

Table A1. Summary of the studies reviewed

Study	Ingberg (1987)	Brunila (1990)	Asplund (1993)	Eriksson (1994)	Helo & Uusitalo (1995)	Asplund (1996)	Asplund & Vuori (1996)
Data used	LFS 1980 HPC 1980	PCD 1975, 1985	LFS 1987	PCD 1970, 75, 80, 85, 90	PCD 1975, 80, 85, 90	TT wage data 1980-94	TT wage data 1980-94
Type of data	Cross-section	Cross-sections	Cross-section	Cross-sections	Cross-sections	Cross-sections	Cross-sections
Population covered	All, men	Full-time, full-year All, men, women	All, men, women, private vs. public sector, occupa- tional categories	All	All with either a university degree or merely a matriculation examination	All non-manual workers, mainly manufacturing & 3 sub-groups (technical, clerical, upper-level)	Non-manual workers in high-tech & other fast growing vs. slowly growing industries, fur- ther division by plant size
Wage concept	Annual taxable income*	Gross annual earnings	Gross hourly wage	Gross monthly and annual earnings	Annual taxable income**	Gross hourly wage	Gross hourly wage
Estimation method(s)	OLS	OLS	OLS, correction for sample, occup. & sectoral selectivity bias	OLS	Tobit	OLS	OLS
Years of schooling	X		X			X	X
Educational levels		X	X	X	X	X	X
Experience		Age	Actual (self-reported)	Age	Calculated as time elapsed since graduation	Actual (from employer registers)	Actual (from employer registers)
Tenure/ OJT			X/X			X/-	X/-

Other variables		X	X	X	X	X	X
No of obs.	4,041/ 2,176	A total of some 11,000 per year	A total of 3,895	Some 100,000 to 200,000	Some 9,000 to 23,000	Some 10,000 to 15,000 per year	Some 10,000 to 15,000 per year

Notes: All variables indicated are not necessarily included at the same time.

LFS = Labour Force Survey; HPC = Household and Population Census; PCD = Population Census Data

* Inclusive of farming and entrepreneurial income; ** inclusive of entrepreneurial and capital income.

Table A1. (cont.)

Study	Asplund et al. (1996a)	Asplund et al. (1996b)	Eriksson & Jäntti (1996)	Eriksson & Jäntti (1997)	Asplund (1998a)	Asplund (1998b)	Uusitalo (1999)
Data used	LFS 1987	LFS 1987	PCD 1970, 75, 80, 85, 90	PCD 1970, 75, 80, 85, 90	LFS 1987, 89, 91, 93	LFS 1987, 89, 91, 93	Merging of several data sources
Type of data	Cross-section	Cross-section	Cross-sections	Cross-sections	Cross-sections	Cross-sections	Cross-sections
Population covered	All, men, women, private vs. public sector	Men, women	All	All, males, females	Men, women by sector (private vs. public)	All	Recruits in 1970; recruits in 1982
Wage concept	Gross hourly wage	Gross hourly wage	Gross monthly and annual earnings	Gross monthly earnings	Gross hourly wage	Gross hourly wage	1970 sample: average annual taxable earnings for 1975-90; 1982 sample: gross monthly earnings for 1994

Estimation method(s)	OLS	Sample selection correction	OLS	OLS	Correction for sample and sector selection bias	OLS	OLS, different schooling choice models
Years of schooling	X	X			X	X	X
Educational levels	X		X	X	X	X	X
Experience	Actual (self-reported)	Actual (self-reported)	Age	Age	Actual (self-reported)	Actual (self-reported)	Age, potential & calculated experience
Tenure/OJT	X/-	X/-			X/X	X/X	
Other variables	X	X	X	X	X	X	X, ability
No of obs.	A total of 3,895	1,873/1,974	Some 70,000 to 180,000	Some 70,000 to 180,000	A total of some 2,500 to 4,000	A total of some 2,500 to 4,000	~ 1,500 (1970 sample); ~ 22,500 (1982 sample)

Table A2. Average returns to educational degrees, all employees and by gender, log -%

	Year	Educational degree						
		Basic	Lower secondary	Upper secondary	Short non-university	BA-level	MA-level	Post-graduate
		(9 years)	(11-12 years)	(12 years)	(13-14 years)	(15 years)	(16 years)	(18-20 years)
All employees								
Asplund (1999) ^a	1987	ref.	4.8	22.8	38.0	50.0	62.1 ^c	
	1989	ref.	4.0	20.4	36.5	49.3	62.0 ^c	
	1991	ref.	3.1	20.2	40.2	49.3	63.4 ^c	
	1993	ref.	3.3	19.1	33.3	43.4	60.5 ^c	
Eriksson & Jäntti (1996a) ^b	1971	ref.		43.4	67.3	96.6		103.8
	1975	ref.		27.1	44.9	66.1		79.0
	1980	ref.		21.8	40.9	60.8		76.3
	1985	ref.		18.8	37.2	56.3		64.9
	1990	ref.		18.4	36.1	56.7		73.9
Male employees								
Asplund (1999) ^a	1987	ref.	8.0	25.9	41.0	45.0	61.0	
	1989	ref.	5.4	21.9	42.1	45.8	62.4	
	1991	ref.	3.8	22.7	43.3	52.7	61.7	
	1993	ref.	1.9 ⁱ	21.4	32.6	36.0	58.4	
Eriksson & Jäntti (1996a) ^b	1971	ref.		48.0	71.5	99.8		112.2
	1975	ref.		28.4	46.6	69.2		83.4
	1980	ref.		22.4	40.5	62.8		79.0
	1985	ref.		20.7	39.4	57.6		69.1
	1990	ref.		22.0	40.6	60.4		78.3

Female employees							
Asplund (1999) ^a	1987	ref.	0.018 ⁱ	19.0	35.3	50.7	62.5
	1989	ref.	0.021 ⁱ	17.9	30.4	51.0	60.6
	1991	ref.	0.026 ⁱ	18.0	36.9	47.7	65.3
	1993	ref.	0.042 ⁱ	15.5	33.5	48.0	59.6
Eriksson & Jäntti (1996a) ^b	1971	ref.		34.0	62.4	94.6	124.5
	1975	ref.		24.4	42.8	63.8	102.3
	1980	ref.		21.4	42.1	60.6	91.1
	1985	ref.		17.1	35.8	57.3	69.8
	1990	ref.		15.9	32.1	55.1	85.8

Notes: An ⁱ indicates that the estimate is not significantly different from zero, i.e. from the reference category, at the 5% level.

^a Also see Asplund (1993a) and Asplund et al. (1996a).

^b The results are approximately the same when using annual and monthly earnings as the dependent variable (see Eriksson and Jäntti, 1996b). Including those aged 16-24 also leaves the results approximately unchanged (cf. Eriksson, 1994).

^c The very small number of post-graduates do not allow a distinction to be made between graduated and post-graduated.

Table A3. Average returns to educational degrees by sector and gender, log -%

	Year	Educational degree					
		Basic	Lower secondary	Upper secondary	Short non-university	BA-level	MA-level
		(9 years)	(11-12 years)	(12 years)	(13-14 years)	(15 years)	(16 years)
Private sector							
Male employees	1987	ref.	11.3	30.4	56.2	60.3	69.0
	1989	ref.	8.5	29.9	58.1	77.2	82.4
	1991	ref.	7.7	28.6	53.5	73.0	70.0
	1993	ref.	1.0 ⁱ	19.5	36.1	45.0	59.0
Female employees	1987	ref.	-3.0 ⁱ	16.1	32.5	44.9	58.4
	1989	ref.	1.5 ⁱ	18.1	32.9	40.1	53.5
	1991	ref.	-0.4 ⁱ	17.1	33.2	37.5	45.7
	1993	ref.	5.7 ⁱ	18.5	43.2	48.2	71.2
Public sector							
Male employees	1987	ref.	12.0	28.8	51.2	52.6	70.0
	1989	ref.	3.7 ⁱ	22.2	42.9	41.8	65.3
	1991	ref.	6.4 ⁱ	25.6	45.7	51.5	66.2
	1993	ref.	4.7 ⁱ	22.8	32.8	41.5	65.8
Female employees	1987	ref.	3.8 ⁱ	20.3	37.0	52.5	65.2
	1989	ref.	9.5	25.5	42.2	64.5	75.1
	1991	ref.	9.5	24.7	47.2	59.6	78.8
	1993	ref.	11.2	17.1	41.5	52.8	65.0

Note: An ⁱ indicates that the estimate is not significantly different from zero, i.e. from the reference category, at the 5% level.

Source: Asplund (1998a)

Table A4. Average returns to educational degrees for all non-manual workers in manufacturing and separately for selected subgroups, log-%

	All non-manual workers			Male non-manual workers			Female non-manual workers			Non-manual workers in fast growing industries			Non-manual workers in slowly growing industries		
	Upper sec. education	Short non-univ. education	Graduate or higher	Upper sec. education	Short non-univ. education	Graduate or higher	Upper sec. education	Short non-univ. education	Graduate or higher	Upper sec. education	Short non-univ. education	Graduate or higher	Upper sec. education	Short non-univ. education	Graduate or higher
1980	13.4	25.9	49.9	14.5	25.9	53.6	12.6	32.0	36.2	13.7	28.5	55.2	5.2	17.3	40.1
1981	12.1	23.7	47.3	13.4	23.6	50.6	10.7	29.7	35.4	12.2	25.7	52.7	3.4	17.6	35.8
1982	12.6	23.9	45.8	15.2	25.1	50.5	10.8	29.9	34.3	10.9	21.7	42.3	3.4	17.2	41.5
1983	12.8	23.6	46.3	14.1	23.5	50.2	11.4	30.6	34.5	13.2	23.5	43.9	6.2	16.7	34.3
1984	12.5	22.2	43.0	15.1	23.9	51.5	10.0	27.2	33.8	12.5	19.6	38.9	8.6	16.4	37.0
1985	12.4	22.9	46.2	16.0	26.0	52.9	9.4	25.6	36.1	11.2	20.3	41.2	1.6	15.8	39.5
1986	11.4	21.4	44.5	16.2	26.5	53.3	8.1	22.0	32.9	8.6	17.0	37.7	-0.7	17.4	32.5
1987	11.9	21.9	45.3	17.6	28.5	54.6	8.0	20.2	36.0	11.1	19.3	39.8	-3.0	16.5	26.7
1988	9.0	17.9	41.4	11.1	20.3	46.7	7.0	18.7	31.6	9.2	15.7	34.0	2.9	21.2	35.0
1989	8.6	15.7	38.8	10.7	17.3	42.9	6.9	19.1	32.8	7.1	14.0	36.4	4.4	21.5	36.9
1990	10.1	18.4	42.1	12.3	21.7	48.6	7.8	17.0	28.9	7.8	14.9	34.4	0.9	11.7	34.4
1991	9.9	17.8	39.7	13.6	22.6	47.7	6.5	15.7	29.0	8.5	15.2	34.4	0.5	9.2	37.0
1992	11.1	18.5	40.5	14.5	23.0	48.4	8.0	18.3	29.9	8.4	13.9	33.8	9.7	24.6	54.3
1993	11.0	18.4	41.8	16.2	25.0	51.8	6.8	16.5	28.3	9.6	14.5	36.7	1.0	9.3	23.2
1994	11.8	18.8	42.8	13.7	21.7	47.8	9.4	18.8	34.7	11.3	19.2	43.3	7.8	15.1	46.9

Note: The reference category is non-manual workers with a basic education only. Estimation results for non-manual workers having completed the lower level of upper secondary education are not reported since most estimates are either insignificant or even negatively signed.

Source: Asplund (1996, 1998c) and Asplund and Vuori (1996)