

Keskusteluaiheita – Discussion papers

No. 753

Rita Asplund

MOBILITY AND EARNINGS

**An analysis of Finnish
manufacturing and services**

Acknowledgement:

Financial support from the National Technology Agency (Tekes) and the Ministry of Social Affairs and Health, within the framework of the Academy of Finland research programme on ageing, is gratefully acknowledged. A first version of the paper was presented, upon invitation, at the conference The Role of Mobility for Low and High Earnings in the European Union and the United States held in Aberdeen, 17–18.11.2000. I wish to thank the organisational and financing bodies of the conference for this opportunity. Sinikka Littu and Eija Savaja have provided invaluable research assistance.

ASPLUND, Rita, MOBILITY AND EARNINGS. An analysis of Finnish manufacturing and services. Helsinki: ETLA, Elinkeinoelämän Tutkimuslaitos, The Research Institute of the Finnish Economy, 2001, 48 p. (Keskusteluaiheita, Discussion papers, ISSN 0781-6847; No. 753).

ABSTRACT: The economic turbulence that has characterised the Finnish economy over the past decade or so has had considerable impact on employment trends and thus on the mobility of individuals between jobs as well as between employment and non-employment. Apart from a marked shift in employment from manufacturing to service industries, both manufacturing and services have seen a growth in jobs in the latter half of the 1990s. These trends raise important questions, since the types of jobs created and, hence, the kinds of individuals recruited have varied and can be expected to continue to vary substantially across sectors and industries.

This paper attempts to highlight the mobility issue by analysing the inflow into manufacturing jobs, on the one hand, and service sector jobs, on the other, with a distinction made between six categories depending on the labour force status of the recruited individuals. This can provide policy-relevant insight on the labour market success and failure of individuals differing in “recruitment background” in times of boom and recession and particularly in periods of rapid technological progress. Attempts are also made to compare the earnings of the six categories in terms of average earnings, earnings dispersion, and earnings growth. A comparison is also made of the “entering position” in the earnings distribution of those having been recruited to examine whether the quality of jobs seems to differ systematically across the six categories. Special attention is thereby paid to the flow into low-paid jobs and the “stability” of such employment.

Key words: earnings, employment stability, low pay, manufacturing, mobility, retail trade, service sector, hotels and restaurants

ASPLUND, Rita, MOBILITY AND EARNINGS. An analysis of Finnish manufacturing and services. Helsinki: ETLA, Elinkeinoelämän Tutkimuslaitos, The Research Institute of the Finnish Economy, 2001, 48 s. (Keskusteluaiheita, Discussion papers, ISSN 0781-6847; No. 753).

TIIVISTELMÄ: Suomen talouden kohtaamat shokit ovat vaikuttaneet voimakkaasti työllisyyden kehitykseen ja sitä kautta myös yksilöiden liikkumiseen eri työpaikkojen sekä työllisyyden ja ei-työllisyyden välillä. Teollisuuden sekä suhteellinen että absoluuttinen osuus työvoimasta on pienentynyt samanaikaisesti kun palvelualojen työllistävä rooli on voimistunut. Tämän teollisuusmaille tyypillisen rakennemuutoksen lisäksi työpaikkojen määrä Suomessa on kasvanut suuresti sekä teollisuudessa että palveluissa 1990-luvun jälkipuoliskolla. Tämä kehityskulku nostaa esiin tärkeitä kysymyksiä, sillä luodut työpaikat, ja siten myös niihin palkattu työvoima, ovat olleet vaihtelevia ominaisuuksiltaan ja tulevat mitä todennäköisimmin vastaisuudessaakin eroamaan merkittävästi toisistaan eri sektoreiden ja toimialojen välillä.

Tässä tutkimuksessa tarkastellaan liikkuvuutta Suomen työmarkkinoilla tehdasteollisuuden ja palvelusektorille, ja edelleen erikseen vähittäiskaupan sekä hotelli- ja ravintola-alalle, suuntautuvien työntekijävirtojen (rekrytointi) näkökulmasta. Tarkastelu tehdään erikseen kuudelle työvoimakategorialle, joiden erottelu perustuu yksilöiden työmarkkina-asemaan edellisenä vuonna. Tarkoituksena on selvittää missä määrin yksilön lähityöhistoria vaikuttaa työmarkkinoilla menestymiseen tai epäonnistumiseen eri suhdannevaiheissa ja erityisesti nopean teknologisen kehityksen aikana. Lisäksi vertaillaan kuuden työvoimaryhmän keskimääräisiä ansiotuloja, niiden kasvuvauhtia ja hajontaa. Edelleen selvitetään ja vertaillaan rekrytoitujen “lähtötulotasoja” palkkajakaumassa, jolloin ensisijainen tavoite on tutkia, vaihteleeko työn laatu (palkassa mitattuna) systemaattisesti kuuden työvoimaryhmän välillä. Erityistä huomiota kiinnitetään yksilöiden rekrytointiin matalapalkkatöihin ja näiden työsuhteiden pysyvyyteen.

Avainsanat: liikkuvuus, työsuhteen pysyvyys, palkka, matalapalkkaisuus, palvelualat, tehdasteollisuus, hotelli- ja ravintola-ala, vähittäiskauppa

YHTEENVETO

Tässä tutkimuksessa esitetyt tulokset sekä vahvistavat että täydentävät olemassa olevaa kuvaa 1990-luvulla tapahtuneen nopean teknologisen kehityksen laajasta vaikutuksesta tehdasteollisuuden työllisyyteen ja työvoimarakenteeseen. Lisäksi tulokset valaisevat palvelualojen työllisyydessä tapahtuneita muutoksia, joista meillä on toistaiseksi huomattavasti vähemmän tietoa. Kahden sektorin työllisyyden vertailu vuorostaan paljastaa mielenkiintoisia yhtäläisyyksiä, kuten myös eroja, varsinkin laman jälkeisten vuosien kohdalla.

Tehdasteollisuudessa laman jälkeinen nousukausi on tuottanut kaksi voittajaryhmää. Toinen muodostuu niistä, jotka ovat onnistuneet säilyttämään työpaikkansa eli ovat jatkaneet saman työnantajan palveluksessa. Toiseen ryhmään kuuluvat ne, jotka ovat vaihtaneet työpaikkaa tehdasteollisuuden sisällä eli ovat onnistuneet löytämään uuden työpaikan toisessa tehdasteollisuuden yrityksessä. Samassa yrityksessä pysyneiden suhteellinen ansiotaso, kuten ansiotason nousukin, ovat säilyneet keskimäärin korkeina. Samalla heidän todennäköisyys kuulua tehdasteollisuuden matalapalkkaisten joukkoon on entisestään pienentynyt. Työpaikkaa vaihtaneet kollegat ovat laman jälkeisillä työmarkkinoilla menestyneet tätäkin paremmin. Ryhmän keskimääräiset ansiot ovat ylittäneet työpaikassaan pysyneiden keskimääräisen ansiotason. Tämä johtuu ansiotulojen nopeammasta nousuvauhdista, mikä johtuu siitä, että yhä suurempi osa heistä on rekrytoitu nimenomaan korkeapalkkaiseen työtehtäviin.

Tehdasteollisuuden ulkopuolelta, eli palvelu- ja muilta aloilta, on sen sijaan rekrytoitu yhä vähemmän työvoimaa. Samalla kasvava osa näistä on virrannut tehdasteollisuuden matalapalkkatöihin.

Nämä kehitystrendit kertovat tehdasteollisuuden 1990-luvulla käynnissä olleen ja edelleen jatkuvan rakennemuutoksen syvyydestä. Tehdasteollisuuden työntekijöiden suotuisa palkkakehitys heijastaa varsinkin 1990-luvun alkupuoliskolla tapahtunutta työvoiman perusteellista "puhdistusta" sekä hyvin koulutetun ja osaavan työvoiman lisääntyvää kysyntää ja siitä käytyä kiristyvää kilpailua 1990-luvun jälkipuoliskolla. Tehdasteollisuuden ulkopuolella työskenteleviltä näytävät vaaditut tiedot ja taidot usein puuttuvan; tehdasteollisuuden yritysten kiinnostus heitä kohtaan on jatkuvasti vähentynyt ja tarjottu työ on useimmiten ollut matalapalkkainen.

Palvelualoilla tilanne on pitkälti samanlainen; voittajiin kuuluvat saman yrityksen palveluksessa pysyneet sekä palvelualojen sisällä työpaikkaa vaihtaneet. Kahden voittajaryhmän välinen ero on kuitenkin palvelualoilla selvästi pienempi kuin tehdasteollisuudessa. Kahden sektorin välillä on kuitenkin myös varteenotettava eroavuus: molempien osalta sektorin ulkopuolella työskentelevien joukosta tehtyjen rekrytointien suhteellinen määrä on tasanaisesti pienentynyt, mutta palvelualoille ulkopuolelta rekrytoidut ovat sektorin vaihdosta huolimatta menestyneet yleensä hyvin myös laman jälkeisinä vuosina. Tämä koskee erityisesti tehdasteollisuudesta palvelualoille siirtyneitä, jotka ovat kasvavassa määrin onnistuneet vaihtamaan korkeapalkkaiseen palvelusektorin työtehtäviin. Oletettavasti tämä liittyy nopeaan teknologiseen kehitykseen etenkin osaamisintensiivisissä liike-elämää palvelevissa yrityksissä sekä tehdasteollisuuden yritysten lisääntyneeseen ulkoistamiseen ja yhteistyöhön palveluyritysten kanssa.

Vähittäiskaupan sekä hotelli- ja ravintola-alan tutkiminen paljastaa samat voittajakategoriat kuin palvelualoilla keskimäärin, joskin kategorioiden väliset erot ovat vähittäiskaupassa olleet lähes kauttaaltaan hieman pienemmät. Merkittävä ero kahden palvelutoimialan välillä liittyy toimialalle tehdasteollisuudesta siirtyneisiin. Nämä entiset tehdasteollisuuden

työntekijät ovat, ainakin palkassa mitattuna, menestyneet yhä paremmin siirryttäessä vähittäiskaupan alalle. Hotelli- ja ravintola-ala on tarjonnut selvästi huonomman vaihtoehdon.

Yhteinen piirre vähittäiskaupalle sekä hotelli- ja ravintola-alalle on sen sijaan vähenevä kiinnostus rekrytoida työvoimaa palvelusektorin muilta aloilta, mikä lisäksi näkyy siinä, että näiden rekrytointien lähtöpalkkataso on toimialan palkkajakaumassa jatkuvasti heikentynyt. Sen selvittäminen, miksi näin on tapahtunut, edellyttäisi kahden toimialan kehityksen perusteellista analysointia, mikä ei ole mahdollista tämän tutkimuksen puitteissa.

Ei-työssä olevien joukosta rekrytoitujen asema on kaikkein heikoin. Se, oliko henkilö rekrytointivaiheessa työtön vai työvoiman ulkopuolella, ei näytä ainakaan vuoden sisällä vaikuttavan lopputulemaan. Molempien ryhmien keskimääräinen ansiotaso on huomattavasti alhaisempi kuin muiden työvoimaryhmien, mikä selittyy sillä, että suurin osa heistä aloittaa palkkajakauman alapäässä. Näin on tapahtunut tarkastelujakson kaikkina vuosina suhdannevaiheesta riippumatta. Sopeutuminen taloudessa tapahtuviin muutoksiin on hoidettu ensisijaisesti rekrytointien määrän kautta, mikä on toisaalta varsin luontevaa, koska suhteellisen alhainen keskimääräinen ansiotaso ei ole jättänyt paljonkaan palkkajoustopuuta.

Ei-työssä olevien joukosta rekrytoitujen yleensä heikko lähtöpalkkataso vaatisi ehdottomasti syvällisempää tarkastelua. Keskeinen tähän liittyvä kysymys on, mitä heille tapahtuu matalapalkkatyössä aloittamisen jälkeen. Onnistuvatko he pysymään työllistettyinä ja, jos näin on, jatkavatko he matalasti palkatuissa työtehtävissä vai siirtyvätkö he yleensä nopeasti paremmin palkattuihin tehtäviin? Onko heillä suuri vaara joutua lyhyeksi tai pidemmäksi ajaksi takaisin ei-työssä olevien joukkoon?

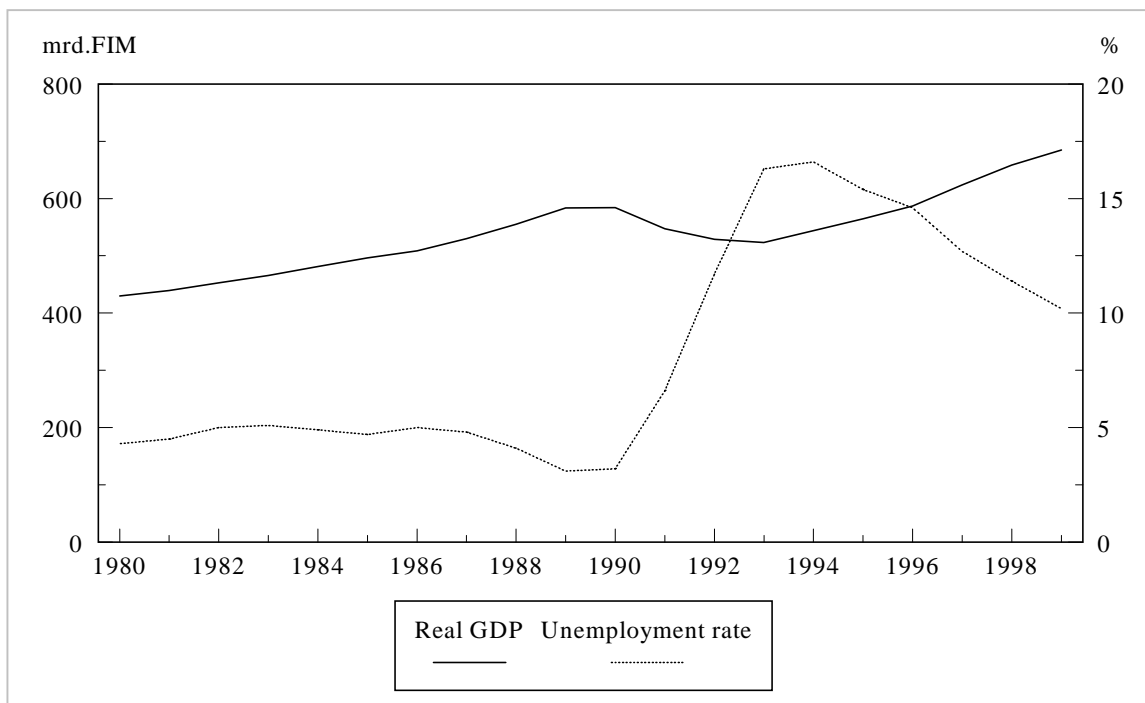
Tässä tutkimuksessa esitellään yksinkertainen tapa lähestyä tätä ongelmaa ja tuottaa edes alustavia vastauksia ainakin joihinkin edellä esitettyihin kysymyksiin. Tulokset eivät ole kovin rohkaisevia: Ei-työssä olevien joukosta rekrytoituilla on tutkituista työvoimaryhmistä ylivoimaisesti pienin todennäköisyys pysyä työllisinä kahden seuraavan vuoden ajan. Toisin sanoen heillä on suurin riski joutua uudestaan työelämän ulkopuolelle ja todennäköisyys jäädä sinne on selvästi suurempi kuin todennäköisyys työllistyä nopeasti uudelleen. Sama yleiskuva toistuu niin teollisuuden, palvelualojen, vähittäiskaupan kuin hotelli- ja ravintola-alankin kohdalla. Myös nämä tulokset kertovat Suomen työmarkkinoiden rakennemuutoksen laajuudesta ja syvyydestä 1990-luvulla. Lisäksi ne viittaavat vahvan työmarkkina-aseman sekä heikon kytkennän työmarkkinoihin omaavien yksilöiden väliseen syveneeseen työvoiman kahtiajakoon.

1. INTRODUCTION

The Finnish economy has over the past decade or so been characterised by tremendous turbulence. The 1980s saw a steady improvement in the economic activity level that towards the end of the decade turned into a boom of unseen intensity. Finland was labelled “Europe’s Japan”. This prosperous development, however, came to a sudden end in the early 1990s. Signs of emerging economic problems were discernible already in the autumn of 1990, mainly in the export sectors, and in 1991 an unfortunate combination of bad luck and bad policies plunged the Finnish economy into its deepest economic crises since the 1930s.¹ Within three years’ time (1990–93) more than half a million jobs were lost, and the unemployment rate climbed from one of the lowest (less than 3.5%) to one of the highest (over 18%) in Europe. Simultaneously the growth in GDP slowed down and, for a few years, even turned strongly negative.

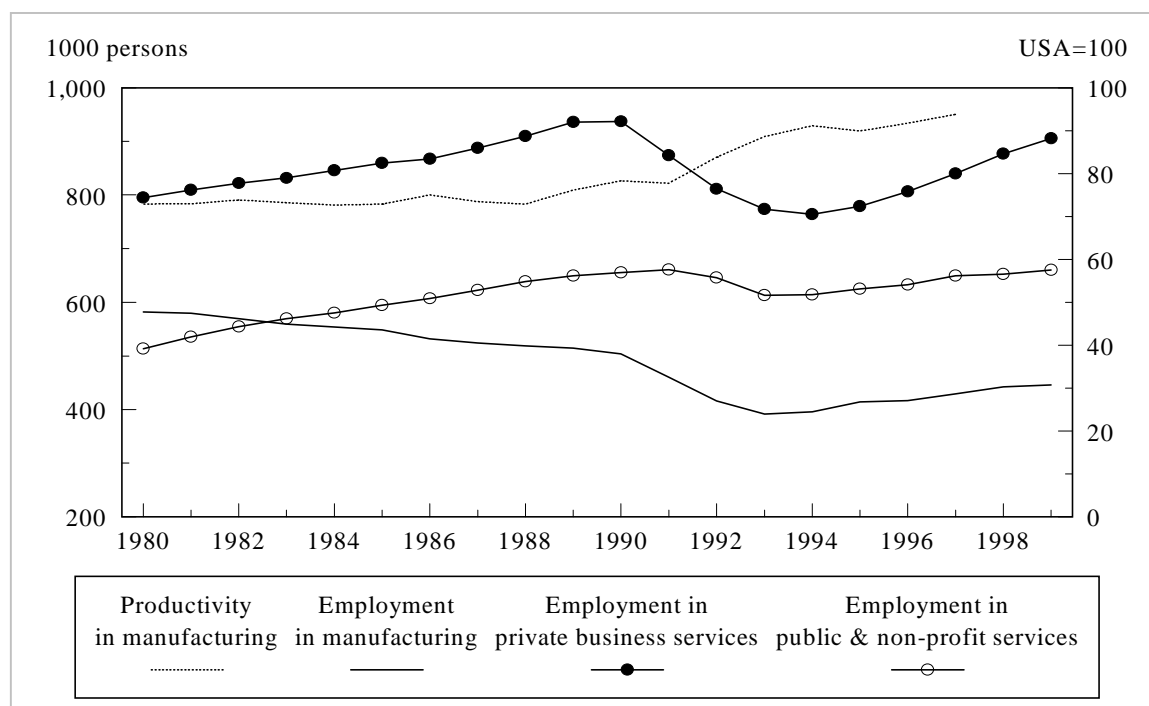
The first weak signs of a recovery were sighted in the exporting manufacturing industries late in 1993. The recovery intensified during the next years and also started to spread to other parts of the economy. GDP growth exceeded all economic forecasts, amounting to an average of 5.1% per year for 1996–98 compared to 2.7% for the OECD as a whole. Due to this extremely rapid growth rate, GDP has more or less returned to its historical time trend, and the deep recession years seem to have caused merely a temporary trend break. In view of this, the unemployment rate has declined very moderately and at an ever-slower pace. (Figure 1)

Figure 1. Trends in real GDP (left scale) and the unemployment rate (right scale)



Source: *ETLA's database*

¹ For a discussion of the Finnish depression and its reasons, see e.g. Finnish Economic Papers (1996) and Kiander & Vartia (1998).

Figure 2. Trends in employment (left scale) and productivity (right scale)

Source: *National Accounts for employment and Maliranta (2000a) for productivity*

Underlying the rapid growth in GDP is an extremely rapid growth in productivity in the manufacturing sector that has pushed Finland close to the USA, the productivity world leader (Figure 2). This development has also rendered Finland top rankings in recent international comparisons of competitiveness. Two factors seem to explain this extraordinary growth in productivity. First, the economic recession in the early 1990s started a process that can be characterised as “Schumpeterian creative destruction” with extensive closing-down of low-productivity plants and companies (e.g. Maliranta 1997; 2000b). Second, Finnish firms invested enormous amounts in new technology. These private business investments in R&D were further boosted by a notable expansion in public R&D support. Indeed, according to comparisons undertaken by the OECD investments in R&D increased most strongly in Finland in the 1990s and, as a consequence, Finland managed to join the top-ranking countries of Japan, South Korea, Sweden and the USA (OECD 1999, Asplund 2000a).

This economic reality has had considerable impact on employment trends and thus on the mobility of individuals between jobs as well as between employment and non-employment. As in most other industrialised economies, there has been a marked shift in employment from manufacturing to service industries, the supposed engine of job creation also in the future. But the Finnish experience reveals non-negligible job growth in the manufacturing sector as well (Figure 2), a trend that can be ascribed to the technological explosion especially in telecommunications.

These employment trends raise important questions of policy relevance, since the types of jobs created and, hence, the kinds of individuals recruited have varied and can be expected to continue to vary substantially across sectors and industries. In particular, the jobs created in the manufacturing sector are heavily technology-driven², while the jobs

² Several recent studies show that the growth in manufacturing employment has been concentrated to technol-

created in the service sector range from (increasingly temporary) low-paid jobs to high-paid expert jobs in combination with a sharpening division of, respectively, lower- and higher-paid jobs between the different service industries.

This paper attempts to highlight the mobility issue by analysing the flow into manufacturing jobs, on the one hand, and into service sector jobs, on the other, with a distinction made according to the labour force status of the recruited individuals. More specifically, the workforce of each year is divided into a total of six categories depending on “the pool of individuals” that the employee belonged to in the previous year. These categories are: (1) still employed in the same sector and the same firm; (2) recruited from another firm in the same sector; (3) recruited from the manufacturing sector (alternatively, from the service sector); (4) recruited from some other sector; (5) recruited from among the unemployed; (6) recruited among those outside the labour force. Comparing the observed recruitment patterns over time provides insight on the labour market success and failure of individuals differing in their recent working history, in times of boom and recession and particularly in periods of rapid technological progress. Here the unemployed stand out as a category of particular interest.

Apart from overall mobility patterns, attempts are also made to compare the earnings of these six categories in terms of average earnings, earnings growth, and earnings dispersion. In addition a comparison is made of the “starting position” in the earnings distribution of those having been recruited in order to examine whether the quality of jobs – as measured by the relative earnings level – seems to differ systematically with the individuals’ “recruitment background”. Special attention is thereby paid to the flow into low-paid jobs. Finally a simple attempt is made to uncover potential differences in employment stability between the workforce categories under study.

The data set used is a 20 per cent representative sample drawn from *Employment Statistics* compiled by Statistics Finland. This data source has been constructed by merging administrative registers, and covers the whole Finnish population starting from 1987. The sample was drawn randomly from the 1987 population and the close to one million people included in the sample have so far been followed up to 1997.

The analysis presented in this paper is mainly descriptive. It includes the manufacturing sector and the service sector³ with a further extension made to two service sector industries with a relatively high concentration of low-paid jobs, that is, retail trade and hotels and restaurants. In a next step, econometric modelling will be used to explore whether the observed differences in labour market outcomes between the six categories is primarily the result of differences in background characteristics or whether the individual’s previous labour force status exerts an independent influence as well. As a final step, the analysis will be complemented with a similar examination of the outflow of labour, that is, patterns, trends and determinants.

ogy-intensive firms and industries, see e.g. Asplund & Lilja (2000), Maliranta (2000b) and Ilmakunnas & Maliranta (2001).

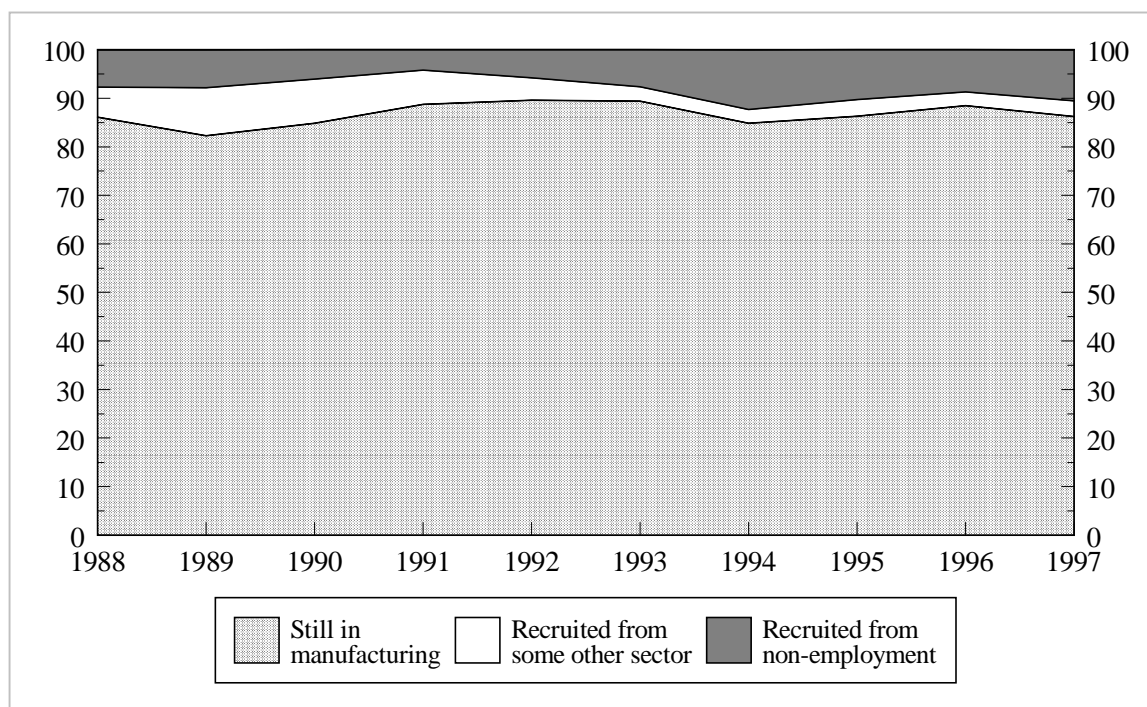
³ The service sector is intended to reflect private-sector employment. Throughout the analysis it is defined to include the following industries: wholesale and retail trade; hotels and restaurants; transport and communication; finance and insurance; real estate, cleaning and rental services; technical and business services; education and research; health and social welfare services; recreational and cultural services; organisational and religious activities; and other services. Some of these admittedly involve both privately and publicly financed elements that do not allow a proper distinction to be made between private-sector and public-sector activities. The only industry with a pure public-sector characteristic that has been left outside the subsequent analysis is public administration and defence.

2. RECRUITMENT PATTERNS IN MANUFACTURING AND SERVICES

The persistence of the workforce and the inflow of new employees from other sectors as well as from among the non-employed are illustrated on a rather crude basis in Figures 3 and 4, separately for the manufacturing sector and the service sector. Both sectors are characterised by a high tendency of employees of remaining in their “own” sector when comparing the situation in two consecutive years. Throughout the investigated time period the share of “stayers” has almost persistently fallen in the interval 85 to 90%, with both sectors displaying much the same trend over time, but with slightly larger fluctuations in manufacturing than in services. The hampering effect of the recession years on mobility stands out clearly in the two figures.⁴ Also the influence of the “mini-recession” that hit the manufacturing sector in 1996 is discernible. Over the post-recession period, both sectors nevertheless display a downward rather than an upward trend in the share of stayers and, conversely, an increase in the relative importance of the inflow of labour from other sectors and, especially, from non-employment. This is also to be expected in view of the net job growth that has characterised both manufacturing and services during the latter half of the 1990s.

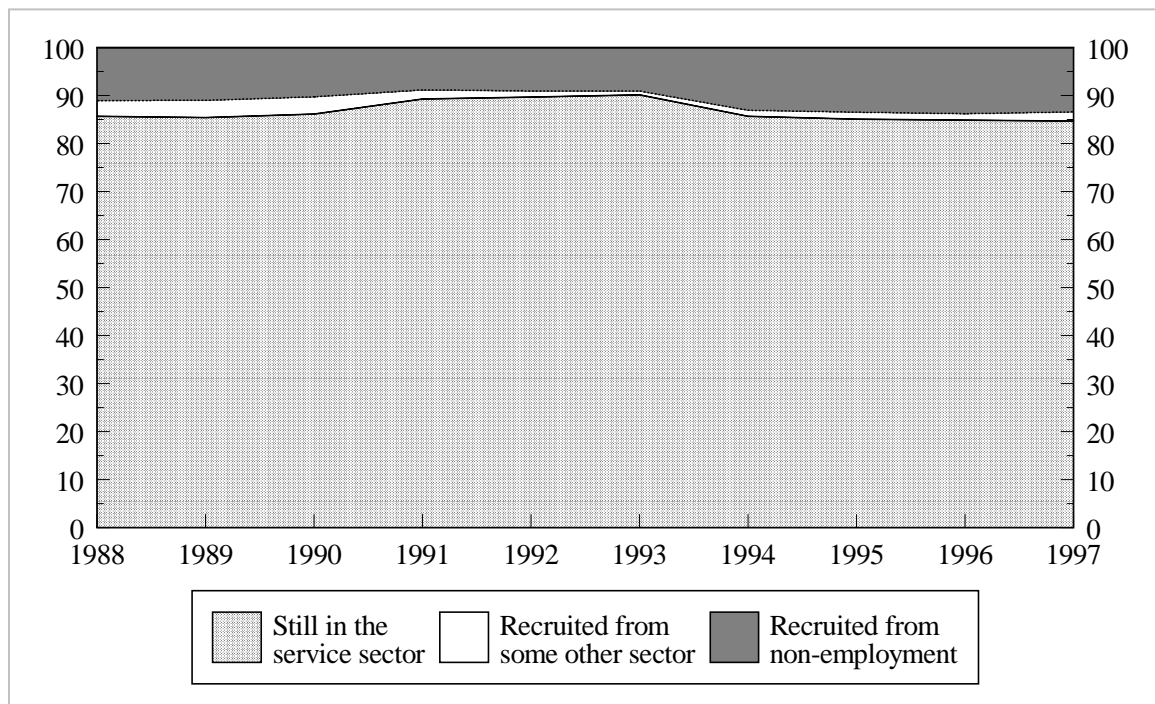
In relative terms, the flow of employees from other sectors⁵ has persistently been slightly higher into manufacturing than into services; in absolute terms, the difference between the two sectors has been minor. The recession years slowed down the mobility across sectoral borders, and in the post-recession years the recruitment share from other sectors has varied between 2 and 3% for manufacturing and has remained less than 2% for the service sector.

Figure 3. Manufacturing: persistence and inflow of labour, 1988–97, %



⁴ This effect has also been documented in e.g. Asplund & Lilja (2000), Maliranta (2000b) and Piekola & Böckerman (2000).

⁵ Other sectors refer here not only to, respectively, manufacturing and services, but also to agriculture and forestry, mining, energy and water supply, and construction.

Figure 4. Service sector: persistence and inflow of labour, 1988–97, %

Instead of recruiting from among those employed in other sectors, the emphasis has shifted towards the pool of non-employed. This is true especially for the service sector for which recruitment among the non-employed has traditionally played a more important role. The relative share of hires among the non-employed declined only slightly during the recession years, and has shown an increasing trend in the post-recession period. In the manufacturing sector, in contrast, the interest for hiring non-employed weakened further during the recession, increased when the recovery started, returned temporarily to its pre-recession level during the mini-recession in 1996, but seems to regain in strength towards the end of the decade.

These different trends both within sectors and between sectors justify a more detailed analysis of the persistence and inflow of labour. This is done in Table 1 for the manufacturing sector and in Table 2 for the service sector. A further division of those classified as still being employed in the same sector reveals that in both manufacturing and services approximately three out of four worked for the same employer in year t as in year $t-1$. The most conspicuous deviations are the boom year of 1989 with a much lower than average tendency of employees of staying in the same firm, and the recession years with the staying-on tendency peaking in the opposite direction. The only discernible difference between the two sectors seems to be a more rapid reaction to changes in the economic activity level in the service sector than in manufacturing. More specifically, the share of those staying in the same sector and the same firm increased more rapidly among service sector workers when the recession hit, but fell more quickly when the recovery set in.

Not surprisingly the trends observed in sector/firm stability show up with the opposite sign when looking at employees' tendency of moving to another firm engaged in the same sector. On average, one out of ten makes such a move within a year, and again this seems to hold roughly for both sectors. The share of same-sector/change-of-firm movers was considerably higher in the boom year of 1989 and notably lower during the recession peak. Likewise, within-sector mobility declined more rapidly among service sector workers when the recession deepened, and increased more rapidly when the economy started to re-

cover. Indeed, within both sectors the economic turbulence turns out to have caused changes in worker stability and mobility that have more or less outweighed each other. This, in turn, shows up as minor fluctuations in the overall share of workers having stayed in the sector from one year to the next (as shown in Figures 3 and 4).

Table 1. Manufacturing: persistence and inflow of labour, 1988–97, %

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Manufacturing, same firm	75.1	68.0	71.8	74.8	80.3	83.4	73.5	78.3	76.8	78.2
Manufacturing, change of firm	11.0	14.3	13.1	14.0	9.3	6.0	11.4	7.9	11.7	8.0
Employed in the service sector	1.8	3.2	4.8	2.3	2.5	0.8	0.6	0.7	0.6	0.6
Employed in other sector	4.4	6.8	4.3	4.7	2.1	2.2	2.3	2.8	2.3	2.6
Unemployed	2.2	2.2	1.4	1.2	3.2	4.3	7.4	5.0	3.9	5.2
Outside the labour force	5.5	5.6	4.7	3.0	2.6	3.3	4.8	5.3	4.8	5.4
No. of obs. (1,000 persons)	95,9	91,1	87,1	73,2	65,9	61,8	74,3	75,7	75,0	76,6

Table 2. Service sector: persistence and inflow of labour, 1988–97, %

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Service sector, same firm	74.9	68.9	74.5	77.9	82.4	76.6	70.6	75.5	76.6	73.1
Service sector, change of firm	10.8	16.6	11.6	11.4	7.3	13.5	15.0	9.6	8.3	11.5
Employed in manufacturing	2.5	2.6	2.6	1.3	0.8	0.5	0.9	1.1	1.0	1.5
Employed in other sector	0.8	1.0	1.0	0.6	0.4	0.4	0.4	0.3	0.4	0.4
Unemployed	2.4	2.3	1.9	2.0	3.8	4.5	7.1	6.7	6.1	6.2
Outside the labour force	8.6	8.7	8.3	6.8	5.2	4.5	5.9	6.8	7.6	7.2
No. of obs. (1,000 persons)	219,1	218,7	220,3	210,1	197,6	182,1	187,0	190,8	200,3	211,4

Above it was noted that the inflow from other sectors has persistently been a relatively more important recruitment channel for manufacturing than for services. From Table 1 it is evident that these hires have mainly concerned people working in non-service industries,

that is, in agriculture, forestry, mining, energy and water supply, and construction. In the service sector the situation is the opposite with hires among manufacturing workers being more important than hires among those working in other non-service industries (Table 2). Obvious reasons for this difference are intensified outsourcing from manufacturing to services, especially in the late 1980s, and most activities of other sectors being closer to those performed in manufacturing than in services. Irrespective of the sector recruited from, the trend points downward, though.

The flow into manufacturing of individuals not belonging to the labour force declined markedly during the recession years, but returned quickly to pre-recession levels when the recovery started. At the turn of the decade 1980/90 the pool of those outside the labour force was more or less an equally important recruitment channel as those employed outside manufacturing, especially in non-service industries. And its relative importance strengthened further during the recovery with the weakening interest of manufacturing firms in hiring non-manufacturing labour.

Another recruitment channel that gained in relative importance when filling up the new manufacturing jobs that were created during the economic upturn was the pool of unemployed. The recruitment of unemployed was particularly frequent in the year when the unemployment rate was highest and the structure of the unemployed most favourable from the employers' point-of-view. The deep recession had pushed also higher-educated people into unemployment, and these were evidently among the first to leave unemployment when more labour was demanded for the new jobs that were created mainly in technology-intensive manufacturing firms and industries.⁶ With the declining "quality" of the pool of unemployed also the flow of them into manufacturing jobs has thinned out.

The hiring of unemployed into the service sector shows much the same trend. But the inflow of unemployed seems to have better maintained its position as a relatively important recruitment channel. Table 2 further reveals that the inflow into service sector jobs from among those outside the labour force has quickly recovered and is regaining its position as the most important recruitment channel after within-sector hires.

One important question, which Tables 1 and 2 do not give an answer to, is whether the increasing interest for unemployed and the renewed interest for those outside the labour force possibly conceals fundamental changes in employment conditions compared to the pre-recession situation. It is rather well documented that a large majority of all new jobs have been of a temporary nature. But there is practically no knowledge available on the background of the individuals having entered these atypical jobs. In view of Tables 1 and 2 it seems that many of them have recently been non-employed, which probably makes them more prone to accept atypical job arrangements. Simultaneously, the uncertainty that such job contracts add to the labour market situation is likely to make employees in other sectors and industries more reluctant to changing jobs, which may at least in part explain the decline in the relative importance of these recruitment channels and thus in between-sector mobility.

Unfortunately, the data set used does not contain information on employment conditions and job contracts. A simple but fairly informative way to approach this issue is to explore the changes that have eventually occurred in the labour force status over the next few years after the recruitment. Are these new hires still employed or have they (re)entered the pool of non-employed? The outcome from such an exercise is reported in a subsequent section.

⁶ The recruitment of unemployed into manufacturing jobs is explored in more detail in a study in progress (Asplund 2001).

3. RECRUITMENT PATTERNS IN RETAIL TRADE AND HOTELS AND RESTAURANTS

In the late 1980s retail trade covered some 11.5% of all employment in the service sector. The employment share of hotels and restaurants was considerably lower, or just over 5%. Both industries saw a steady decline in their relative employment share over the next years. Retail trade experienced its lowest share in 1997, when it covered just below 9% of all service sector employment. By 1999 it had recovered to about 9.6%. In hotels and restaurants, on the other hand, the bottom was reached already in 1993/94 – down to 4.6%, but ever since the industry's employment share has increased and amounted to 5.3% in 1999.

In both retail trade and hotels and restaurants the fluctuations in the persistence and inflow shares of labour have been notably larger than for the service sector as a whole (Figures 5 and 6). At the turn of the decade 1980/90, when the economy was booming, the probability of staying-on for another year was down to some 73% or less in both industries. When the recession hit, the tendency of leaving the industry declined markedly. The share of stayers climbed rapidly to over 85% in retail trade but reached at most only 80% in hotels and restaurants. And in both industries the stability of the labour force dropped equally quickly when the recovery started. In hotels and restaurants the probability of being employed in the industry also the next year fell to pre-recessional levels (some 70%) but remained at a higher level in retail trade (close to 80%). Also in these two industries the trend points down rather than up, however.

At the turn of the decade 1980/90, both industries were characterised by a substantial inflow of labour from other industries as well as from non-employment. But the recruitment of labour from other industries dropped suddenly when the recession hit, more so in retail trade than in hotels and restaurants, and has remained at this lower level throughout the investigated time period. The inflow from non-employment, in contrast, was strained only marginally during the recession years, and was soon exceeding even pre-recessional levels.

Figure 5. Retail trade: persistence and inflow of labour, 1988–97, %

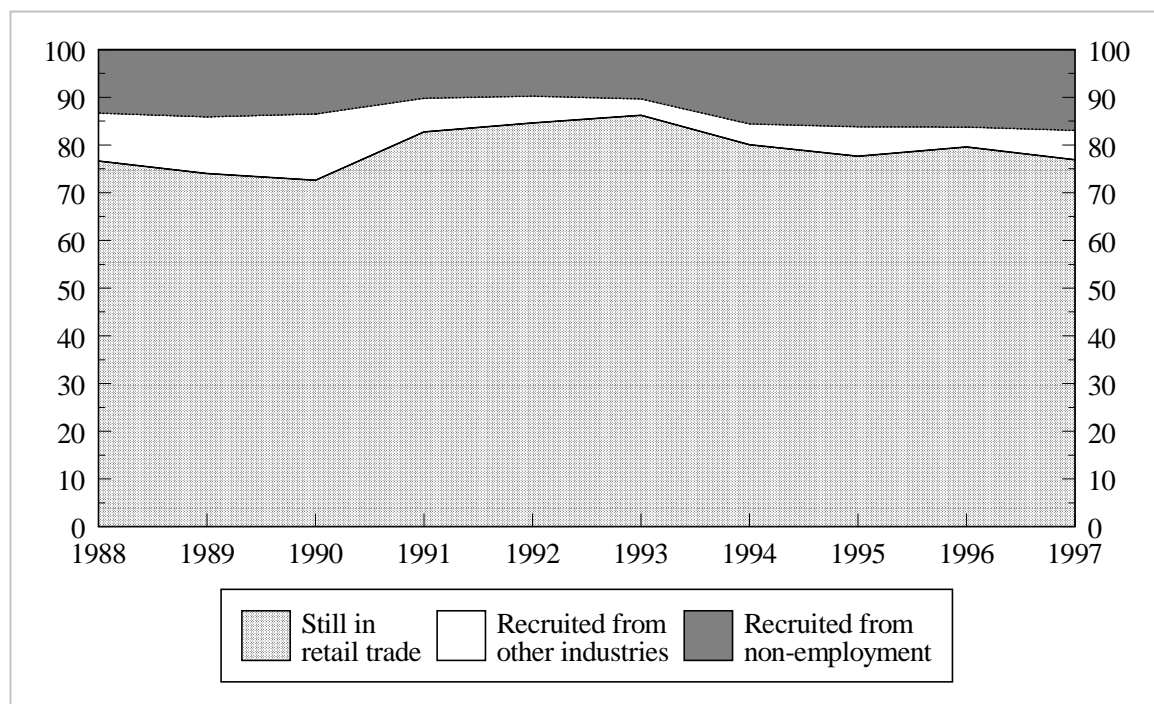
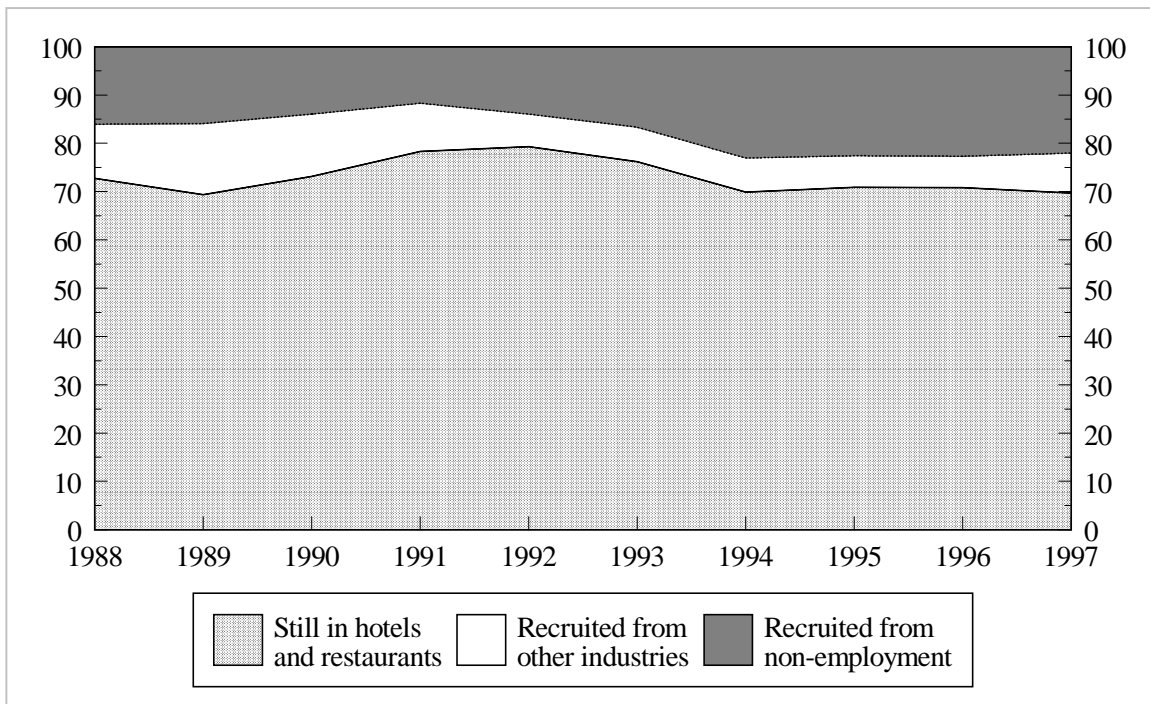


Figure 6. Hotels and restaurants: persistence and inflow of labour, 1988–97, %

Splitting the stayers' category into those having changed versus not having changed firm from one year to the next displays no surprises (Tables 3 and 4). In both industries the tendency of remaining in the same firm strengthened with the recession and, conversely, the recruitment of labour from other firms engaged in the same industry declined. Moreover, the higher degree of labour mobility in hotels and restaurants as compared to retail trade that was evident already in Figures 5 and 6 above, is repeated also when examining within-industry mobility.

Tables 3 and 4 further reveal that for both retail trade and hotels and restaurants, the other service sector industries represent the most important channel when recruiting among those employed outside the own industry. Those employed outside the service sector seem to be of minor interest to firms engaged in retail trade and hotels and restaurants, and especially if employed in a non-manufacturing sector, that is, in agriculture, forestry, mining, energy and water supply, and construction. A common feature of these three alternative outside-own-industry recruitment channels, however, is that their relative importance has declined during the investigated time period.

When dividing the non-employed into those having been recruited from among the unemployed, on the one hand, and from among those being outside the labour force, on the other, both industries stand out as important channels into the labour market, especially for those entering from outside the labour force. Indeed, the relative share of labour market entrants reveals a steady upward trend, and by the mid-90s they were the most important single recruitment channel for both industries. The rapid increase in the flow of unemployed into both retail trade and hotels and restaurants seems to have come to an end already in 1994, and the relative share of ex-unemployed has shown a downward trend ever since. The pattern observed for the service sector as a whole as well as for the manufacturing sector is, in other words, repeated at least when it comes to these two service sector industries.

Table 3. Retail trade: persistence and inflow of labour, 1988–97

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Retail trade, same firm	69.0	63.8	62.9	74.1	76.9	80.4	71.1	66.9	71.5	70.2
Retail trade, change of firm	7.6	10.2	9.8	8.6	7.7	5.9	9.0	10.7	8.1	6.8
Employed in other services	6.8	9.1	8.5	5.4	4.0	2.8	3.1	3.1	2.8	3.8
Employed in manufacturing	2.4	2.0	3.9	1.2	0.8	0.3	0.9	2.8	1.3	1.9
Employed in other sector	0.8	0.8	1.5	0.5	0.8	0.3	0.3	0.3	0.2	0.4
Unemployed	2.2	2.1	1.7	1.9	3.4	4.2	7.3	6.1	5.2	5.5
Outside the labour force	11.1	12.0	11.8	8.3	6.3	6.1	8.2	10.1	11.0	11.5
No. of obs. (1,000 persons)	24,9	23,9	24,8	21,9	19,9	17,5	17,3	17,7	18,0	19,1

Table 4. Hotels and restaurants: persistence and inflow of labour, 1988–97

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Hotels & rest., same firm	60.8	57.5	61.9	63.2	67.1	66.1	57.4	59.5	63.6	60.1
Hotels & rest., change of firm	12.0	11.9	11.2	15.2	12.2	10.1	12.5	11.4	7.2	9.6
Employed in other services	9.3	11.8	10.1	8.5	5.3	6.7	5.8	5.5	5.5	6.3
Employed in manufacturing	1.7	2.4	2.0	1.2	1.2	0.3	1.1	0.8	0.8	1.8
Employed in other sector	0.3	0.6	0.8	0.3	0.3	0.2	0.2	0.2	0.2	0.2
Unemployed	3.9	3.4	2.5	2.9	6.2	8.4	12.4	9.9	8.5	8.5
Outside the labour force	12.2	12.5	11.4	8.8	7.7	8.2	10.6	12.6	14.1	13.5
No. of obs. (1,000 persons)	11,0	11,5	11,0	9,7	8,5	7,6	7,9	8,1	8,6	9,3

All in all, both retail trade and hotels and restaurants seem to represent service sector industries that are more sensitive to changes in the economic activity level than the service sector on average. Both industries also reveal higher than average degrees of labour mobility. This holds for within- and between-industry mobility as well as for mobility from non-

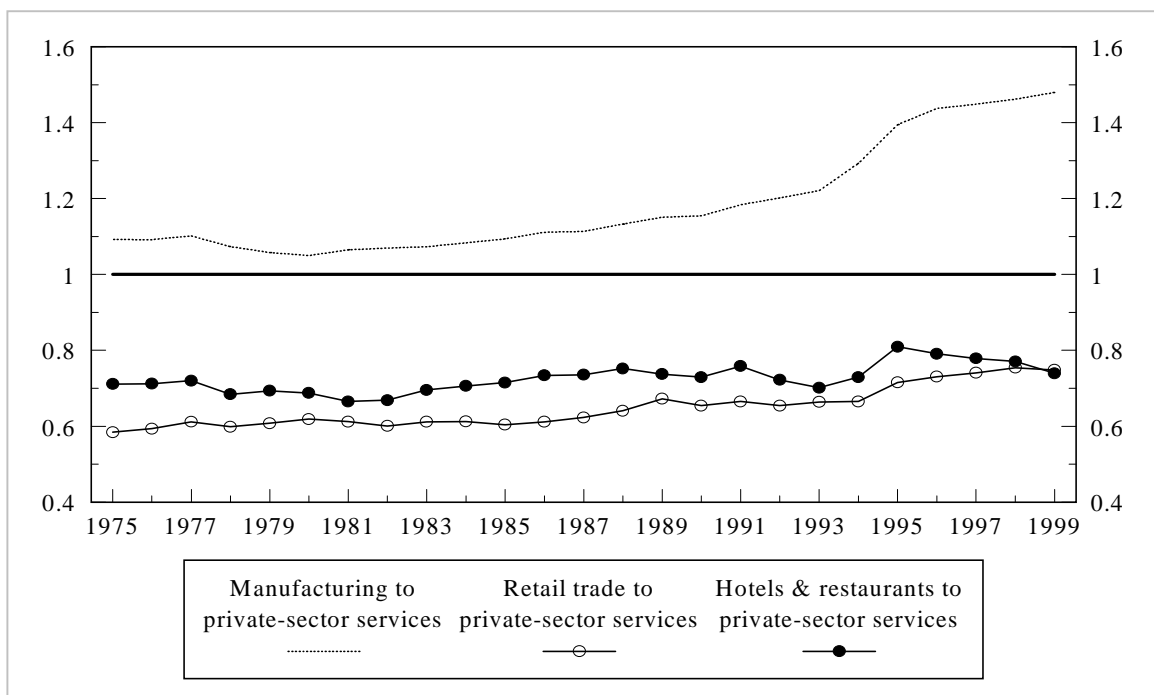
employment into employment. Moreover, of the two industries the workforce of retail trade is clearly the less mobile one. Finally, the high share of non-employed individuals having been recruited to the two industries will add important features when next turning to the question of job quality, as measured by earnings, and to the analysis of employment stability undertaken in a later section.

4. EARNINGS LEVELS AND GROWTH

This section focuses on the levels and growth rates of earnings of the six categories into which the workforce of, respectively, manufacturing, services, retail trade, and hotels and restaurants has been divided. But before proceeding to this issue, it might be informative to look at the relative earnings of the two sectors and the two industries, and the development over time of these earnings ratios. This is done in Figure 7 with the average (gross) hourly wage in private-sector services used as the point of reference.

The figure reveals a gap in average pay between manufacturing and private-sector services that has widened ever since the early 1980s. Moreover, in the recovery years of 1994 and 1995 the upwardly sloping trend in relative manufacturing wages suddenly shifted to continue from a considerably higher level, and at the turn of the century the average hourly wage in manufacturing was close to 50% higher than in private-sector services. This tremendous strengthening in the relative wage position of manufacturing workers is yet another expression for the profound restructuring that the manufacturing sector and its workforce were pushed into by the deep recession in the early 1990s.

Figure 7. Average (gross) hourly wages in manufacturing, retail trade, and hotels and restaurants relative to those in private-sector services, 1975–99



Source: ETLA's database

Both retail trade and hotels and restaurants stand out as low-paid service sectors, albeit their relative wage position does have improved slightly over the past decades. Compared to each other, the average hourly wage in retail trade has mostly been some 10–15% lower than in hotels and restaurants. However, due to strong wage fluctuations in hotels and restaurants in the 1990s and an outstanding downward trend in wage levels towards the end of the decade, the difference in average hourly wages between the two industries has practically disappeared.

In the subsequent analysis, the earnings concept refers to average (gross) monthly earnings as calculated from information on annual earnings and months worked during the calendar year. Annual earnings correspond to annual taxable earnings as recorded in tax registers, while the annual number of months in work originates from various registers. No information is available on the number of weeks and hours worked. There is no distinction made between full- and part-timers, either.

For those not having worked on a full-time, full-year basis, the working month no doubt stands out as a rather crude measure. If the time worked during the year does not add up into full months, then the calculated average monthly earnings will inevitably either over- or underestimate the actual average monthly earnings of that year. These problems can be expected to be most severe for individuals who have experienced spells in unemployment and/or outside the labour force during the year. This expectation receives support in the data in the sense that the share of extremely high and, especially, of unrealistically low monthly earnings is highest in the category of workers recruited among the unemployed as well as in the category of workers recruited among those outside the labour force.⁷ The data offers no possibility to avoid this situation, however.⁸

Apart from unavoidable measurement errors in the calculated average monthly earnings, the earnings comparisons presented below are also affected – to an unknown degree – by the fact that the information on individuals' labour force status refers to one single point of the year, viz. the last of December. The individuals' activities during the year are not documented. Hence, we do not know when during the year the observed move occurred. – Was it even the only one? Nor do we know why the individual moved. The potential explanations are numerous: better job offer, lay-off, employment arrangements supported by the public sector, etc. With these qualifications in mind, the earnings levels and growth rates of the six workforce categories reveal the following patterns.

⁷ The upper and lower bounds for “acceptable” calculated monthly earnings are drawn based on minimum wage considerations and the development of the general wage index.

⁸ What the data does offer is an opportunity to recalculate the monthly earnings of individuals having experienced spells of unemployment during the year. In addition to the number of months in employment, the data also gives the number of months in unemployment. This piece of information has been added from the unemployment registers of the Ministry of Labour. But no attempt has been made by Statistics Finland to adjust the individuals' numbers of months in employment to the length of the unemployment spell(s) eventually experienced during the same year. Consequently there are individuals whose working months and unemployment months sum to over 12, indicating that their monthly earnings are underestimated when only using the information on months in employment. However, if adjusting the number of months worked to the number of months in unemployment, it is implicitly assumed that the information on unemployment is more correct than that on employment, and there is no evidence justifying such an assumption. It is, nevertheless, of some interest to compare the “adjusted” and “unadjusted” earnings for the six workforce categories identified. Most important, the difference in outcomes is negligible for all categories except for those recruited among the unemployed, whose adjusted monthly earnings are on average higher than the unadjusted ones. This difference turns out to be larger in manufacturing than in services. Moreover, in manufacturing it seems to correlate positively with the unemployment rate, while in the service sector the correlation coefficient rather shows up with a negative sign.

Figure 8. Manufacturing: relative mean earnings according to labour force status in the previous year, 1988–97 (manufacturing, same firm in 1988 as in 1987 = 100)

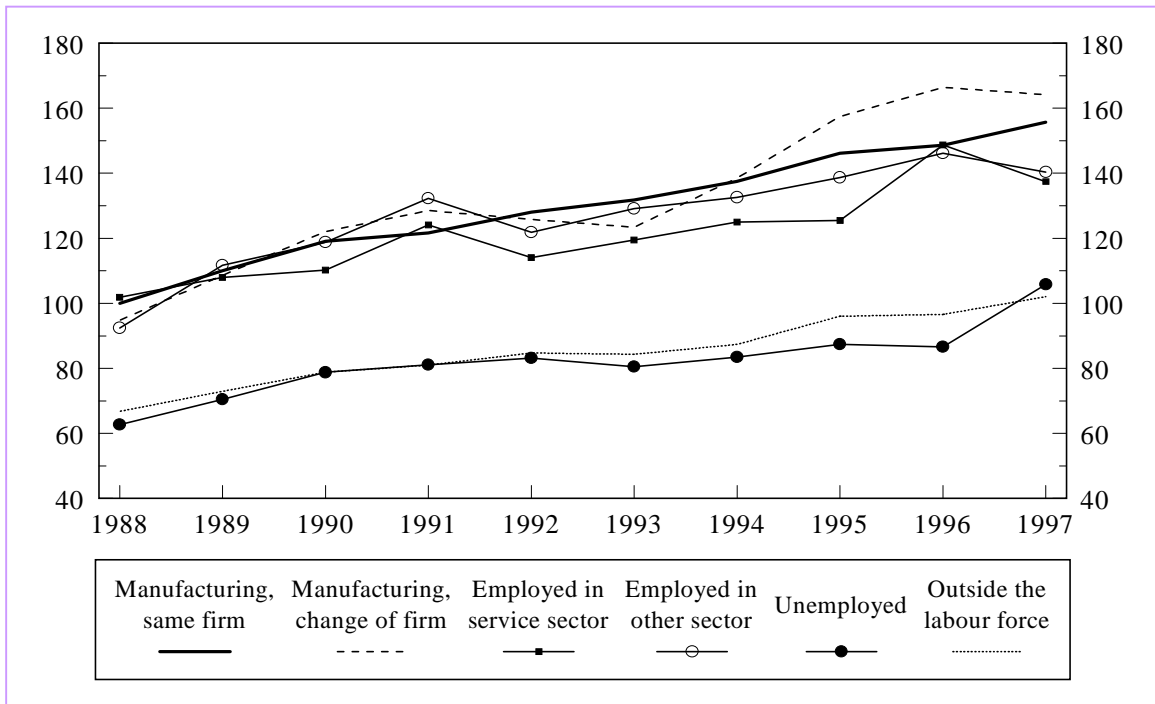
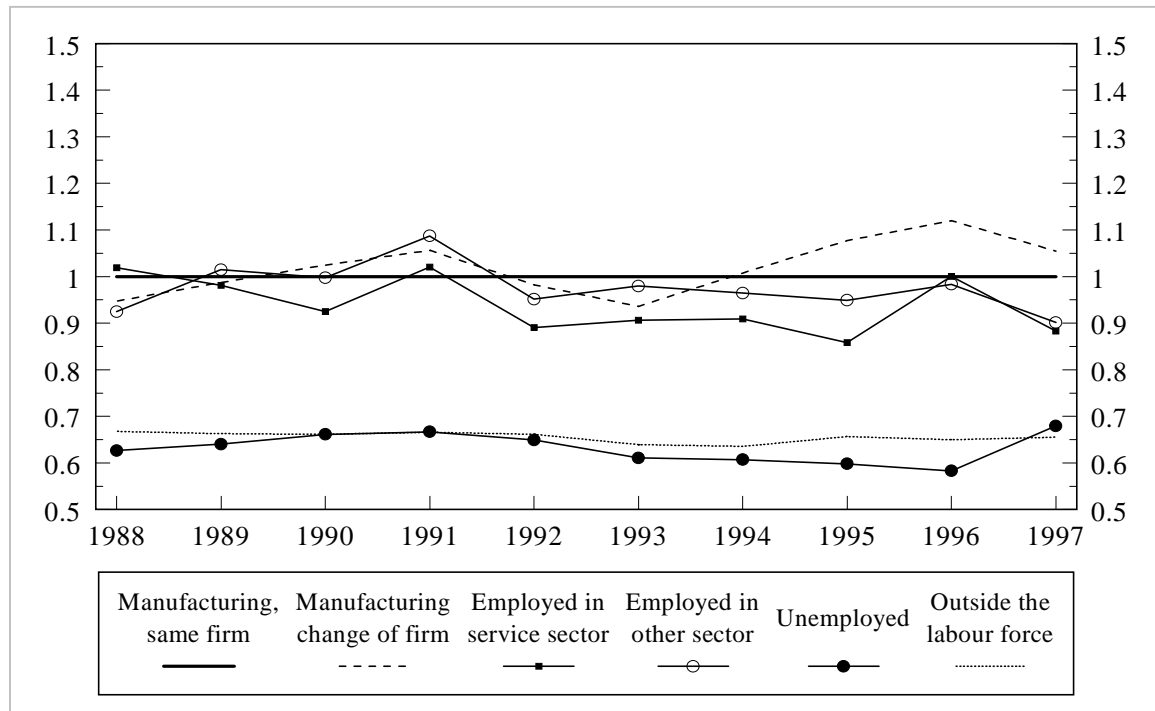


Figure 9. Manufacturing: relative mean earnings according to labour force status in the previous year, 1988–97 (manufacturing, same firm = 100)



Figures 8 and 9 present the earnings levels of the manufacturing workforce. In Figure 8 the reference earnings level is the mean of the average monthly earnings in 1988 of those who are observed to have been in the same manufacturing firm in 1988 as in 1987. This figure thus provides a combined picture of relative earnings levels and relative earnings growth rates of the six categories under study. Figure 9 merely clarifies, on an annual basis, the absolute gap in mean earnings between the six categories over the different years investigated.

The clustering of the six categories into two distinct groups – the previously employed and the previously non-employed – is outstanding. Those who have stayed in the same firm for another year have seen a steady growth in their earnings irrespective of the dramatic changes in the activity level of the economy. Compared to these stayers, those having moved to work for another manufacturing firm experienced wage gains in the pre-recession years, wage losses in the recession years, and rapidly growing wage gains in the post-recession years. This clearly hints about the dominating reason behind the change of firm. In the post-recession years, the mean earnings of these within-manufacturing movers have clearly exceeded those of their staying colleagues, which can be taken to reflect the intensified, technology-enhanced competition for higher-educated labour in combination with increasing shortages of specialised skills, particularly in rapidly expanding industries.

Those having moved to a manufacturing job from a non-manufacturing industry seem to have fared worse than within-manufacturing movers. This holds especially for the 1990s and more so for those having moved from the service sector as compared to those having come from some other non-manufacturing sector. An intuitive explanation would be that these “outsiders” do not possess the specialised skills that well-paid manufacturing jobs usually require. Acquiring such skills demands training both on- and off-the-job.

The weakest earnings trend is observed for those having been hired among the unemployed, and their earnings seem to increasingly lag behind the earnings also of those entering the labour market from outside the labour force. While the relative earnings of these entrants have remained roughly unchanged between 1988 and 1997 (about two-thirds of the monthly earnings of stayers), those of the unemployed reveal a steadily declining trend, which was, however, suddenly reversed in 1997.⁹ Whether this is a temporary or a more permanent phenomenon remains an open question until more recent data is available.

The same analysis for service sector employees is undertaken in Figures 10 and 11. The earnings growth of stayers has been more moderate in the service sector than in manufacturing, but this diverging trend started only in the post-recession period. As in the manufacturing sector, within-sector movers have generally managed to obtain considerable wage gains as compared to their staying colleagues. But opposite to the situation in manufacturing, these wage gains show up during most of the investigated time period. Another notable difference between the two sectors is that those having shifted from a manufacturing job to a service sector job have also gained markedly from their move. As shown in Figure 8 above, those moving in the opposite direction have usually lost in wage terms compared to their staying colleagues. Obviously this difference in outcomes is partly due to the types of jobs obtained by these between-sector movers, but also to the gap in overall wage levels between the two sectors.

The relative earnings position of those recruited among the unemployed shows much the same pattern as for those having flown from unemployment into manufacturing jobs, including the sudden change in 1997. But because of more moderate earnings growth in the service sector as compared to the manufacturing sector, the relative earnings position of these ex-unemployed has worsened less in the service sector than in manufacturing. Finally, those having been recruited from outside the labour force have usually fared much

⁹ Adjusting the months worked to the registered months in unemployment (see footnote 7 above) pushes the earnings curve of the ex-unemployed above that of the labour market entrants, but nevertheless retains it below the earnings curves of the previously employed. Comparing the six workforce categories based on median instead of mean earnings levels causes only marginal changes in the overall patterns for relative earnings levels and growth rates. The most notable change is a shift of the relative position of those having moved to a manufacturing job from some other sector, closer to that of movers from the service sector. See Figures A1 and A2 of the Appendix.

better both when compared with their ex-unemployed colleagues¹⁰ and when compared with their counterparts having entered the manufacturing sector.¹¹

Figure 10. Service sector: relative mean earnings according to labour force status in the previous year, 1988–97 (service sector, same firm in 1988 as in 1987 = 100)

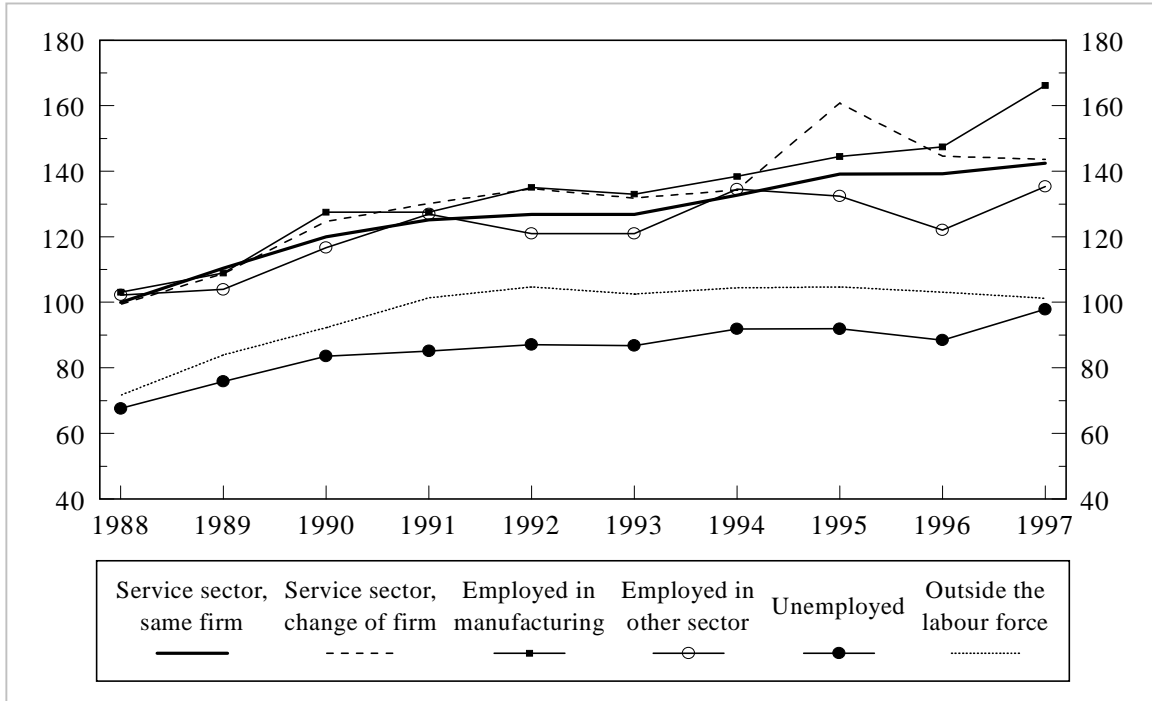
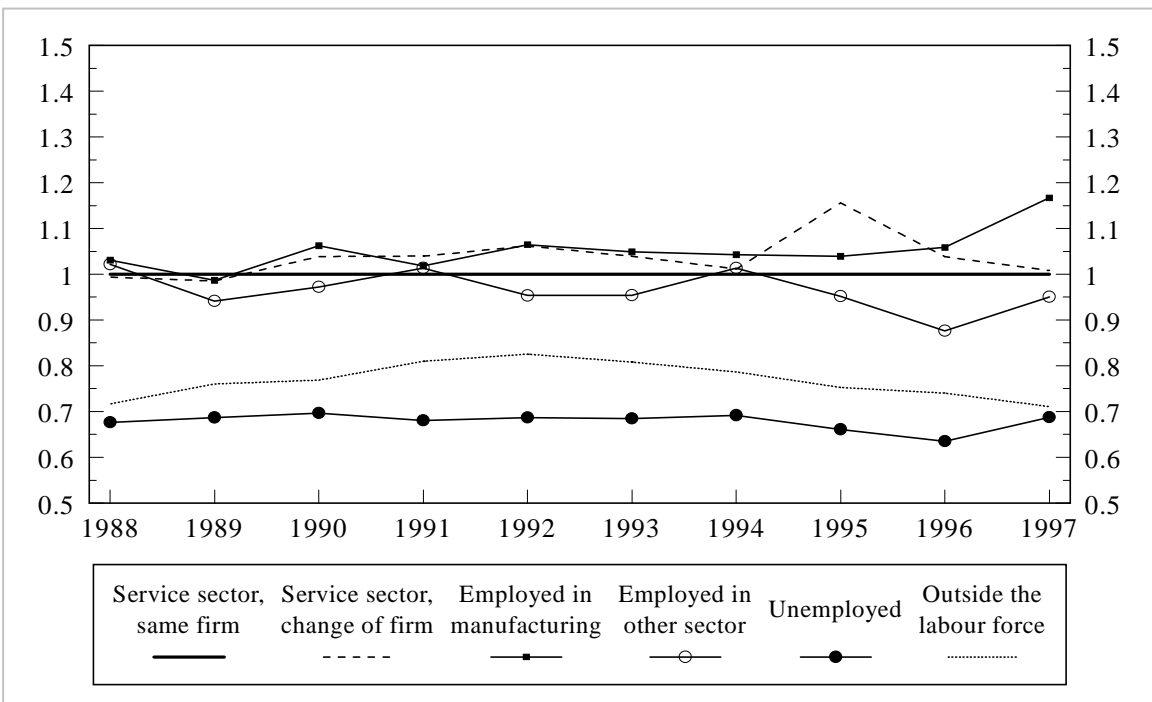


Figure 11. Service sector: relative mean earnings according to labour force status in the previous year, 1988–97 (service sector, same firm = 100)



¹⁰ If using adjusted instead of unadjusted monthly earnings, the earnings curve of the ex-unemployed shifts close to that of labour market entrants.

¹¹ The same information based on median instead of mean earnings is presented in Figures A3 and A4 of the Appendix. The difference in outcomes is minor.

The same exercise is repeated for retail trade in Figures 12 and 13, and for hotels and restaurants in Figures 14 and 15. Those having stayed in the same firm for another year have seen their earnings grow at more or less the same rate irrespective of whether having been employed in retail trade or in hotels and restaurants. Moreover, the earnings curve of these stayers looks much the same as for the service sector as a whole, which is also to be expected in view of the centralised wage-setting institutions characterising the Finnish labour market.

Figure 12. Retail trade: relative mean earnings according to labour force status in the previous year, 1988–97 (retail trade, same firm in 1988 as in 1987 = 100)

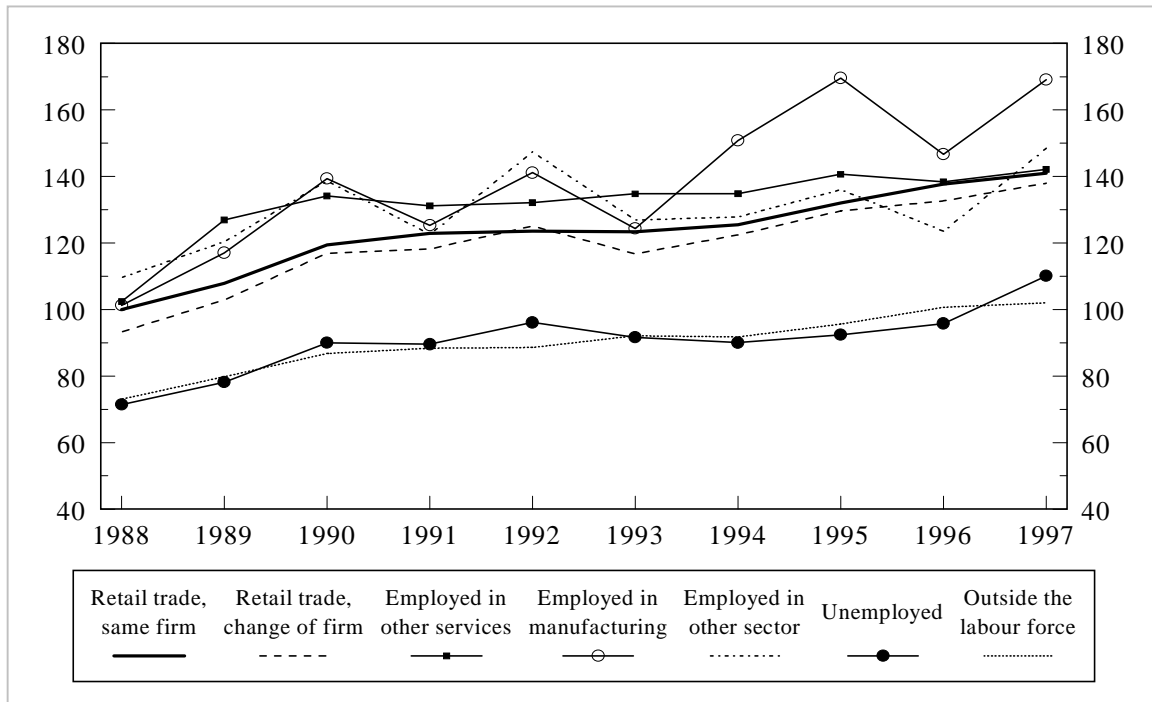


Figure 13. Retail trade: relative mean earnings according to labour force status in the previous year, 1988–97 (retail trade, same firm = 100)

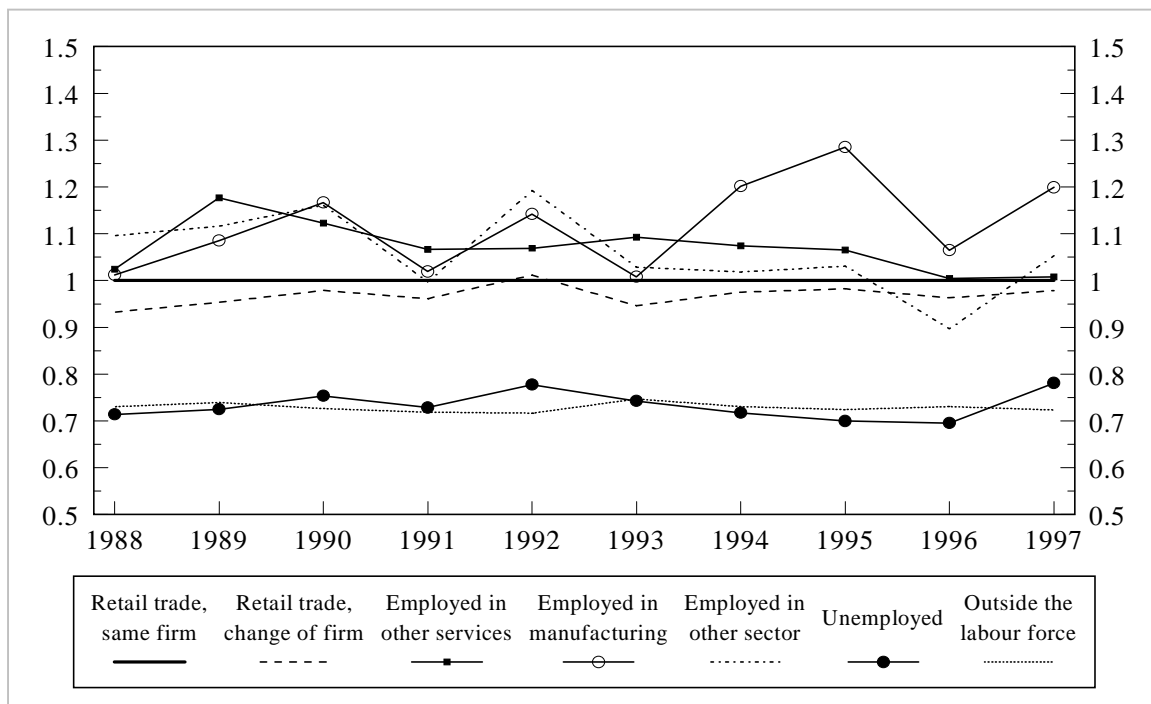


Figure 14. Hotels and restaurants: relative mean earnings according to labour force status in the previous year, 1988–97 (hotels and restaurants, same firm in 1988 as in 1987 = 100)

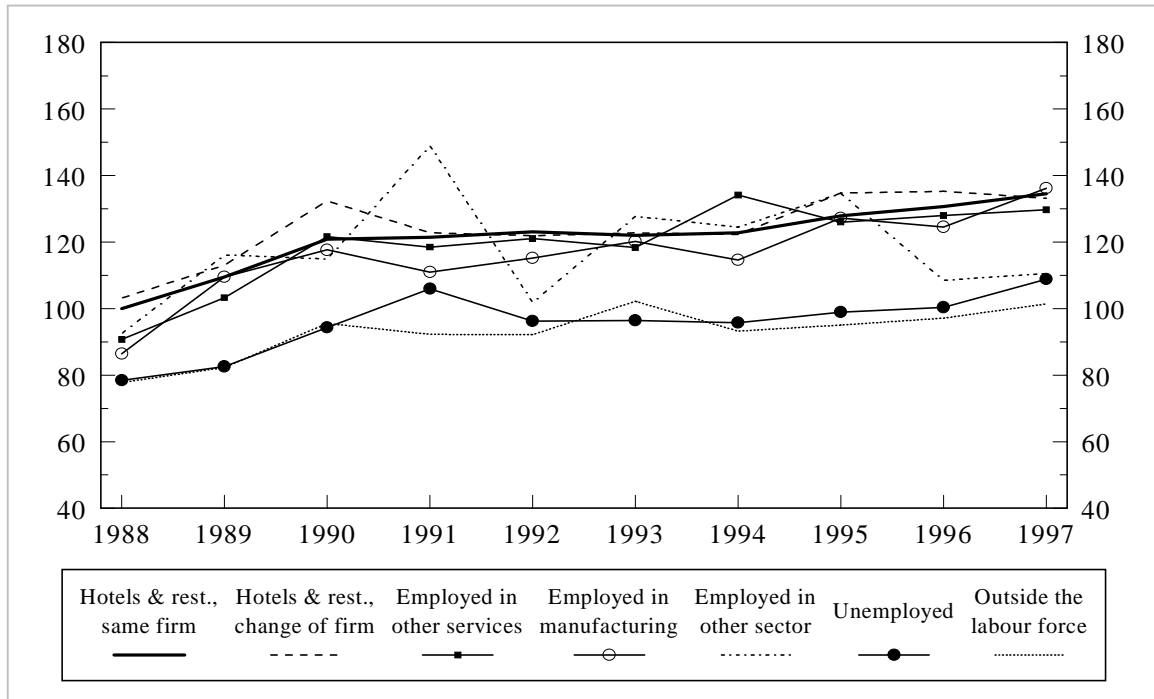
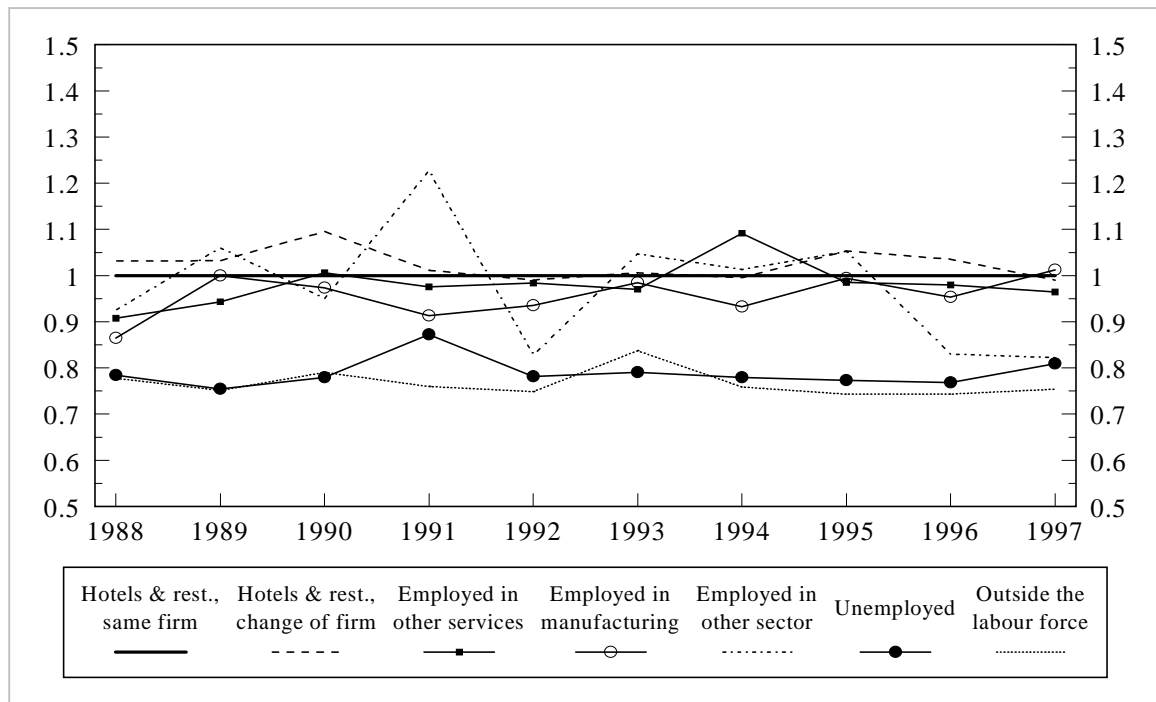


Figure 15. Hotels and restaurants: relative mean earnings according to labour force status in the previous year, 1988–97 (hotels and restaurants, same firm = 100)



Those having moved to work for another firm engaged in retail trade have almost persistently experienced a slightly weaker growth in earnings compared with their staying colleagues. In hotels and restaurants, in contrast, the difference in earnings growth between

stayers and within-industry movers has mostly been negligible, except for the boom years at the turn of the decade 1980/90 and the initial recovery period.

Opposite to within-industry movers, those having moved into retail trade from some other service industry or from outside the service sector have mostly managed to obtain notably higher earnings as compared to those who have continued to work for the same firm. In hotels and restaurants, on the other hand, such moves have only occasionally granted higher earnings than for those continuing in the industry, either for the same or for some other firm.

Finally, in contrast to the service sector as a whole, the difference between those recruited among the unemployed and those recruited among labour market entrants has been minor throughout the investigated years. Moreover, in both retail trade and hotels and restaurants the earnings of these previously non-employed have grown at approximately the same rate as the earnings of those having stayed in the industry. As a consequence, also their relative earnings position has remained roughly unchanged. In retail trade the earnings level of these previously non-employed has been some 25–30% below the earnings level of stayers, while the corresponding wage gap in hotels and restaurants has been slightly smaller, about 20–25% below the earnings of stayers.¹²

In addition to earnings levels, it is also of interest to compare the spread in earnings between the four sectors/industries and the six workforce categories. The result from calculating for each of them the ratio between the 90th percentile and the 10th percentile, the D90/D10-ratio, is presented in Figures A9 to A12 of the Appendix.

When comparing those who have stayed in the same firm for another year, the dispersion in earnings turns out to be lowest in hotels and restaurants, followed by retail trade. Both service industries also display a slight increase in the earnings dispersion of stayers. A weak upward trend is discernible in hotels and restaurants since the early 1990s, but in retail trade only after the recession years. Earnings dispersion among stayers is clearly higher in manufacturing and highest in the service sector. A higher spread in earnings in broad sectors as compared to single industries is only to be expected, though, and the service sector showing the highest dispersion is largely an indication of its greater heterogeneity compared to manufacturing. And opposite to the two service industries, in both sectors earnings dispersion among stayers has rather been decreasing than increasing.

In retail trade the spread in earnings has persistently been slightly higher among within-industry movers than among stayers, but the overall trend has been roughly the same. A higher spread in earnings among within-industry movers dominates also in hotels and restaurants, but the fluctuations over time reveal no trend whatsoever. The spread in earnings is considerably higher among those having been recruited from other service industries or from outside the service sector. Certainly this is at least partly attributable to smaller numbers of observations in these categories when going down to two- and three-digit industry levels, especially when it comes to outside-sector inflows. But this finding may also reflect a larger heterogeneity among these hires with respect to both individual and job characteristics.

An even larger spread in earnings among movers is observed for the service sector as a whole, and there seems to be no distinct trend in the calculated annual D90/D10-ratios. In

¹² Repeating these comparisons based on median instead of mean earnings produces, once again, approximately the same results (see Figures A5–A8 of the Appendix).

manufacturing, in contrast, the difference in earnings dispersion between stayers and movers is much smaller, except for hires among those employed in some other sector than manufacturing and services. Also here it is difficult to point to clear trends over the investigated time period.

The spread in earnings among those having been recruited from the pool of unemployed and from outside the labour force reveals interesting similarities and dissimilarities across the two sectors and the two industries. In retail trade earnings dispersion among these two workforce categories has remained very close to that of stayers. This also holds for the manufacturing sector. In hotels and restaurants and particularly in the service sector as a whole, on the other hand, earnings dispersion among ex-unemployed and especially among labour market entrants has come down to a level close to that of stayers only in more recent years.

5. ENTERING POSITION IN THE EARNINGS DISTRIBUTION

These marked differences in earnings levels, earnings growth rates and earnings dispersion across workforce categories within the same sector/industry but also between sectors/industries for the same workforce category point to substantial variation in the earnings level at which the new hires enter their new jobs. One way of shedding some light on this issue is to calculate the spread in the relative entering earnings position of the six workforce categories.

More precisely, the workforce of each year and sector/industry is ranked according to the size of the employees' monthly earnings and divided into ten groups each embracing 10% of the workforce (deciles). The relative position of each employee is then contrasted against his/her labour force status in the previous year, which gives the distribution across deciles of each workforce categories. In other words, the focus is on uncovering the flow within each category into the different parts of the earnings distribution – the relative “entering position” – rather than calculating the distribution of each category within the different deciles. This section presents the outcome from such an exercise with the emphasis on low-paid and high-paid entering positions.

Figures 16 to 19 display, separately for the two sectors and the two industries, the relative share of each workforce category located in the lowest end of the earnings distribution, here defined to comprise the three lowest deciles. The corresponding information when restricting the analysis to the lowest 10% of the earnings distribution is provided in Figures A13 to A16 of the Appendix.

A common feature of manufacturing, services, retail trade, and hotels and restaurants is that the relative share of those with an entering position placing them among the 30% of the workforce with the lowest earnings, is very similar for those having stayed in the same sector/industry either with the same or with another firm. In manufacturing, the absolute level of this share has for most of the investigated time period stayed below 30%, indicating that these two workforce categories are generally under-represented in low-paid manufacturing jobs. Moreover, this favourable outcome seems to have strengthened especially for those who in the post-recession period moved to work for another manufacturing firm. In the service sector, in contrast, such an under-representation characterises those having stayed with the same firm for another year rather than their firm-changing colleagues. Much the same pattern emerges for the two service sector industries, albeit the under-

representation of stayers and within-industry movers has almost persistently been somewhat stronger in hotels and restaurants than in retail trade. In retail trade, on the other hand, the post-recession period points to a steadily decreasing flow into low-paid positions of both stayers and their firm-changing counterparts.¹³

Those having changed from a non-manufacturing to a manufacturing job reveal an increasing tendency of flowing into lower-paid positions. The relative entering position of those shifting from a non-service industry improved only temporarily at the turn of the decade 1980/90, and has ever since worsened steadily; of those hired in 1997 close to 50% entered a low-paid position. A clear but slightly more moderate worsening is discernible in the relative entering position of those coming from a service sector job. Figure A13 in the Appendix shows that this worsening goes all the way down to the lowest 10% of the earnings distribution.

The situation of hires into the service sector turns out to be completely different. The flow of outside-sector hires into the lower end of the earnings distribution has been very balanced irrespective of boom and recession years (Figure 17). Indeed, the time trend points to a decreasing rather than an increasing share of low-paid positions especially among those having shifted from a manufacturing job into a service sector job. And again this trend is reflected also at the very bottom end of the earnings distribution (Figure A14 of the Appendix).

This favourable trend in the relative entering position of those moving from the manufacturing sector is particularly outstanding in retail trade (Figure 18). In hotels and restaurants, in contrast, these ex-manufacturing workers have almost persistently been over-represented among those having flown into a low-paid job, albeit the trend seems to have turned downward towards the end of the investigated time period (Figure 19).

Those recruited into retail trade from some other service sector industry have in the post-recession years seen a steady weakening in their relative entering position with an increasing share flowing into low-paid jobs. The same trend is observable in hotels and restaurants, but here it is rather a return to the unfavourable situation of these hires that prevailed also before the recession.

A large majority of those recruited among the non-employed enter a low-paid job. Of those going into the manufacturing sector, three out of four have started in the lower end of the earnings distribution. While this situation has prevailed among those coming from outside the labour force, irrespective of boom and recession, the relative entering position of the unemployed started to worsen further in the post-recession period. After the peak in 1996, when almost 85% of those recruited among the unemployed entered a low-paid job, the situation seems to have “normalised”, however.

The relative entering position of those non-employed moving into a service sector job looks slightly more favourable. Except for the peak in 1996, some 70% of those recruited among the unemployed have been given a low-paid job, a share that is somewhat smaller than for the manufacturing sector. Among those coming from outside the labour force, a decreasing share was entering low-paid positions, but only up to 1992, after which it has climbed back to some 65%. However, compared to manufacturing this is still a 10 percentage points lower number.

¹³ The same pattern emerges when analysing the lowest 10% instead of the lowest 30% of the earnings distribution. See Figures A13–A16 of the Appendix.

Figure 16. Manufacturing: share of those having entered the lowest 30% of the sector's earnings distribution, by labour force status in the previous year, 1988–97

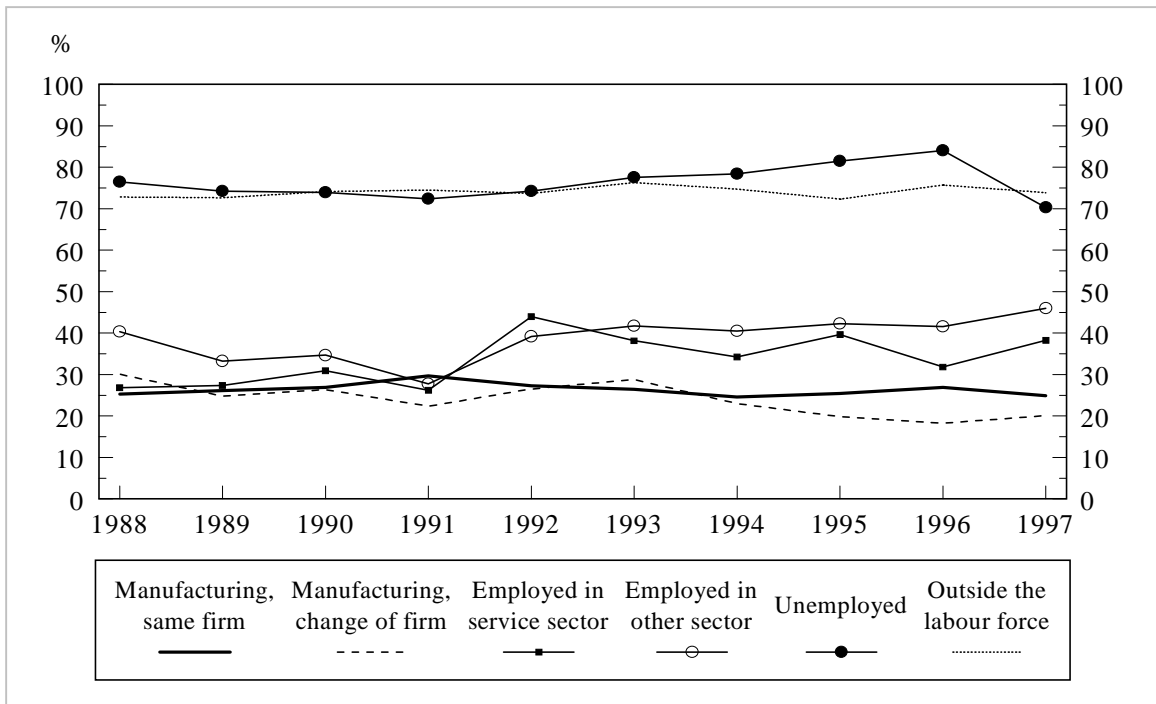
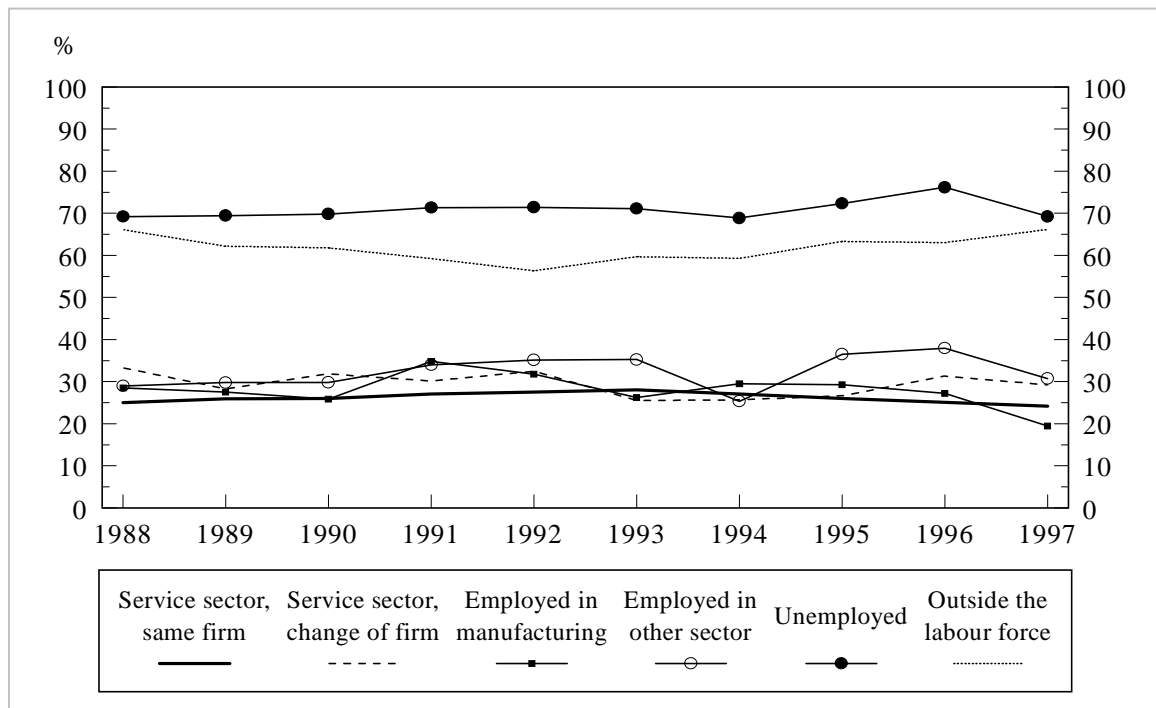


Figure 17. Service sector: share of those having entered the lowest 30% of the sector's earnings distribution, by labour force status in the previous year, 1988–97



Retail trade differs from the service sector as a whole in at least two respects. First, a higher share of the non-employed has entered a low-paid position. Indeed, this share is very close to that observed for manufacturing, or some 75%. Second, the situation has been very similar for unemployed and labour market entrants, except for 1997 which points to a clear improvement in the relative entering position of unemployed having managed to get a

job in retail trade. This latter observation also holds for hotels and restaurants. But opposite to retail trade, the over-representation of the non-employed in low-paid positions is less strong with, broadly speaking, some 60–65% having entered the lower end of the industry's earnings distribution.

Figure 18. Retail trade: share of those having entered the lowest 30% of the industry's earnings distribution, by labour force status in the previous year, 1988–97

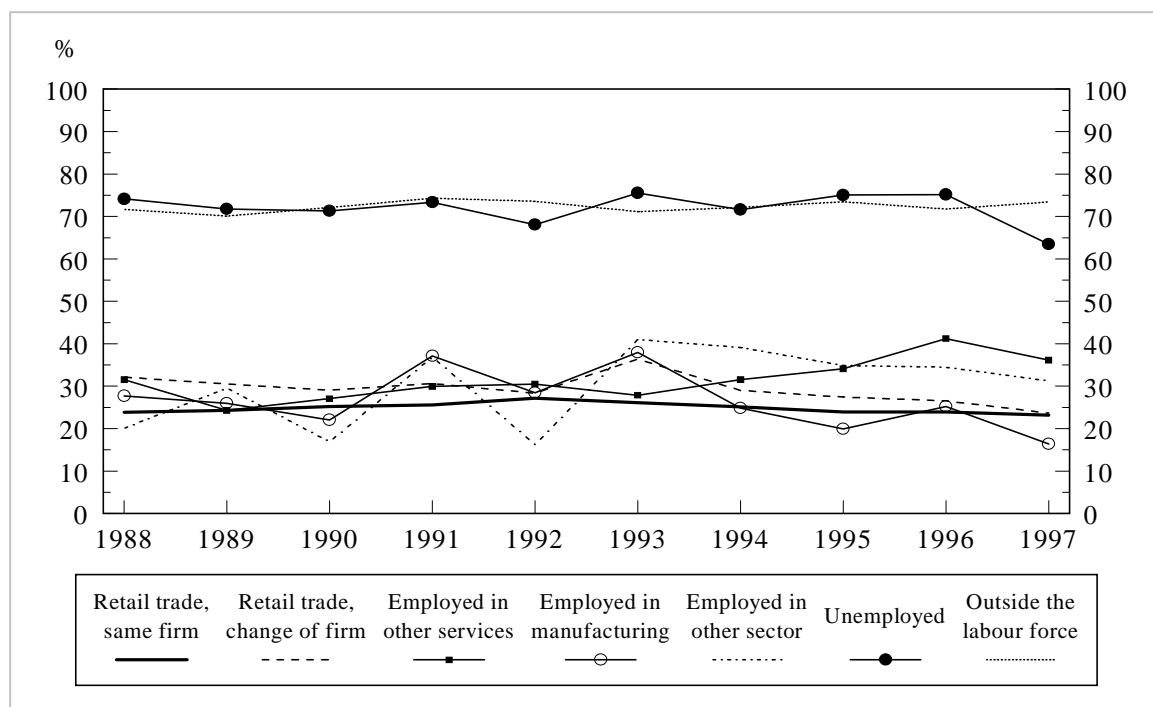
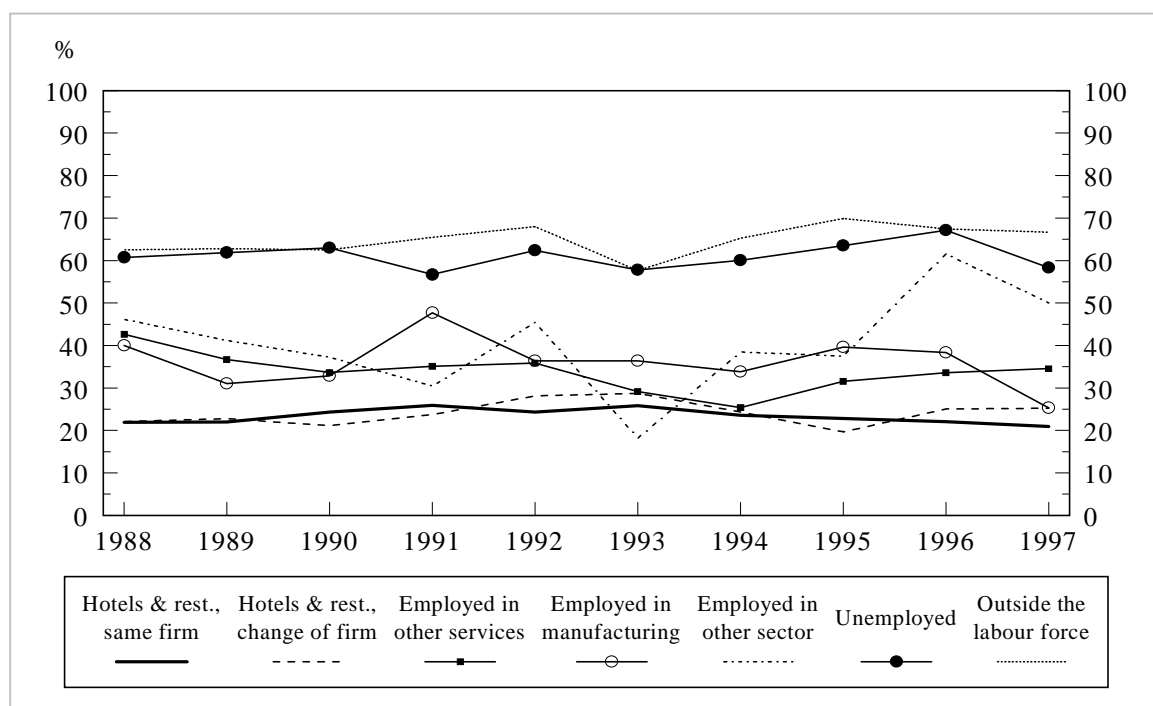


Figure 19. Hotels and restaurants: share of those having entered the lowest 30% of the industry's earnings distribution, by labour force status in the previous year, 1988–97



Notable differences across the two sectors and the two industries show up also when examining the flow of non-employed into the lowest decile instead of the three lowest deciles of the earnings distribution (Figures A13–A16 of the Appendix). Here manufacturing stands out as the clearly worst alternative, followed by the service sector. Compared to the service sector as a whole, hotels and restaurants turn out to be a better alternative for the non-employed, with retail trade falling in-between.

The entering positions analysed in Figures 16–19 are based on, respectively, within-sector and within-industry calculations. If instead taking the whole-economy distribution of wage and salary earners as the point of departure, the outcome for the two service sector industries and especially for their hires among the non-employed looks considerably worse. This is because now also the relative earnings level of the industry is accounted for. When using this framework, nine out of ten non-employed recruited into retail trade have entered a low-paid job. In hotels and restaurants the corresponding share has in more recent years exceeded 80%.¹⁴

When repeating the same analysis with the focus turned to those having managed to enter a high-paid position, here defined as the highest 30% of the earnings distribution, the outcome looks like Figures 20 to 23. In both sectors and industries, those having stayed in the same firm for another year seem to be slightly over-represented at this end of the earnings distribution. Moreover, this tendency comes out most strongly in hotels and restaurants.

The within-sector movers in manufacturing display an inflow pattern that is consistent with the fluctuations in their relative mean earnings, as shown in Figure 8 above. The improvement and weakening in their mean earnings relative to their staying colleagues now get an explanation in the form of increases and decreases in the share among them having obtained a high-paid position due to their change of firm. For instance, in 1996 almost one-half of them entered a manufacturing job that placed them among the highest-paid in the sector.

In the service sector, on the other hand, those having moved to work for another service sector firm show, at most, only a slight over-representation when it comes to higher-paid jobs. The difference between stayers and movers within the sector is, in effect, quite small, except for a temporary trend break in 1995. In retail trade the similarity between stayers and, in this case, within-industry movers is even more outstanding, whereas the situation in hotels and restaurants rather reminds of that in manufacturing with fairly large fluctuations depending on the activity level of the economy.

Those recruited from outside the manufacturing sector have, especially in the post-recession period, fared much worse than those having moved within the sector. Again the situation is more or less the opposite in the service sector, where especially those previously in manufacturing have in large proportions been recruited into higher-paid service sector jobs.

In retail trade, those recruited from outside the industry have persistently been overrepresented among entrants into higher-paid positions. Also here ex-manufacturing workers have experienced an increasingly favourable situation in post-recession years. Simultaneously the relative entering position has weakened for those having moved to work in retail trade from some other service sector industry. In hotels and restaurants, in contrast, those recruited from outside the industry have usually managed to obtain higher-paid positions to

¹⁴ The change in outcomes is much smaller for the two sectors as the influence of the relative earnings level is much weaker for broad sectors with an earnings distribution close to the whole-economy dispersion in earnings as compared to outstanding low-pay and high-pay industries. See Figures A17–A24 of the Appendix.

a smaller extent than the within-industry movers. Furthermore, the situation of these “outsiders” turns out to have changed only marginally over the investigated time period.

Figure 20. Manufacturing: share of those having entered the highest 30% of the sector’s earnings distribution, by labour force status in the previous year, 1988–97

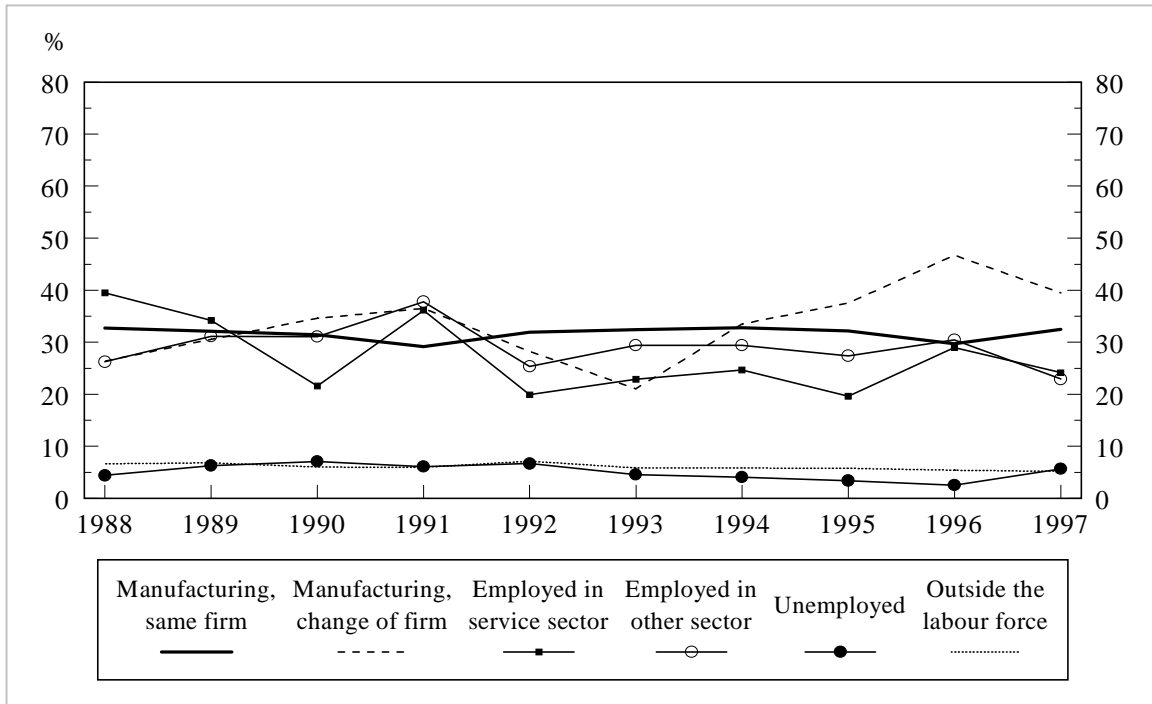


Figure 21. Service sector: share of those having entered the highest 30% of the sector’s earnings distribution, by labour force status in the previous year, 1988–97

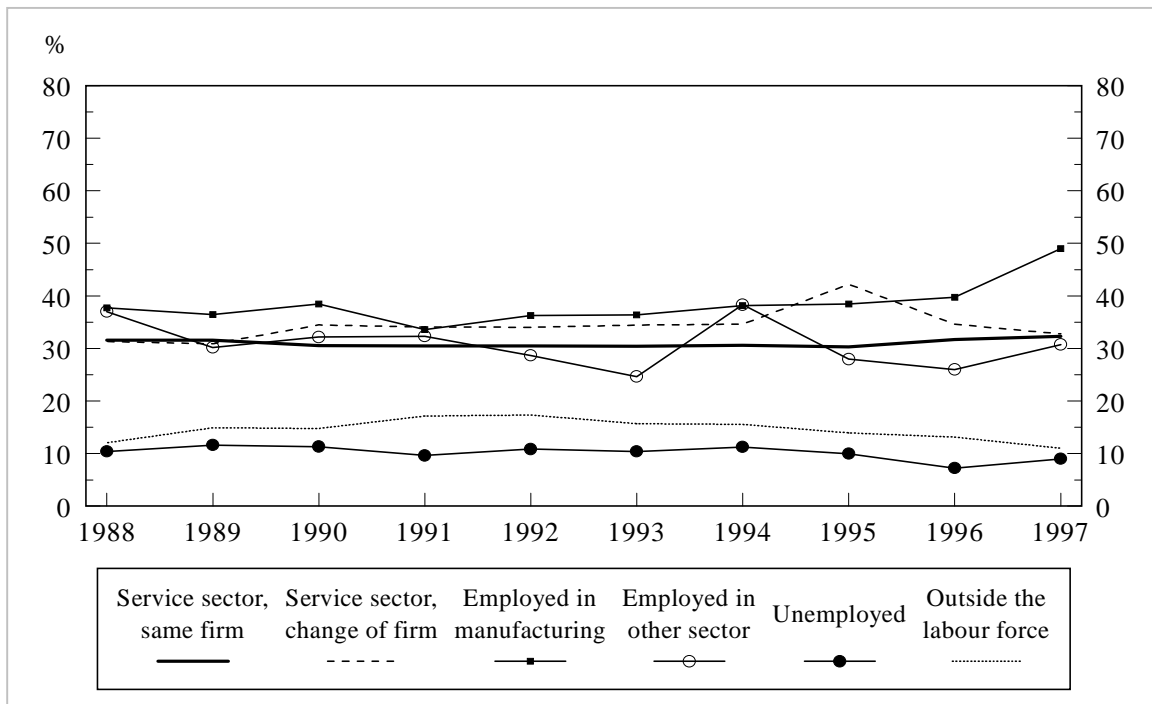


Figure 22. Retail trade: share of those having entered the highest 30% of the industry's earnings distribution, by labour force status in the previous year, 1988–97

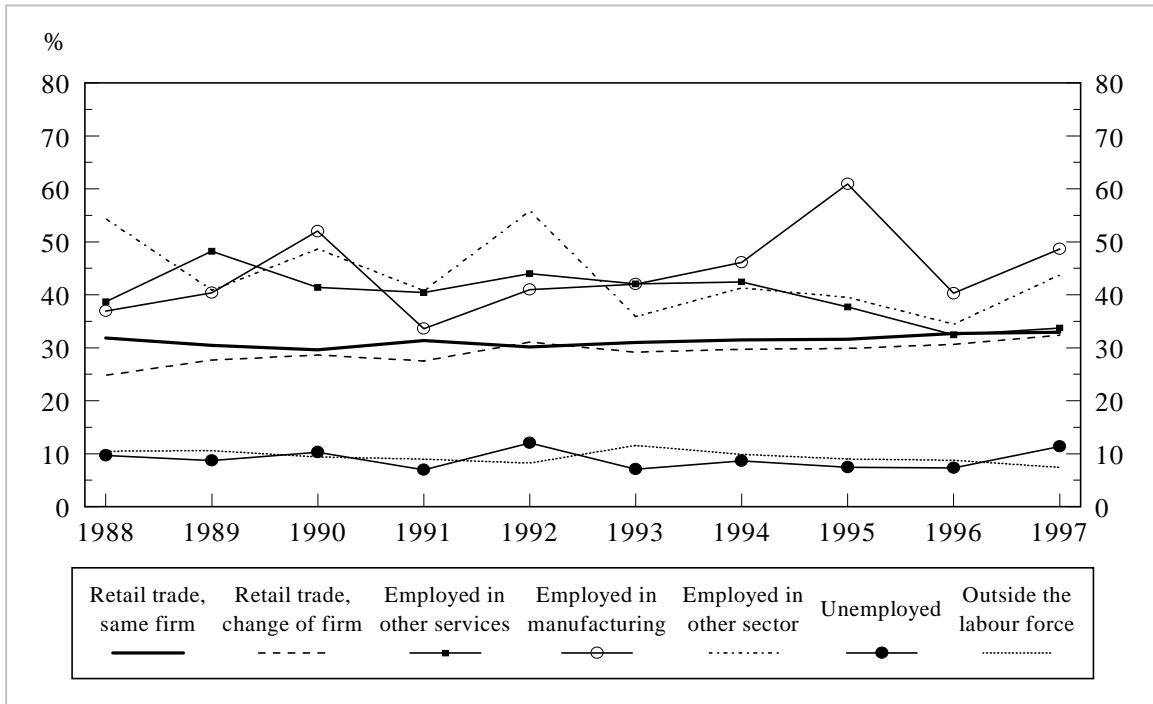
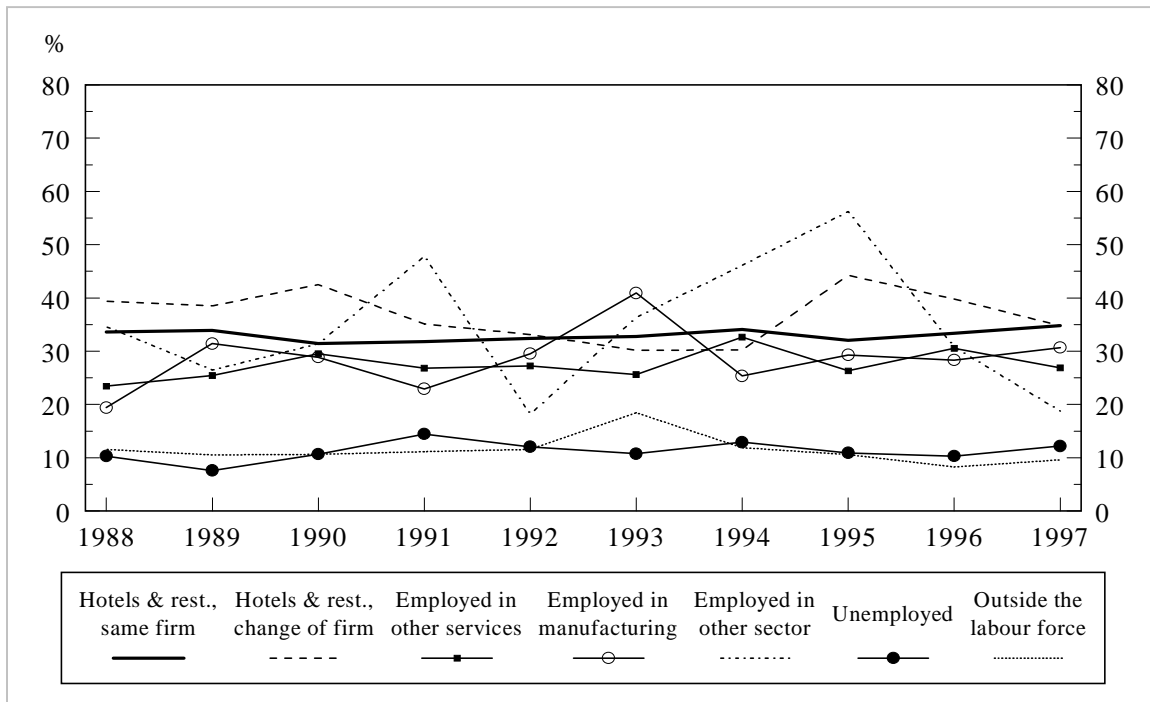


Figure 23. Hotels and restaurants: share of those having entered the highest 30% of the industry's earnings distribution of all employees, by labour force status in the previous year, 1988–97



When finally looking at the non-employed, their possibilities to enter higher-paid positions have throughout been small and have also remained small despite of booms and recessions. Their entering situation is most unfavourable in manufacturing with only some 5% of those

recruited among the non-employed flowing into the highest 30% of the sector's earnings distribution. A slightly higher portion, or some 10%, is obtained for the service sector, retail trade, and hotels and restaurants.¹⁵

6. EMPLOYMENT STABILITY

This section, finally, reports on the results from a simple attempt to uncover potential differences in the employment stability across individuals differing in their previous labour force status. For this exercise the workforce is divided on a slightly cruder basis than in the analyses undertaken in the previous sections. Here a distinction is made between four categories: (1) stayers representing those continuing in the same firm for another year; (2) movers embracing all employed who, in the next year, are observed to work for another firm either in the same or in a different industry/sector; (3) ex-unemployed covering those recorded as unemployed in the previous year; and (4) labour market entrants comprising those recorded as having been outside the labour force in the previous year.

The analysis of each individual's employment stability extends over the two years following upon the year when the individual is observed to work in the manufacturing sector, in the service sector, in retail trade, or in hotels and restaurants. A number of possible outcomes are examined and compared for the four workforce categories under study: the individual remains employed over the next two years; the individual circulates between non-employment and employment; and the individual fails in getting a new job after a year in unemployment or outside the labour force. The alternative outcomes identified and their relative frequency in the four workforce categories are shown in Tables 5 to 8.

Those having continued to work in the same manufacturing firm reveal a very high probability of remaining employed (anywhere in the economy) also over the next two years (Table 5). Their employment stability weakened temporarily during the recession years, but returned quickly to pre-recession levels when the recovery started. The same overall trend is discernible among within-sector and between-sector movers, albeit along a slightly weaker employment stability line. The probability of remaining employed also over the next two years is substantially lower for those recruited among the non-employed. Furthermore, it dropped dramatically during the recession, more for those recruited among the unemployed, but recovered quickly, again at a more rapid pace among these ex-unemployed, and soon even exceeded pre-recession levels.

The probability of entering a circle of employment and unemployment is highest among those recruited among the unemployed and lowest among the stayers. A common feature of the four workforce categories, however, is that this particular risk increased markedly during the recession and has, moreover, remained at a notably higher level compared to the pre-recession situation. Another common feature is that the risk of remaining unemployed for at least one more year, instead of finding a new job, has been considerably higher for most of the investigated time period. This indicates that the characteristics of those having flown into unemployment from a manufacturing job have usually been in low demand in the Finnish labour market of the 1990s.¹⁶

¹⁵ If making the same comparison based on the whole-economy earnings distribution, the situation looks, of course, much worse, particularly for non-employed recruited into retail trade or hotels and restaurants. See Figures A25–A28 of the Appendix.

¹⁶ For further details, see e.g. Asplund (2000b).

Table 5. Manufacturing: employment stability by labour force status in the previous year, 1988–97, %

Labour force status in year		1987	1988	1989	1990	1991	1992	1993	1994
t+1	t+2								
<i>Manufacturing, same firm in year t-1 and year t:</i>									
Employed	Employed	88.9	82.9	77.1	77.9	83.5	87.7	88.1	89.2
Unemployed	Employed	0.8	0.9	2.5	2.1	2.3	1.0	0.9	1.3
Unemployed	Unemployed	0.4	1.0	4.1	5.1	3.4	2.3	2.3	2.5
<i>Employed in year t-1; change of firm within or into manufacturing in year t:</i>									
Employed	Employed	85.5	79.5	72.8	75.1	78.9	82.5	85.5	87.7
Unemployed	Employed	1.3	1.3	3.3	2.0	3.7	1.9	1.5	2.0
Unemployed	Unemployed	0.8	1.6	5.6	6.2	4.8	3.2	3.1	2.2
<i>Unemployed in year t-1; manufacturing job in year t:</i>									
Employed	Employed	65.0	45.8	40.2	38.5	54.9	63.6	67.3	69.6
Unemployed	Employed	5.5	6.1	8.4	7.7	12.6	7.3	7.0	7.3
Unemployed	Unemployed	5.4	11.7	20.4	28.1	13.9	9.8	9.1	8.4
Left labour force	Employed	2.6	2.0	1.6	1.6	1.5	2.0	1.3	1.6
Left labour force	Left labour f.	3.0	2.9	4.5	4.2	4.0	2.4	1.7	2.0
<i>Outside the labour force in year t-1; manufacturing job in year t:</i>									
Employed	Employed	57.9	46.8	44.3	47.6	53.2	56.6	59.9	62.6
Unemployed	Employed	1.8	2.2	4.8	4.1	5.1	3.8	4.0	5.2
Unemployed	Unemployed	1.3	3.0	6.8	7.6	4.6	4.3	4.2	3.2
Left labour force	Employed	9.5	8.0	5.7	5.3	7.9	7.9	5.9	6.9
Left labour force	Left labour f.	11.6	13.6	13.5	13.5	13.1	11.9	10.0	9.2

Finally, a rather small and declining share of those recruited among the unemployed has left the labour force after one year in a manufacturing job. This probability is substantially higher among those recruited from outside the labour force, but declining as well. Both groups of non-employed reveal, however, a much higher probability of leaving the labour force for a longer period than of re-entering the labour market already in the next year. Hence, unemployed seem to be more likely to return to unemployment, when no job is to be found, while labour force “outsiders” are more likely to return to a life outside the labour force when employment prospects are bad. But irrespective of the kind of non-employment that follows upon the manufacturing job, the probability of returning into working life is generally lower than the risk of remaining among the non-employed for another year.¹⁷

¹⁷ In this context it might be worthwhile to remind about one shortcoming of the data used, viz. that all information on the individual’s labour force status concerns a single point during the year. Year-to-year comparisons thus say nothing about the individual’s labour market experience between these specific points in time. The reported probabilities of remaining employed may consequently be overestimates, if shorter spells of non-employment have been frequent. These probabilities should, in other words, be looked upon as “upper bounds”. The same reasoning applies to the risks of non-employment, which are overestimates, if shorter employment spells have occurred. These risks then set the “lower bounds”.

The outcome from corresponding calculations for the service sector is presented in Table 6. For stayers and movers the overall patterns and trends are remarkably similar to those in the manufacturing sector. The probability of remaining employed over the next two years is higher for stayers than for movers, but both experienced a considerable weakening in their employment stability prospects during the recession. This drop was particularly strong among those moving within or into the service sector, and they are still lagging behind their counterparts in manufacturing. The risk of becoming unemployed is moderate despite an increase during the recession years and a tendency of persistently higher risk levels during the post-recession years. And if becoming unemployed, then the risk of continuing in unemployment is somewhat higher than the probability of finding a new job.

Unemployed having been recruited into a service sector job face a markedly lower probability of staying employed compared to their counterparts having entered the manufacturing sector. Conversely, their risk of returning into unemployment has been considerably higher, as has been their risk of circulating between employment and unemployment and of seeing their unemployment spells extend over at least two years. They also face a higher risk of leaving the labour force. But just as for their counterparts employed into manufacturing, the risk of remaining non-employed for another year is clearly higher than the chance of finding a new job.

Table 6. Service sector: employment stability by labour force status in the previous year, 1988–97, %

Labour force status in year		1987	1988	1989	1990	1991	1992	1993	1994
t+1	t+2								
<i>Service sector, same firm in year t-1 and year t:</i>									
Employed	Employed	88.0	85.7	82.8	79.7	81.4	85.6	87.1	88.8
Unemployed	Employed	0.5	0.6	1.2	1.4	2.0	1.2	1.0	0.9
Unemployed	Unemployed	0.2	0.5	1.6	3.1	2.7	1.9	1.6	1.4
<i>Employed in year t-1; change of firm within or into the service sector in year t:</i>									
Employed	Employed	83.5	79.7	70.1	69.3	72.5	79.5	83.6	84.7
Unemployed	Employed	1.1	1.1	3.2	3.1	4.4	2.2	1.6	2.2
Unemployed	Unemployed	0.5	1.0	4.2	6.2	4.9	2.9	2.4	2.4
<i>Unemployed in year t-1; service sector job in year t:</i>									
Employed	Employed	56.7	47.3	33.8	26.9	29.5	42.0	48.5	50.0
Unemployed	Employed	6.8	6.8	9.3	9.5	14.2	13.4	10.7	12.4
Unemployed	Unemployed	6.4	11.8	22.4	33.8	31.0	19.2	17.0	16.2
Left labour force	Employed	3.8	2.7	1.7	1.3	1.9	2.7	2.8	2.3
Left labour force	Left labour f.	6.2	5.9	6.0	5.2	5.2	4.9	3.9	3.5
<i>Outside the labour force in year t-1; service sector job in year t:</i>									
Employed	Employed	55.7	51.6	47.4	45.5	49.5	55.2	56.7	59.4
Unemployed	Employed	1.6	1.8	3.2	3.9	5.4	4.5	3.9	4.2
Unemployed	Unemployed	0.9	1.4	4.1	7.1	5.3	3.5	3.3	2.9
Left labour force	Employed	10.7	8.4	6.2	5.0	6.7	7.4	8.5	7.4
Left labour force	Left labour f.	14.7	15.0	15.6	13.9	14.2	13.0	12.3	11.3

For those recruited from outside the labour force the difference between the two sectors in the probability of remaining employed has mostly been small or negligible. This also holds for the calculated risks of either entering a circle of employment and non-employment or of remaining locked in unemployment or outside the labour force for at least one more year.

The outcome for stayers and movers is very similar in retail trade and the service sector as a whole. The only outstanding difference is a slightly lower probability of retail trade employees of remaining employed and, conversely, a somewhat higher risk of flowing into unemployment. (Cf. Tables 6 and 7.)

Table 7. Retail trade: employment stability by labour force status in the previous year, 1988–97, %

Labour force status in year		1987	1988	1989	1990	1991	1992	1993	1994
t+1	t+2								
<i>Retail trade, same firm in year t-1 and year t:</i>									
Employed	Employed	86.1	82.6	77.9	73.0	73.8	78.3	82.1	83.8
Unemployed	Employed	0.9	0.9	1.6	1.8	2.6	1.8	1.5	1.3
Unemployed	Unemployed	0.5	0.7	2.1	4.3	4.6	3.9	3.0	2.5
<i>Employed in year t-1; change of firm within or into retail trade in year t:</i>									
Employed	Employed	82.6	77.5	71.2	65.6	70.2	75.0	76.6	81.6
Unemployed	Employed	1.2	1.6	2.7	3.5	4.3	3.5	2.6	2.1
Unemployed	Unemployed	0.3	1.1	2.8	6.7	5.2	4.5	3.5	3.6
<i>Unemployed in year t-1; retail trade job in year t:</i>									
Employed	Employed	66.6	60.4	46.2	37.2	43.5	55.9	56.6	65.3
Unemployed	Employed	4.5	4.6	8.0	7.4	11.4	8.8	6.9	6.9
Unemployed	Unemployed	2.9	6.0	11.3	26.1	20.7	9.1	11.2	7.0
Left labour force	Employed	4.3	2.0	1.7	3.4	2.3	4.3	3.9	2.7
Left labour force	Left labour f.	4.3	6.0	6.4	5.4	5.7	3.5	4.1	3.9
<i>Outside the labour force in year t-1; retail trade job in year t:</i>									
Employed	Employed	55.3	47.9	42.8	44.6	49.4	52.4	52.7	56.5
Unemployed	Employed	1.8	1.3	3.2	3.6	5.8	3.2	3.5	3.1
Unemployed	Unemployed	0.7	0.9	2.8	5.1	3.7	3.6	3.0	1.6
Left labour force	Employed	11.6	9.9	7.2	5.5	7.2	8.5	9.2	8.7
Left labour force	Left labour f.	14.7	17.6	19.0	17.5	15.0	13.5	13.2	13.4

Unemployed going into retail trade, in contrast, face a probability of remaining employed that is higher than the average for the service sector. Conversely, they have a lower than service-sector-average risk of returning into unemployment. Simultaneously their probability of leaving the labour force after one year in retail trade employment has mostly been higher than for the service sector as a whole. The outcome for those recruited from

outside the labour force differs in that they have a lower than service-sector-average probability of remaining employed. Otherwise their situation is identical to that of the ex-unemployed; that is, they have a lower than service-sector-average risk of becoming unemployed and a higher than service-sector-average risk of leaving the labour force. In other words, compared to the service sector as a whole, non-employed recruited into retail trade are more likely to leave the labour force and less likely to become unemployed when their employment terminates.

Inside retail trade, the pattern from manufacturing and services is repeated, though, with ex-unemployed facing a higher risk of returning to unemployment and “ex-outsiders” having a higher risk of again leaving the labour force. And both groups reveal a higher risk of continuing in non-employment than of re-entering the labour market.

Table 8. Hotels and restaurants: employment stability by labour force status in the previous year, 1988–97, %

Labour force status in year		1987	1988	1989	1990	1991	1992	1993	1994
t+1	t+2								
<i>Hotels and restaurants, same firm in year t-1 and year t:</i>									
Employed	Employed	84.4	76.9	68.0	62.8	65.0	72.5	77.3	79.3
Unemployed	Employed	1.3	1.4	3.4	3.4	5.5	3.1	2.5	2.5
Unemployed	Unemployed	0.6	0.9	4.0	6.8	7.0	5.0	3.3	2.9
<i>Employed in year t-1; change of firm within or into hotels and restaurants in year t:</i>									
Employed	Employed	78.3	70.5	59.3	55.6	62.8	69.5	74.4	76.0
Unemployed	Employed	1.4	2.1	5.7	5.0	6.1	4.4	4.3	3.8
Unemployed	Unemployed	0.7	1.5	5.7	8.8	7.2	4.3	3.8	4.2
<i>Unemployed in year t-1; hotel and restaurant job in year t:</i>									
Employed	Employed	59.6	51.2	36.7	30.2	33.4	48.2	51.6	51.3
Unemployed	Employed	6.3	4.6	7.1	10.0	10.9	10.4	7.9	9.9
Unemployed	Unemployed	5.6	11.3	16.4	24.6	21.2	11.9	12.2	12.1
Left labour force	Employed	4.5	2.8	2.5	1.1	2.1	2.8	3.2	2.4
Left labour force	Left labour f.	5.2	4.1	7.8	5.3	6.1	6.1	4.6	4.6
<i>Outside the labour force in year t-1; hotel and restaurant job in year t:</i>									
Employed	Employed	56.3	44.1	37.7	41.6	45.7	45.6	50.5	50.7
Unemployed	Employed	2.2	2.6	3.9	4.8	4.7	6.8	4.8	4.6
Unemployed	Unemployed	0.4	1.3	5.1	8.5	5.2	6.5	4.2	2.7
Left labour force	Employed	9.7	9.8	6.4	6.4	8.4	5.8	9.8	10.1
Left labour force	Left labour f.	12.3	15.7	16.7	13.4	16.4	13.4	12.7	12.3

Stayers and movers experience the weakest probability of remaining employed also over the next two years if the employing firm is engaged in hotels and restaurants. Still in the mid-90s, this probability was under 80%, which is far below the service sector average.

Accordingly they have also faced a higher risk of becoming unemployed compared both with retail trade and the service sector as a whole. Indeed, the unemployment risk of those having moved within or into hotels and restaurants has mostly been quite close to and occasionally even higher than the corresponding risk among those recruited into the industry from outside the labour force.

As in retail trade, those recruited among the unemployed have a clearly higher than service-sector-average probability of remaining employed over the next two years, at least. As high levels as in retail trade it does not reach, though. Another feature in common with retail trade is that those recruited from outside the labour force face a clearly lower than service-sector-average probability of staying employed. And again this probability is even lower than in retail trade. Hence, while in the service sector as a whole the probability of remaining employed is higher for those recruited from outside the labour force than for those recruited among the unemployed, the situation is the opposite in retail trade and hotels and restaurants. Possibly the fairly good employment prospects of unemployed in these two service sector industries are due to the industries offering relatively low-paid positions, and especially to non-employed. Or then the favourable outcome is mainly due to data shortcomings concealing relatively more short employment and unemployment spells in these industries.¹⁸ This would definitely deserve further research.

The differences between retail trade and hotels and restaurants when it comes to the risks of the previously non-employed of returning to non-employment after, at most, a one-year employment spell, are mostly small. The above conclusions for retail trade concerning patterns and trends within the industry and compared to the service sector as a whole, may thus be repeated for hotels and restaurants.

7. CONCLUDING REMARKS

The analysis reported in this paper adds to previous evidence on the substantial impact that the technological explosion in the 1990s has had on manufacturing employment. In addition it highlights an issue on which there is considerably less knowledge, viz. the dynamics in service sector employment. By further comparing the two sectors, interesting similarities and dissimilarities emerge, especially when it comes to the post-recession years.

In manufacturing the recovery period has produced two groups of winners: those having managed to continue to work for the same firm and those having moved to work for another manufacturing firm. The stayers have, on average, been able to maintain both relatively high earnings and earnings growth rates in combination with growing underrepresentation in low-paid jobs. An even more favourable situation is, however, observed among their moving colleagues. The risk of these within-sector movers of entering a low-paid job has decreased markedly at the same time as their probability of entering a high-paid job has improved. This, in turn, explains why they have beaten their staying colleagues in terms of both mean earnings and earnings growth. Simultaneously a thinning flow of between-sector movers has to an increasing extent entered low-paid manufacturing jobs.

¹⁸ See the discussion in footnote 17 above.

These trends within manufacturing reveal some of the depth of the ongoing restructuring process. The favourable earnings development of stayers and within-sector movers is largely a result of profound “cleansing” of the labour force and intensified demand and thus competition for labour with a high education and specialist skills.¹⁹ Those working outside manufacturing seem to mostly lack these capabilities as the interest of manufacturing firms in this part of the labour force has declined continuously and, if employed, they have often entered a low-paid job.

Much the same situation is observed for the service sector with the winners being the stayers and the within-sector movers. The difference between the two workforce categories is, however, notably more moderate in the service sector. There is at least one conspicuous difference between manufacturing and services, though. While in both sectors the hires among those employed outside the sector have diminished substantially, those having been recruited into the service sector have generally continued to fare quite well and especially those with experience from the manufacturing sector. This latter category has to an increasing extent managed to occupy high-paid positions in the service sector. Obviously this relates to the rapid technological development especially in knowledge-intensive service businesses and the extended outsourcing from and co-operation arrangements with manufacturing firms.²⁰

The same winners can be found in retail trade and hotels and restaurants, albeit the differences between the workforce categories usually stand out as slightly larger in hotels and restaurants. There is one major exception to this similarity, though, which concerns ex-manufacturing workers, who prove to have fared increasingly well when entering retail trade jobs. They have been considerably less successful when going into hotels and restaurants. On the other hand, a common feature of the two industries is a declining interest for those working in some other service sector industry, which is furthermore reflected in a steady weakening in the relative entering position of such hires. Explaining these trends would require an in-depth analysis of the restructuring that has taken place in the two industries over the past decade. This is, however, out of the scope of the present paper.

The non-employed face the weakest position, and the difference between the unemployed and those outside the labour force is in this respect minor. Their mean earnings are substantially lower than for the other workforce categories, which is due to most of them entering low-paid jobs. Moreover, this pattern has been retained over booms and recessions; the adjustments to changes in the economic activity level have occurred primarily in the relative number of hires among them, possibly because the wage flexibility option has already been emptied. Going into a manufacturing job stands out as the worst alternative. However, when also accounting for differences in relative earnings between sectors and industries, retail trade and hotels and restaurants overtake this jumbo position.

The disadvantaged entering position of most non-employed definitely deserves further investigation. The crucial question then is: What happens to them after they have entered a low-paid job? Do they manage to stay employed and, if so, do they remain low-paid or do they tend to get better-paid jobs? Or do they face a high risk of returning into non-employment for shorter or longer periods?

¹⁹ For an analysis of the “cleansing” process with mostly older and less-skilled flowing into non-employment, see e.g. Asplund (2000b). The recruitment strategy of manufacturing firms is analysed in e.g. Asplund (2001). In both studies account is also made for the technological level and the size of firms.

²⁰ See e.g. Leiponen (2000a,2000b).

This paper has presented the outcome from a simple attempt to provide provisional answers to at least some of these questions. The patterns and trends that emerge are not encouraging. The non-employed have the lowest probability of remaining employed over the next two years. Conversely, they face the highest risk of returning into non-employment, and their risk of being locked there for a longer period is clearly higher than their chances of re-entering the labour market. Moreover, this overall pattern is repeated in manufacturing and services as well as in retail trade and hotels and restaurants. Consequently it can be taken as a further indication of the profound restructuring that the Finnish labour market has undergone in the 1990s and that seems to have deepened the gap between those with a strong and those with a weak attachment to the labour market.

The results reported in this paper point in several directions for further research. First, the role in the recruitment process of individual characteristics – especially education, age and sex – needs to be sorted out. And this analysis should, when possible, be complemented with firm-specific information. Here the recruiting firm's technological intensity and size are of particular interest, since high-tech firms as well as small firms are nowadays often argued to be the real engine in the creation of new jobs. Special attention should thereby be paid to those entering low-paid jobs in order to uncover factors that seem to hamper or ease their upward mobility in the earnings distribution. One important aspect that so far has received only limited attention is the effect of further education and training on these prospects. Finally, looking merely at the recruitment side might prove to be an all too narrow perspective. Equally important as the flow into the labour market is the flow out from it, as are also the background factors – individual as well as firm specific – affecting the observed patterns.

References:

- Asplund, R. (2000a), "Introductory summary", Chapter 1 in Asplund, R. (ed.), *Public R&D funding, technological competitiveness, productivity, and job creation*. Helsinki: The Research Institute of the Finnish Economy ETLA, Series B 168.
- Asplund, R. (2000b), *Unemployment among Finnish manufacturing workers: Who gets unemployed and from where?* Helsinki: The Research Institute of the Finnish Economy ETLA, Discussion papers Nro. 711.
- Asplund, R. (2001), *Recruitment into Finnish manufacturing and services: Are there jobs for the unemployed?* ETLA, Helsinki. (work in progress)
- Asplund, R. & R. Lilja (2000a), *Employment and unemployment in Finnish manufacturing 1985–95: Is technological progress the cause or the cure?* Helsinki: The Research Institute of the Finnish Economy ETLA, Discussion papers Nro. 717.
- Finnish Economic Papers* (1996), Special Issue "The Finnish Economic Crises of the 1990s", Vol.9, No. 1, Spring 1996.
- Ilmakunnas, P. & M. Maliranta (2001), *The Turnover of Jobs and Workers in a Deep Recession: Evidence from the Finnish Business Sector*. Helsinki: The Research Institute of the Finnish Economy ETLA, Discussion papers Nro. 747.
- Kiander J. & P. Vartia, (1998), "The Depression of the 1990s in Finland: A Nordic Financial Crises or a Result of the Collapse of the Soviet Union?", in Myllyntaus, T. (ed.), *Economic Crises and Restructuring in History, Experiences of Small Countries*. Scripta Mercaturae Verlag.
- Leiponen, A. (2000a), *Essays in the Economics of Knowledge: Innovation, Collaboration, and Organizational Complementarities*. Helsinki: The Research Institute of the Finnish Economy ETLA, Series A 31.
- Leiponen, A. (2000b), *Innovation in Services and Manufacturing. A Comparative Study of Finnish Industries*. Helsinki: The Research Institute of the Finnish Economy ETLA, Series B 165.
- Maliranta, M. (1997), *The Determinants of Aggregate Productivity. The evolution of microstructure and productivity within plants in Finnish manufacturing from 1975 to 1994*. Helsinki: The Research Institute of the Finnish Economy ETLA, Discussion papers Nro 603.
- Maliranta, M. (2000a), "Privately and publicly financed R&D as determinants of productivity – Evidence from Finnish Enterprises", Chapter 3 in Asplund, R. (ed.), *Public R&D funding, technological competitiveness, productivity, and job creation*. Helsinki: The Research Institute of the Finnish Economy ETLA, Series B 168.
- Maliranta, M. (2000b), "Job creation by supporting technology advances – Evidence from Finnish plants", Chapter 4 in Asplund, R. (ed.), *Public R&D funding, technological competitiveness, productivity, and job creation*. Helsinki: The Research Institute of the Finnish Economy ETLA, Series B 168.
- Piekkola, H. & P. Böckerman (2000), *On Whom Falls the Burden of Restructuring? Evidence from Finland*. Helsinki: The Research Institute of the Finnish Economy ETLA, Discussion papers Nro 714.
- OECD (1999), *Science, Technology and Industry Scoreboard 1999 – Benchmarking Knowledge-based Economies*. Paris.

Figure A1. Manufacturing: relative median earnings according to labour force status in the previous year, 1988–97 (manufacturing, same firm in 1988 as in 1987 = 100)

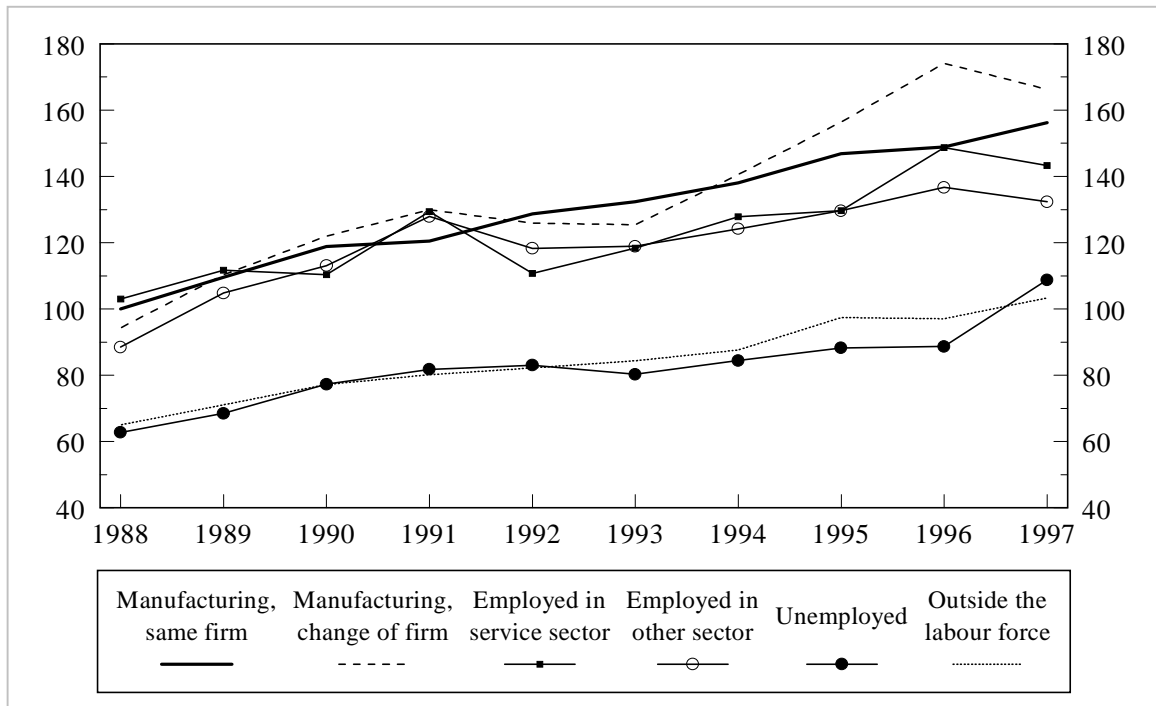


Figure A2. Manufacturing: relative median earnings according to labour force status in the previous year, 1988–97 (manufacturing, same firm = 100)

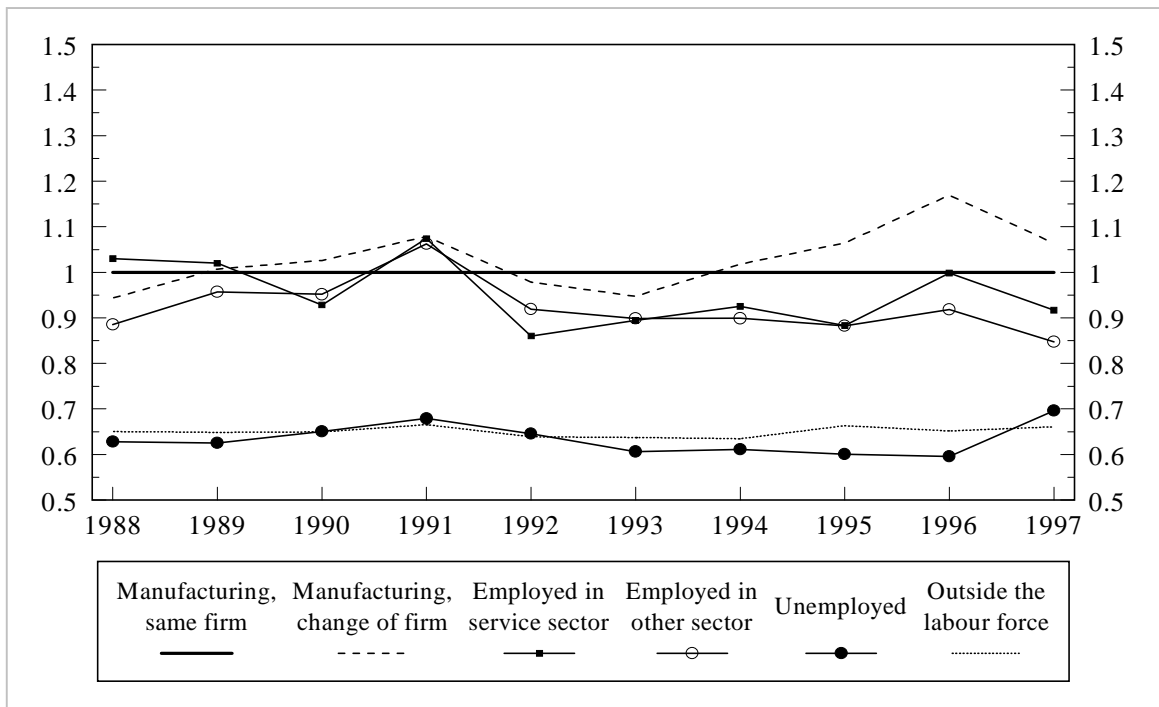


Figure A3. Service sector: relative median earnings according to labour force status in the previous year, 1988–97 (service sector, same firm in 1988 as in 1987 = 100)

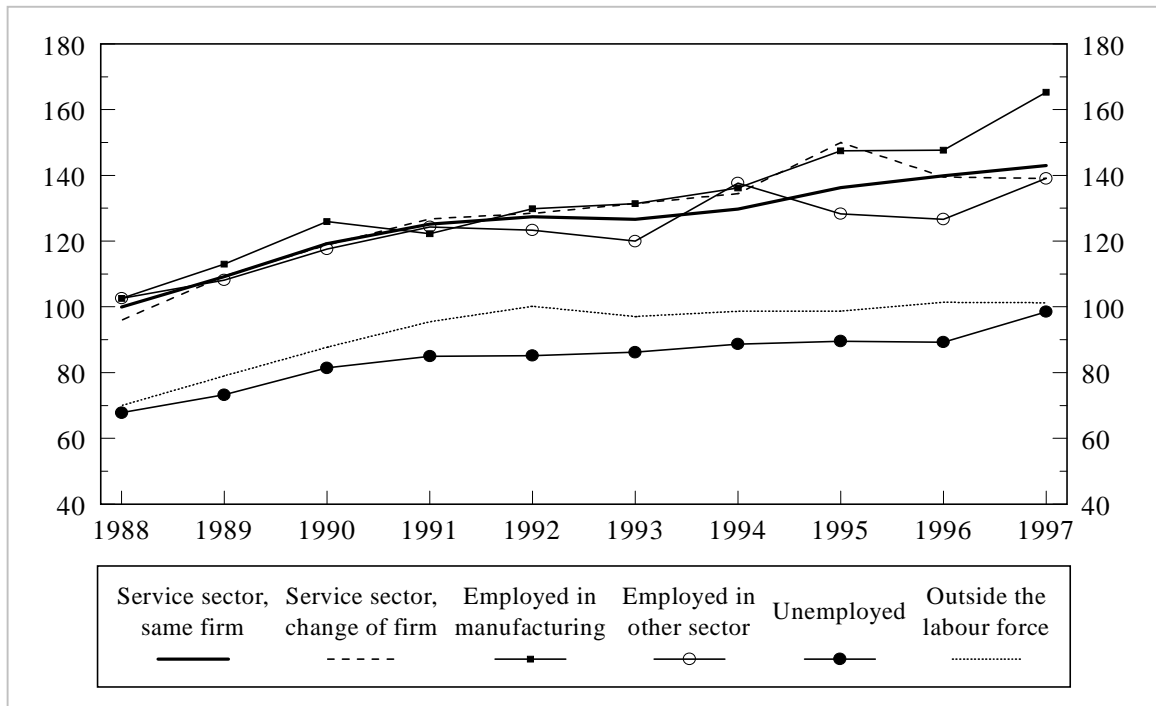


Figure A4. Service sector: relative median earnings according to labour force status in the previous year, 1988–97 (service sector, same firm = 100)

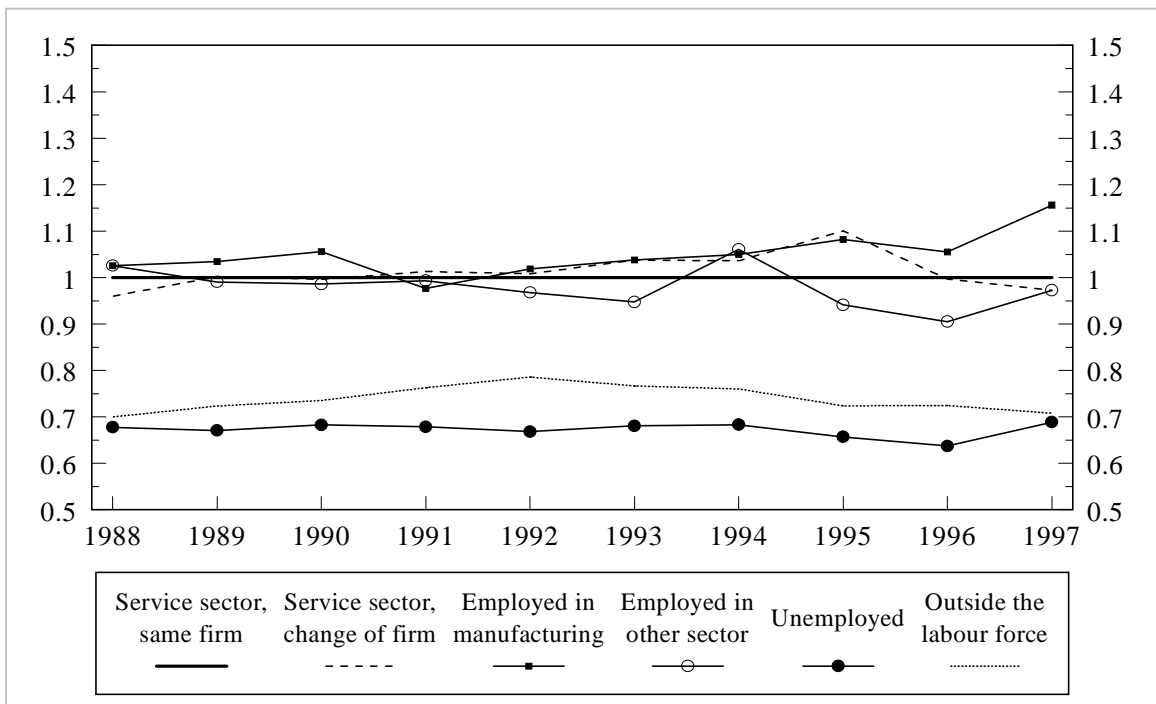


Figure A5. Retail trade: relative median earnings according to labour force status in the previous year, 1988–97 (retail trade, same firm in 1988 as in 1987 = 100)

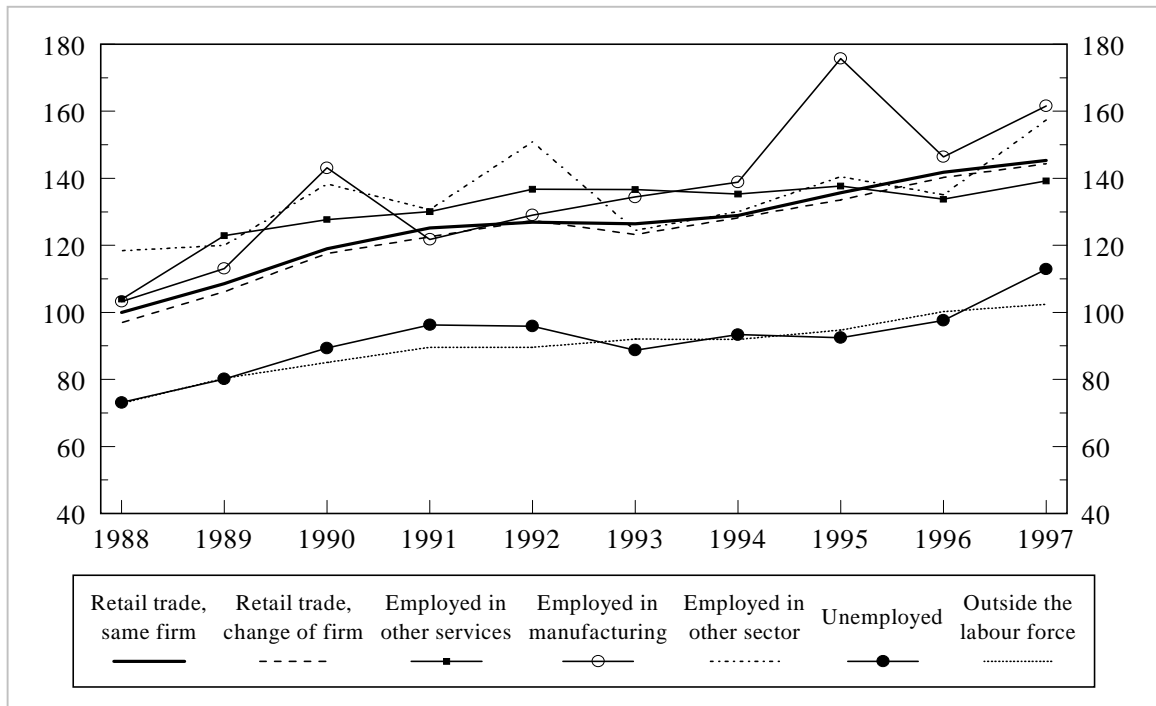


Figure A6. Retail trade: relative median earnings according to labour force status in the previous year, 1988–97 (retail trade, same firm = 100)

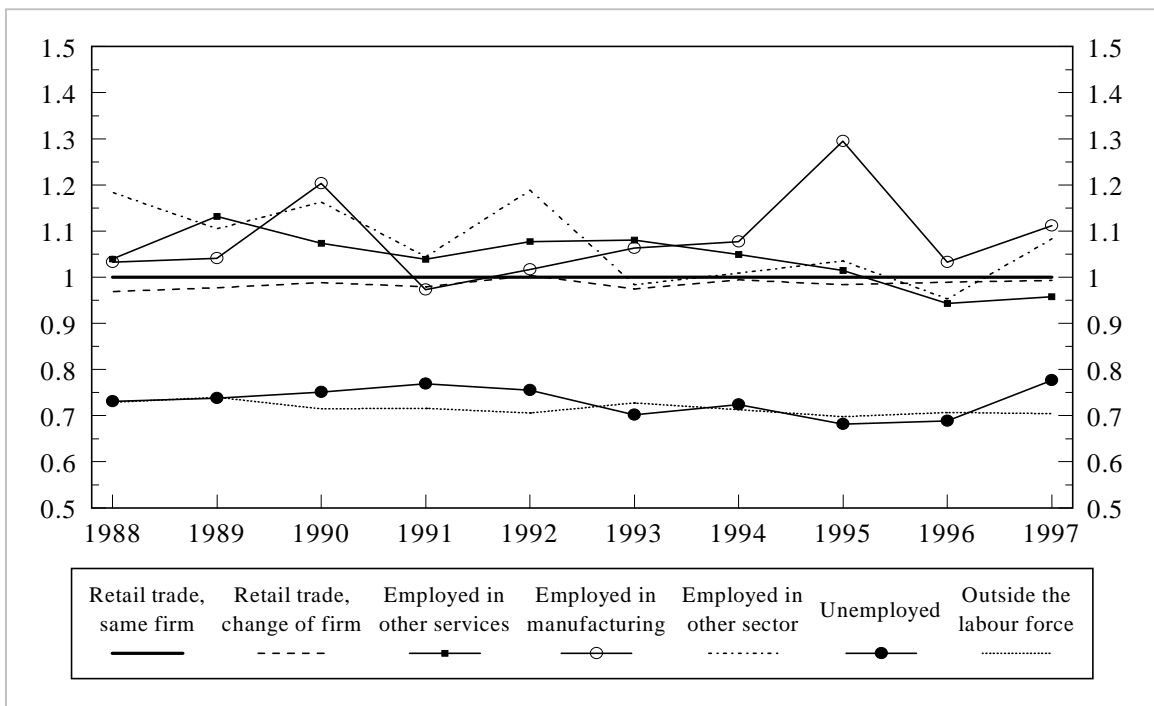


Figure A7. Hotels and restaurants: relative median earnings according to labour force status in the previous year, 1988–97 (hotels and restaurants, same firm in 1988 as in 1987 = 100)

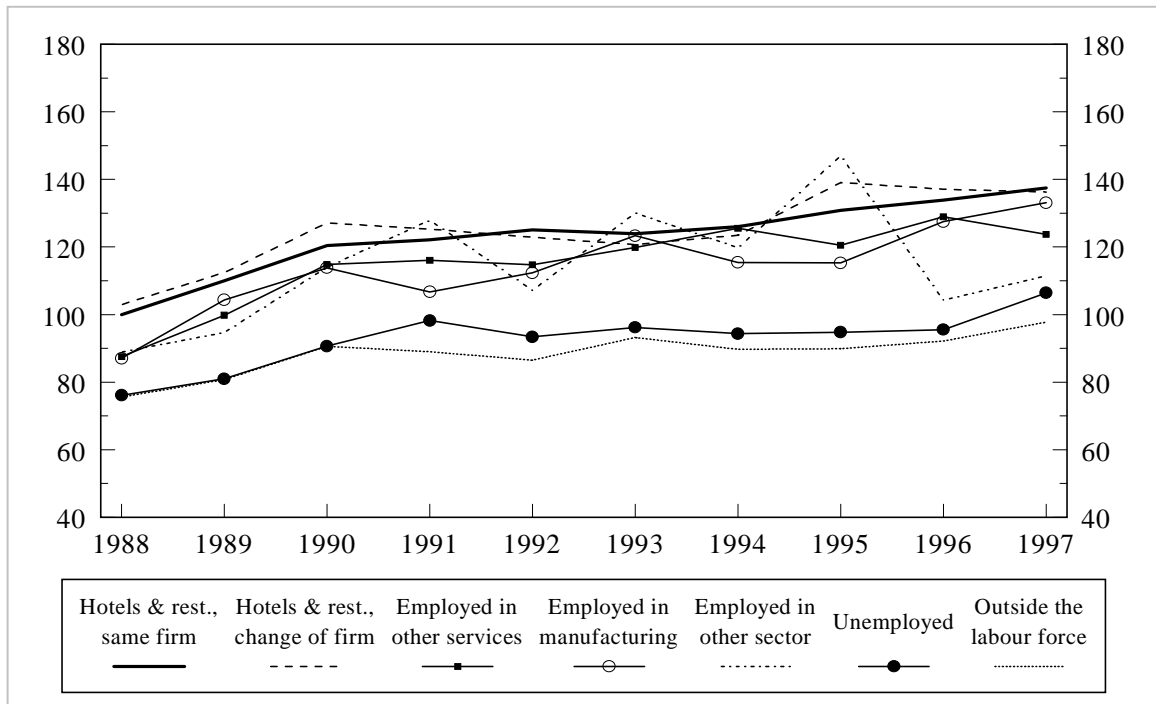


Figure A8. Hotels and restaurants: relative median earnings according to labour force status in the previous year, 1988–97 (hotels and restaurants, same firm = 100)

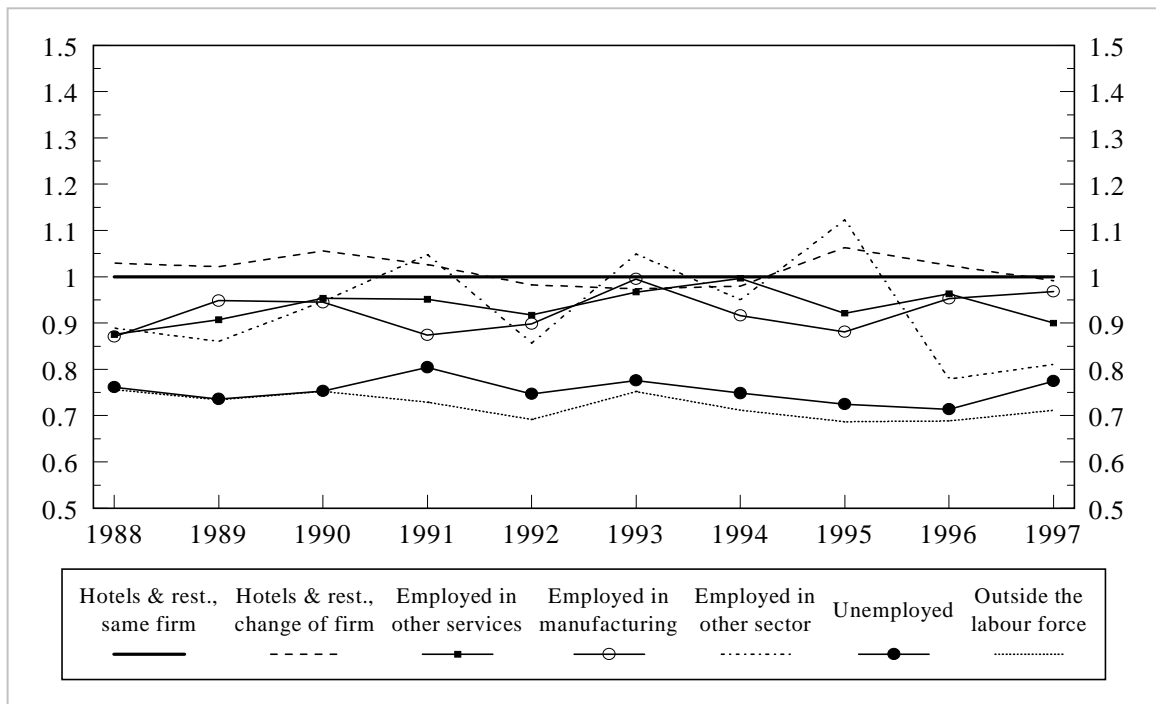


Figure A9. Manufacturing: earnings dispersion (D90/D10-ratio) by labour force status in the previous year, 1988–97

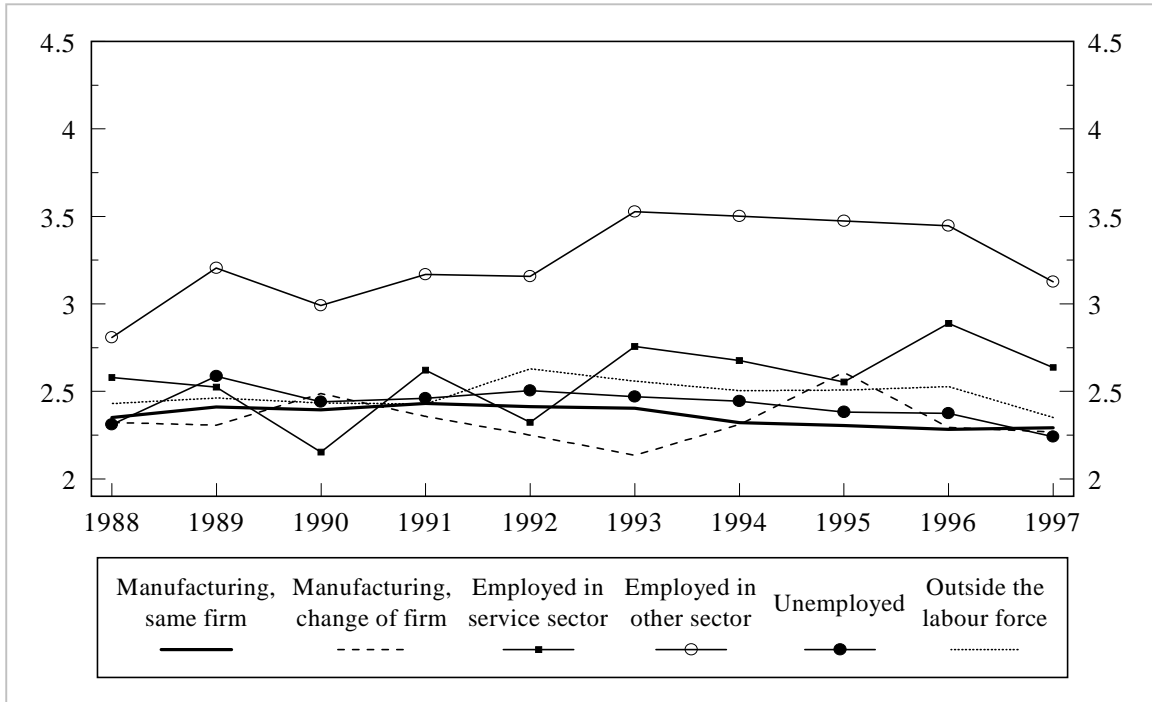


Figure A10. Service sector: earnings dispersion (D90/D10-ratio) by labour force status in the previous year, 1988–97

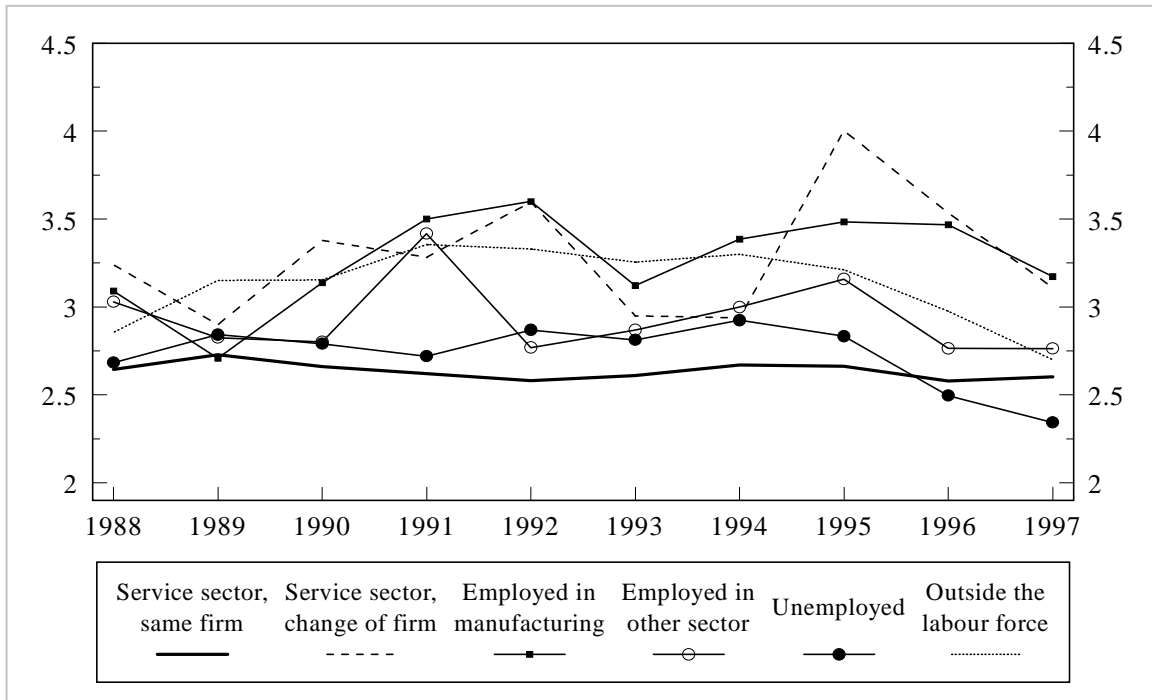


Figure A11. Retail trade: earnings dispersion (D90/D10-ratio) by labour force status in the previous year, 1988–97

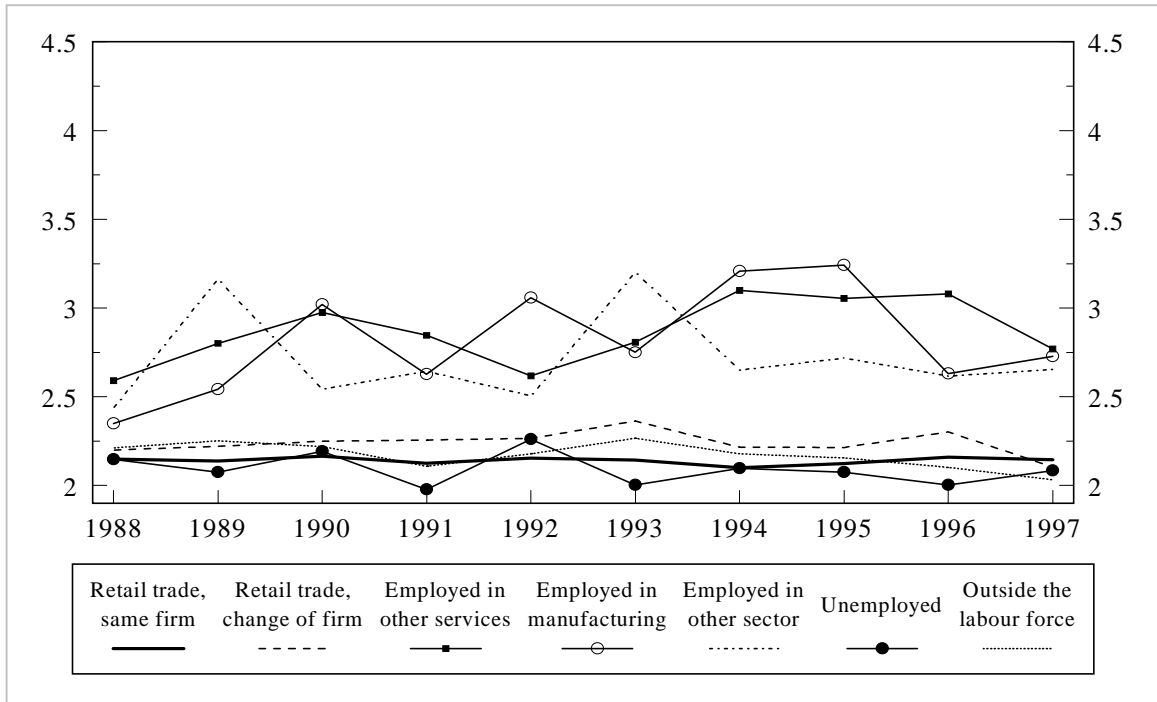


Figure A12. Hotels and restaurants: earnings dispersion (D90/D10-ratio) by labour force status in the previous year, 1988–97

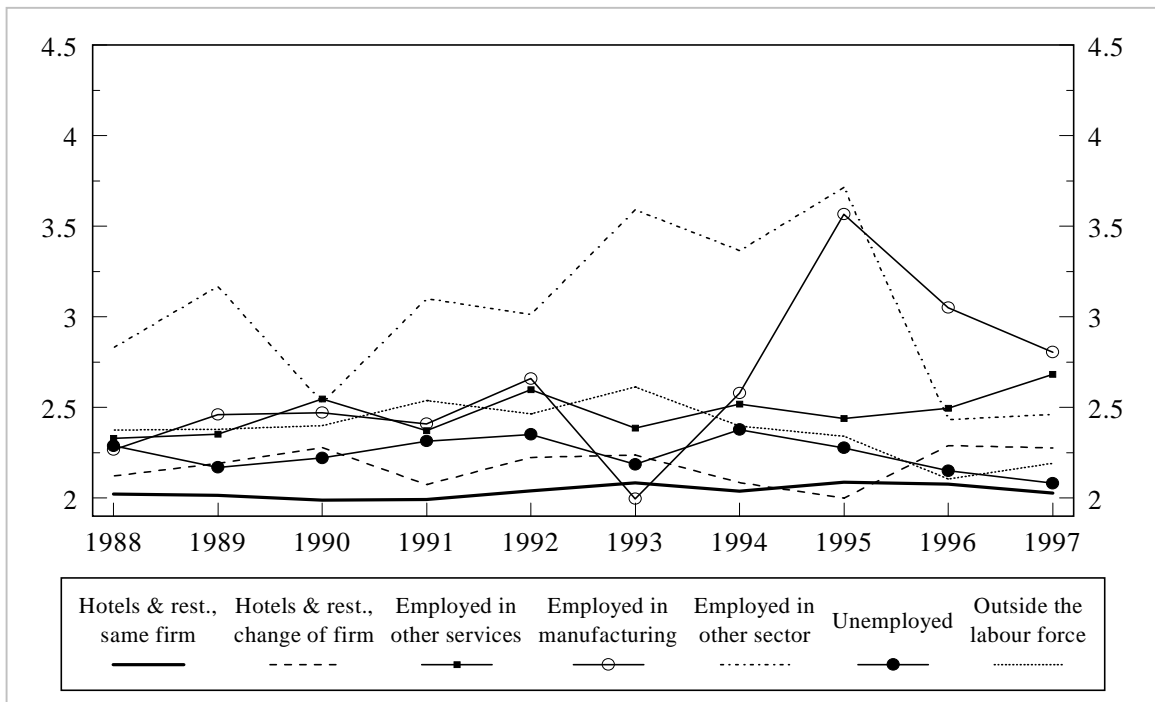


Figure A13. Manufacturing: share of those having entered the sector's lowest earnings decile, by labour force status in the previous year, 1988–97

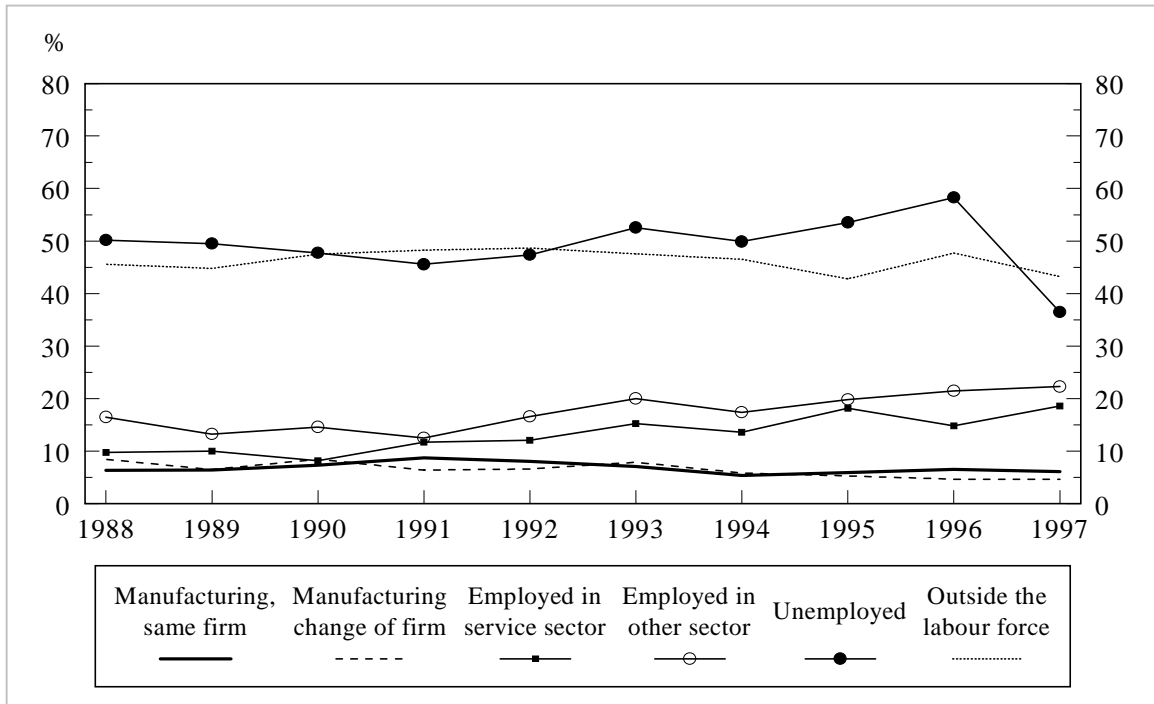


Figure A14. Service sector: share of those having entered the sector's lowest earnings decile, by labour force status in the previous year, 1988–97

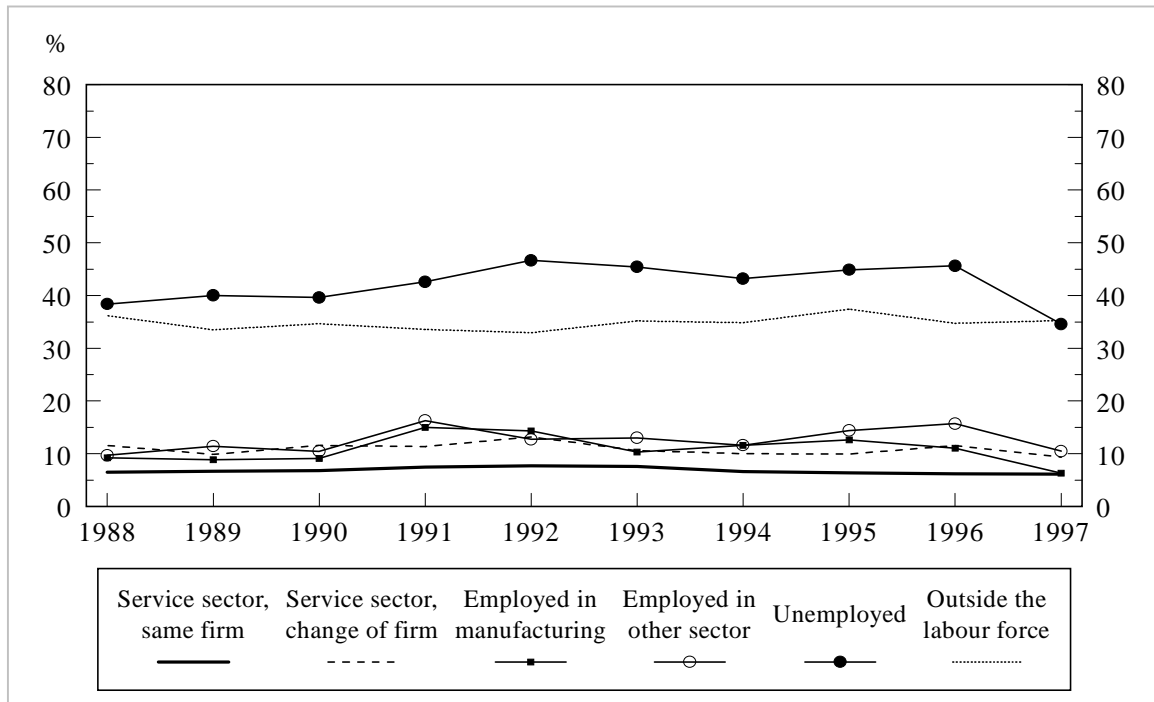


Figure A15. Retail trade: share of those having entered the industry's lowest earnings decile, by labour force status in the previous year, 1988–97

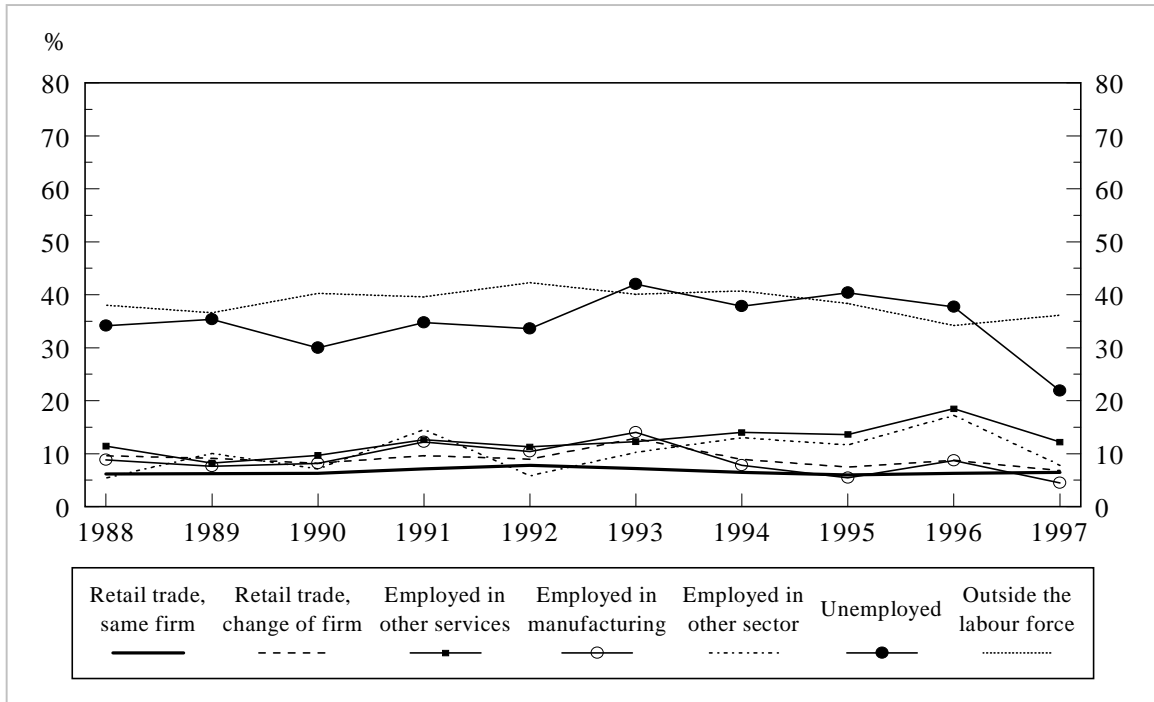


Figure A16. Hotels and restaurants: share of those having entered the industry's lowest earnings decile, by labour force status in the previous year, 1988–97

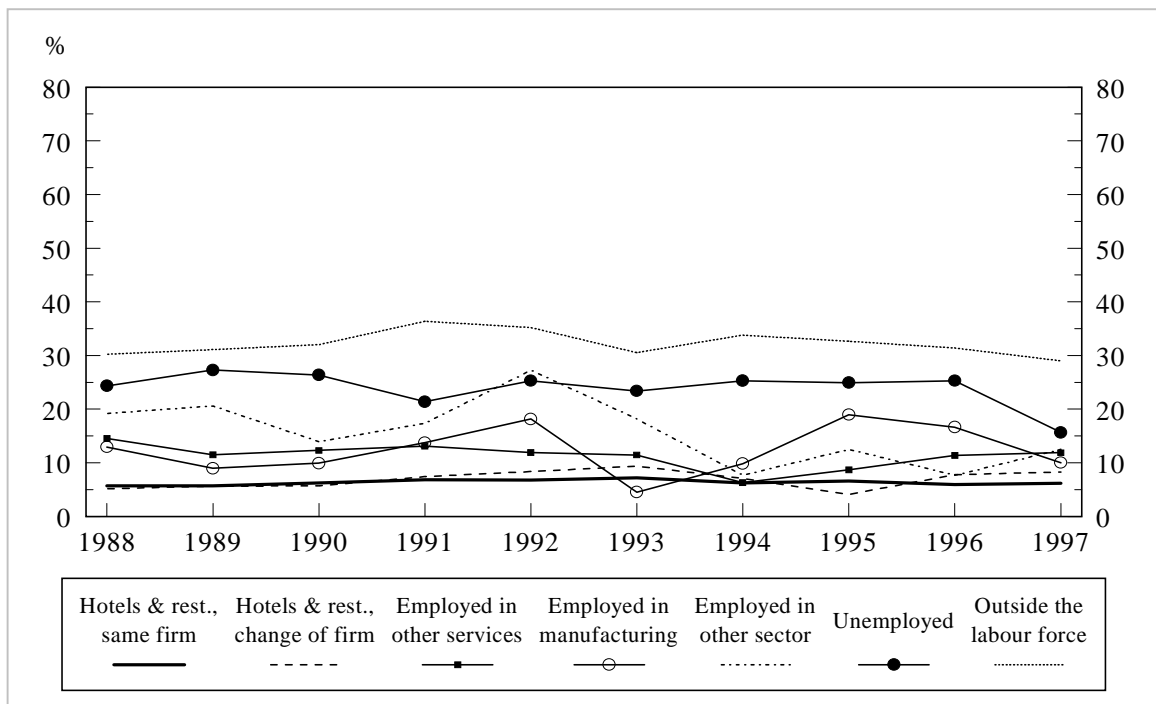


Figure A17. Manufacturing: share of those having entered the lowest 10% of the earnings distribution of all employees, by labour force status in the previous year, 1988–97

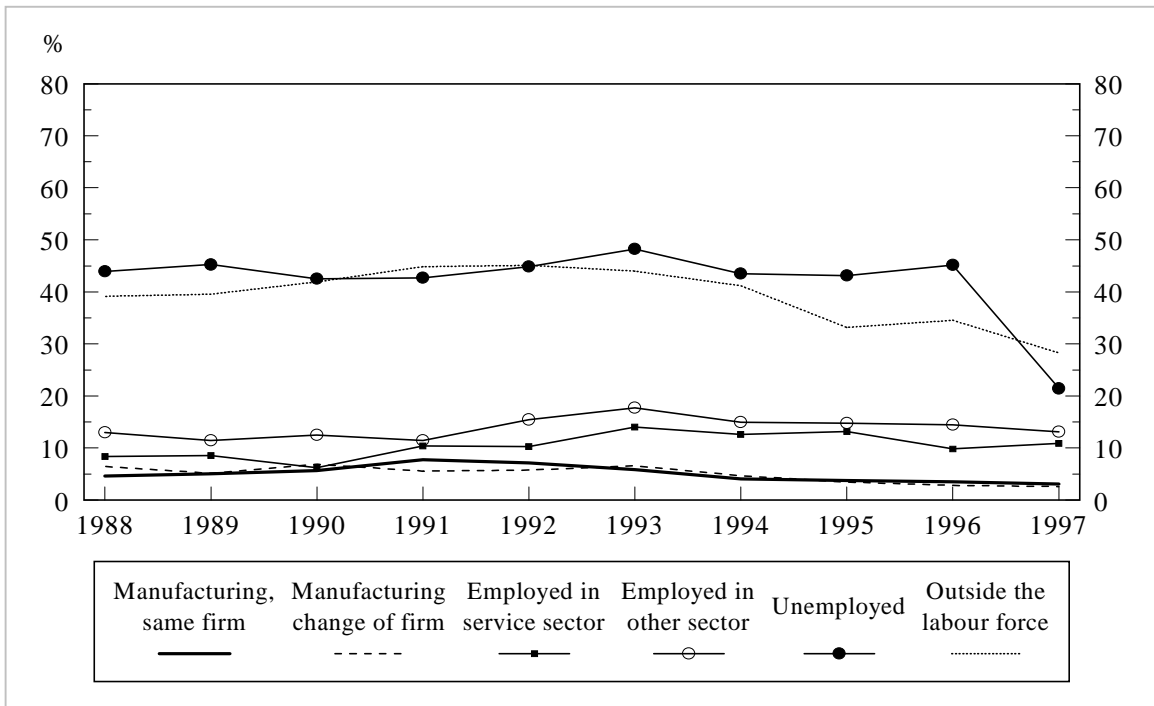


Figure A18. Service sector: share of those having entered the lowest 10% of the earnings distribution of all employees, labour force status in the previous year, 1988–97

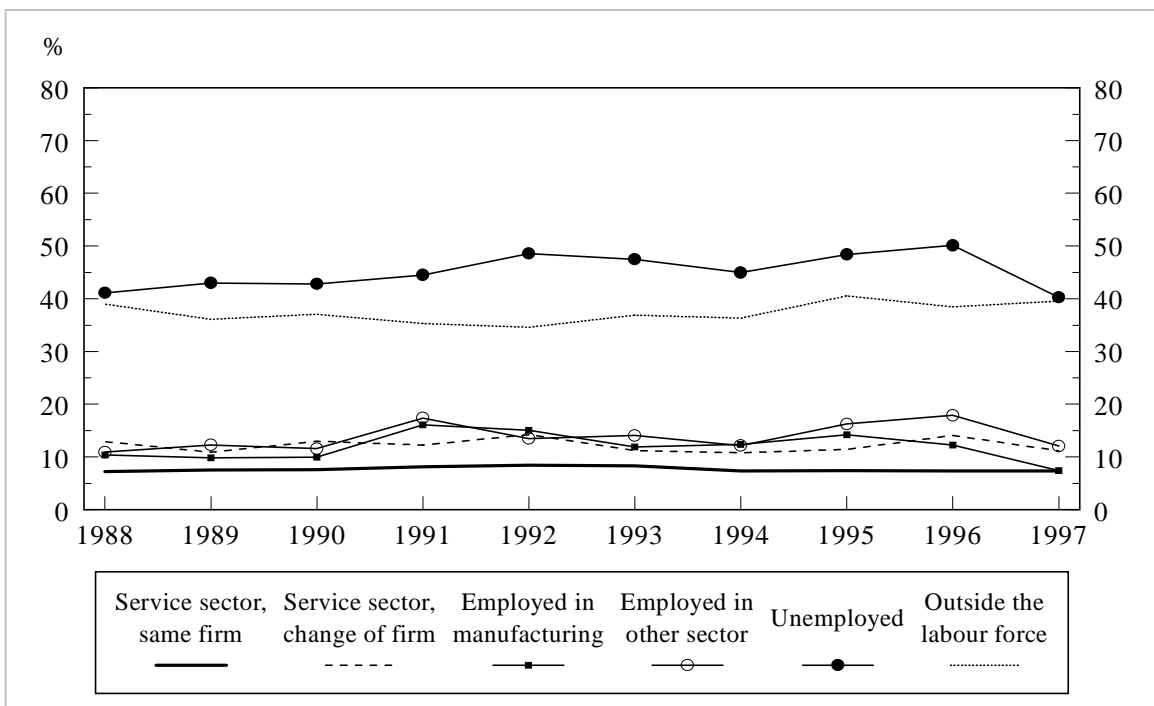


Figure A19. Retail trade: share of those having entered the lowest 10% of the earnings distribution of all employees, by labour force status in the previous year, 1988–97

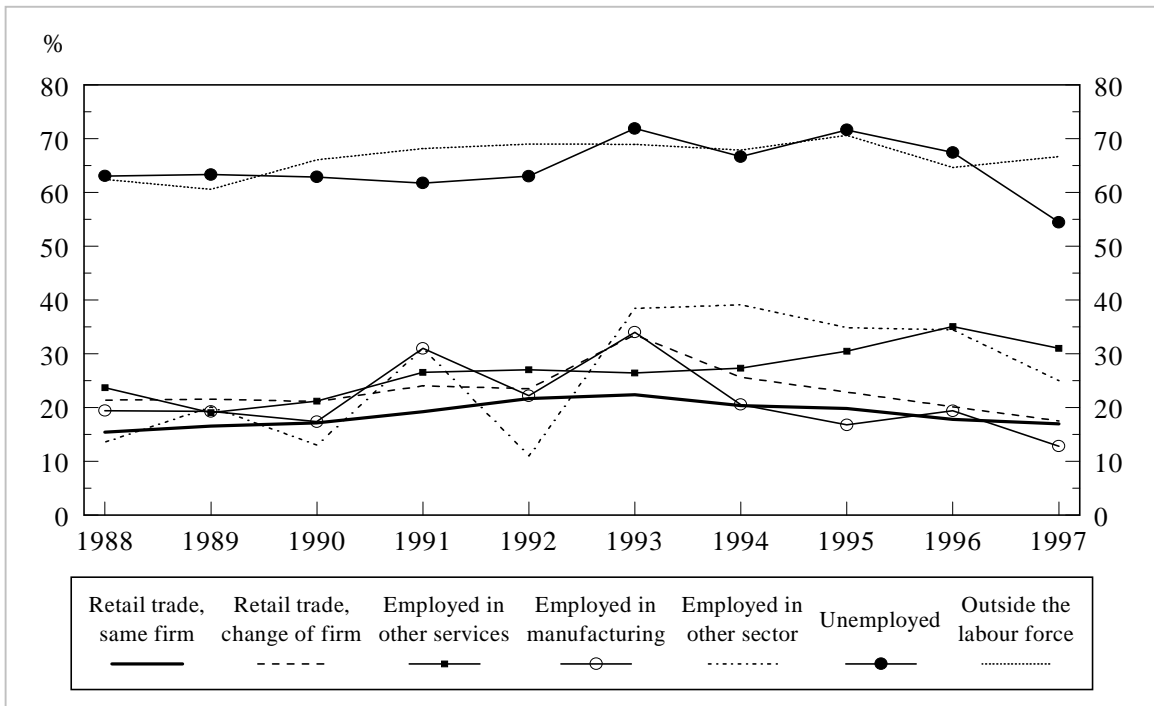


Figure A20. Hotels and restaurants: share of those having entered the lowest 10% of the earnings distribution of all employees, by labour force status in the previous year, 1988–97

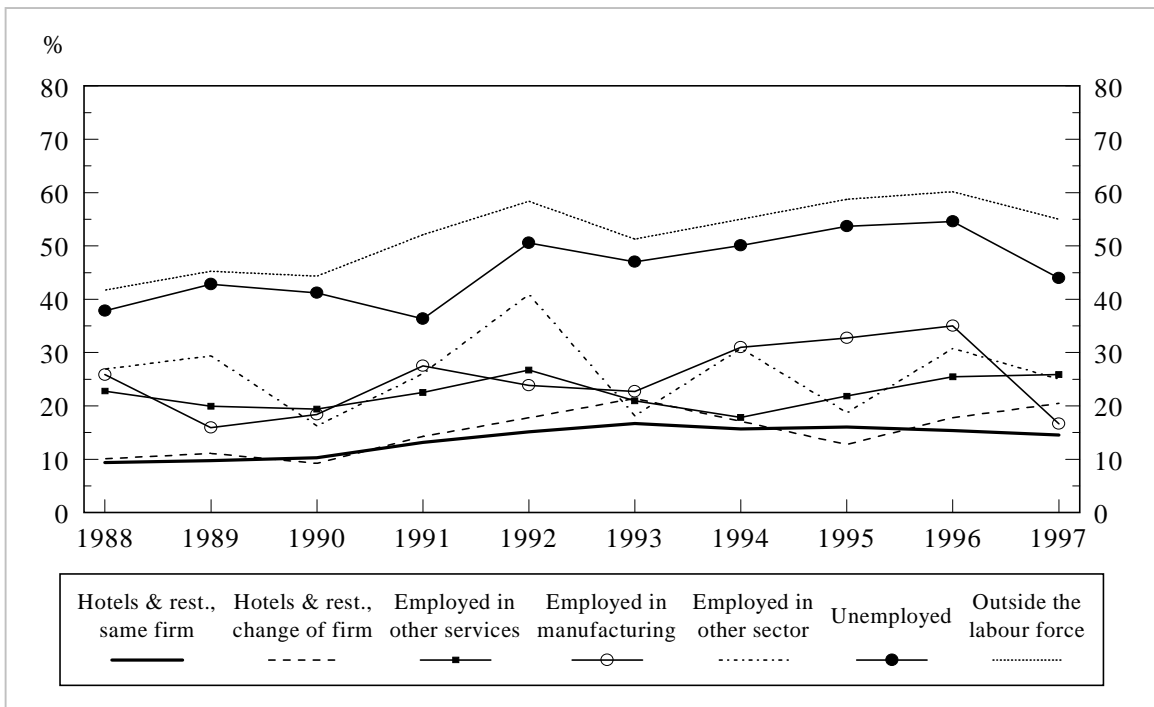


Figure A21. Manufacturing: share of those having entered the lowest 30% of the earnings distribution of all employees, by labour force status in the previous year, 1988–97

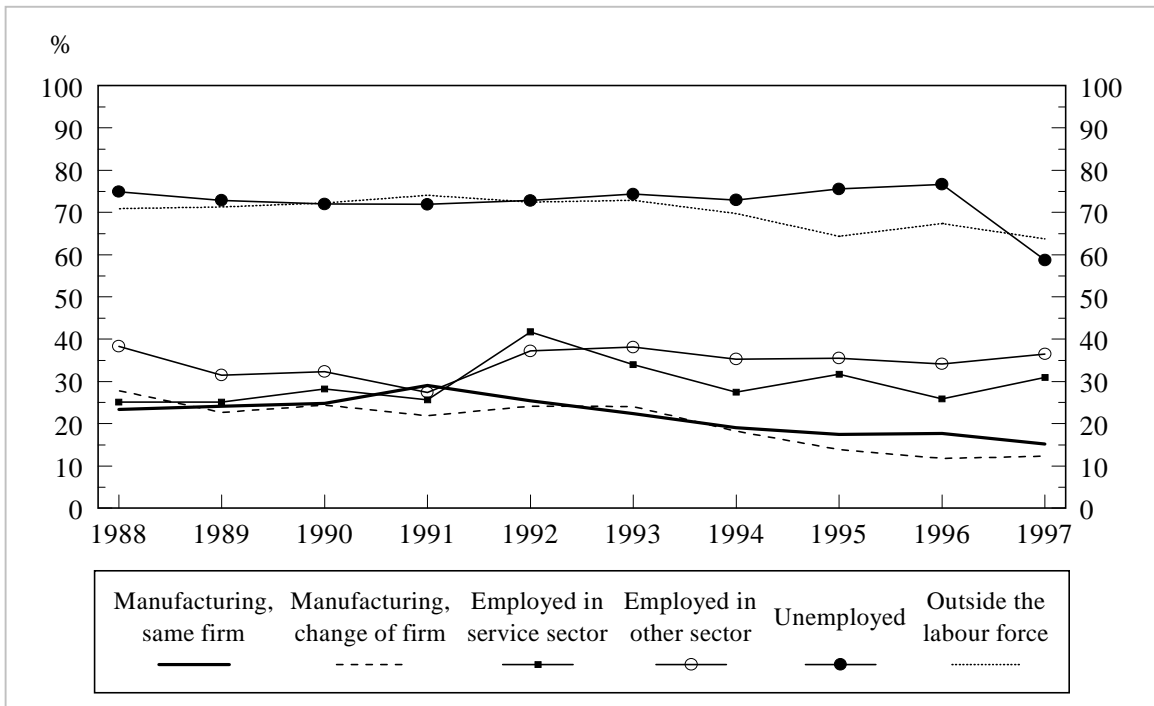


Figure A22. Service sector: share of those having entered the lowest 30% of the earnings distribution of all employees, by labour force status in the previous year, 1988–97

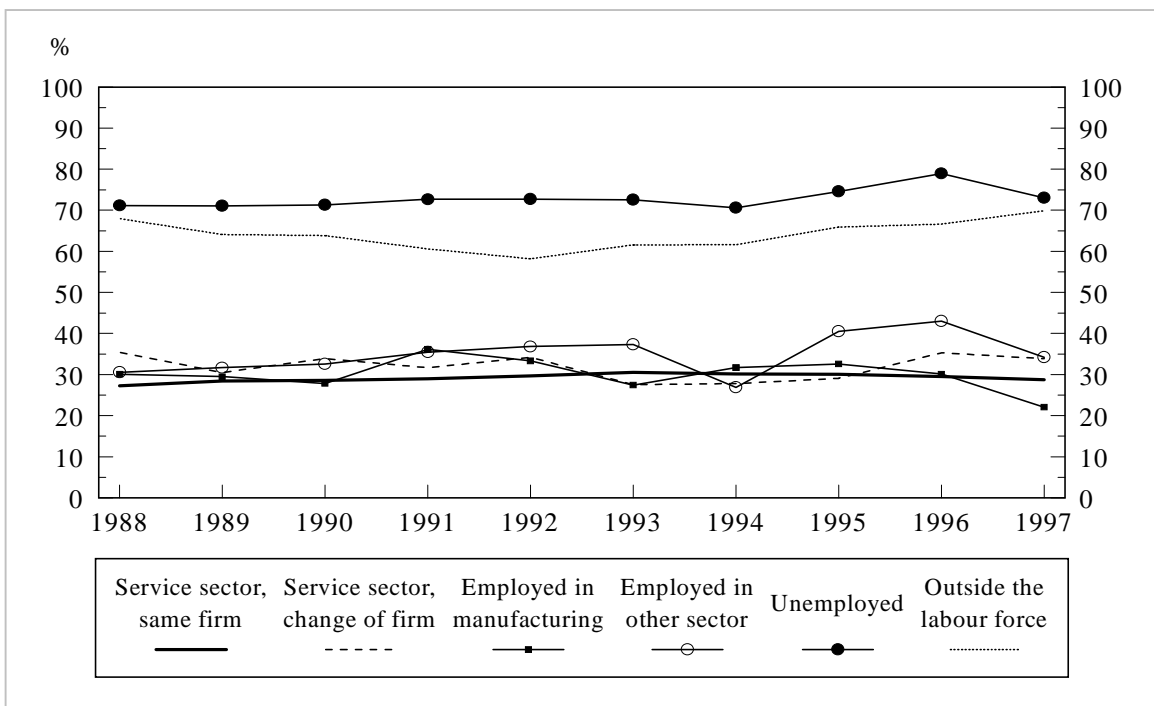


Figure A23. Retail trade: share of those having entered the lowest 30% of the earnings distribution of all employees, by labour force status in the previous year, 1988–97

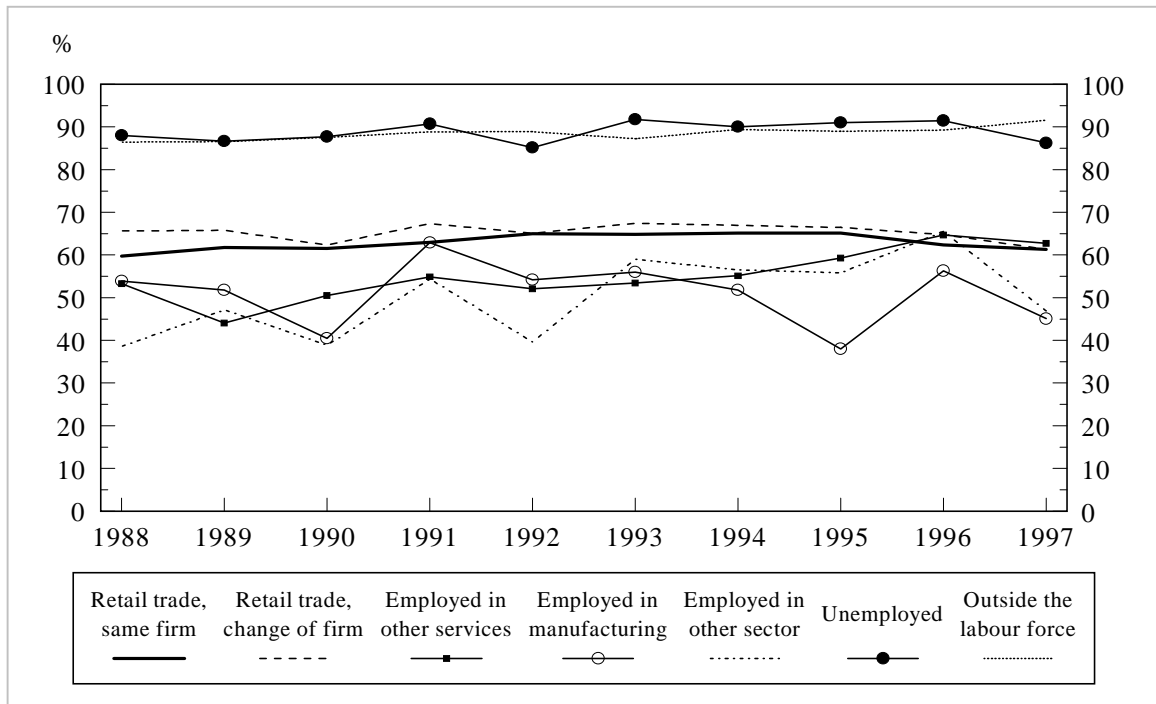


Figure A24. Hotels and restaurants: share of those having entered the lowest 30% of the earnings distribution of all employees, by labour force status in the previous year, 1988–97

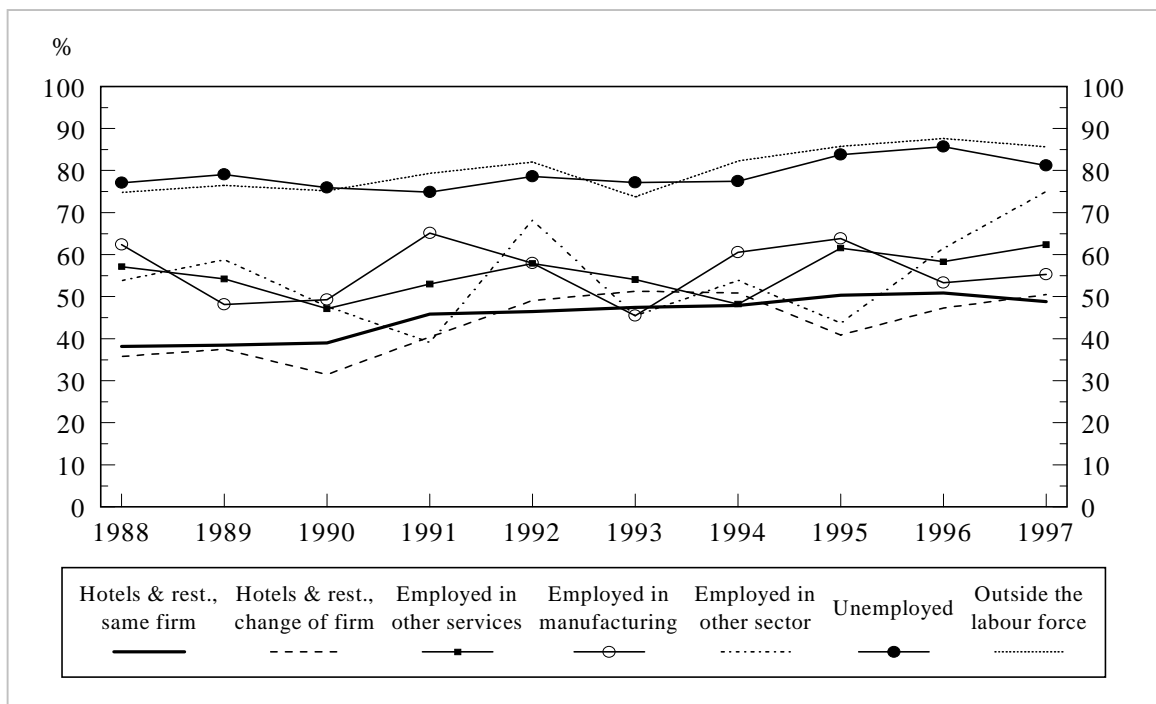


Figure A25. Manufacturing: share of those having entered the highest 30% of the earnings distribution of all employees, by labour force status in the previous year, 1988–97

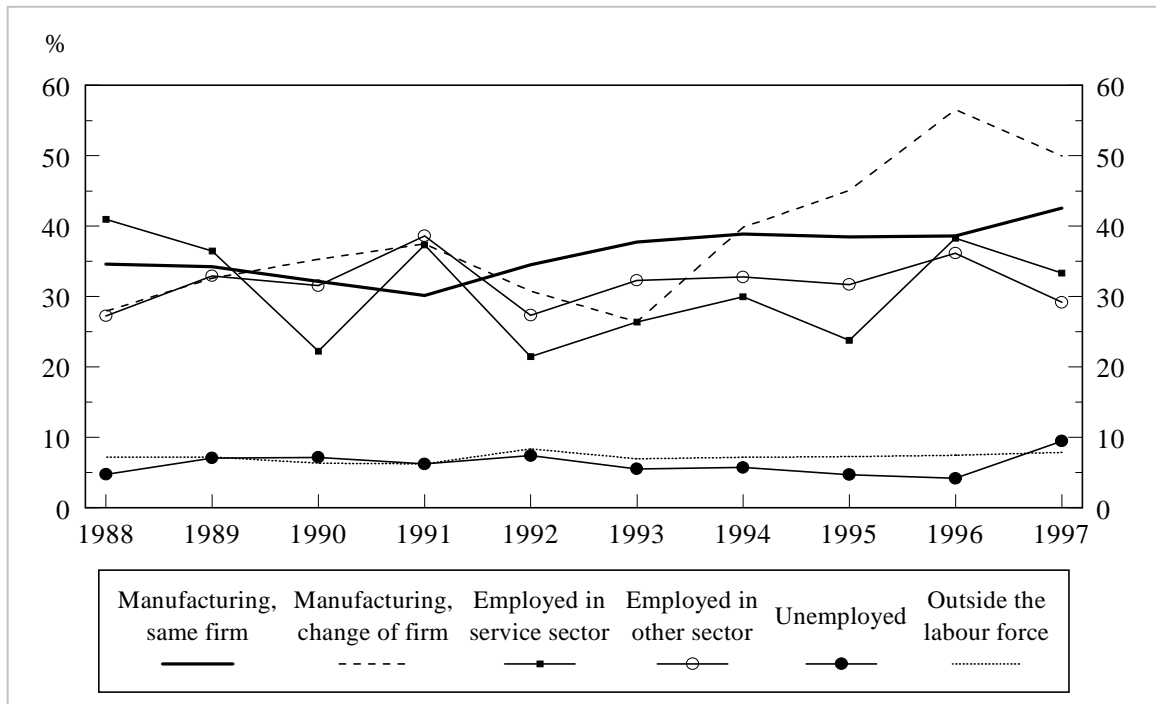


Figure A26. Service sector: share of those having entered the highest 30% of the earnings distribution of all employees, by labour force status in the previous year, 1988–97

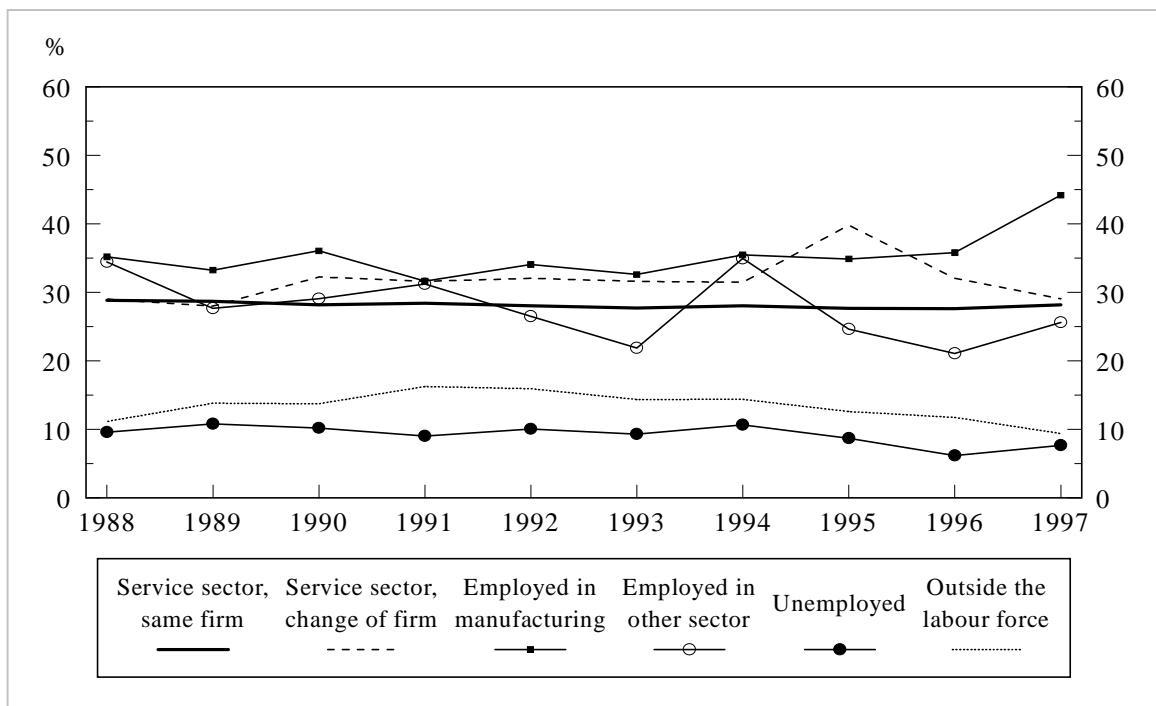


Figure A27. Retail trade: share of those having entered the highest 30% of the earnings distribution of all employees, by labour force status in the previous year, 1988–97

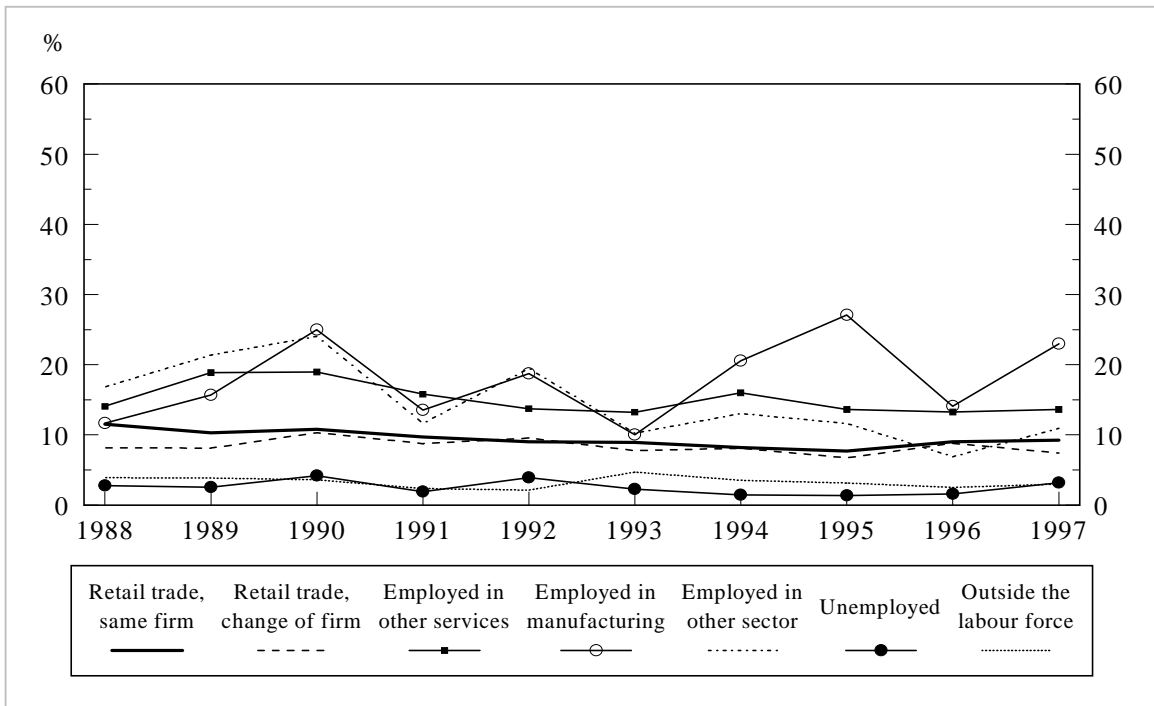
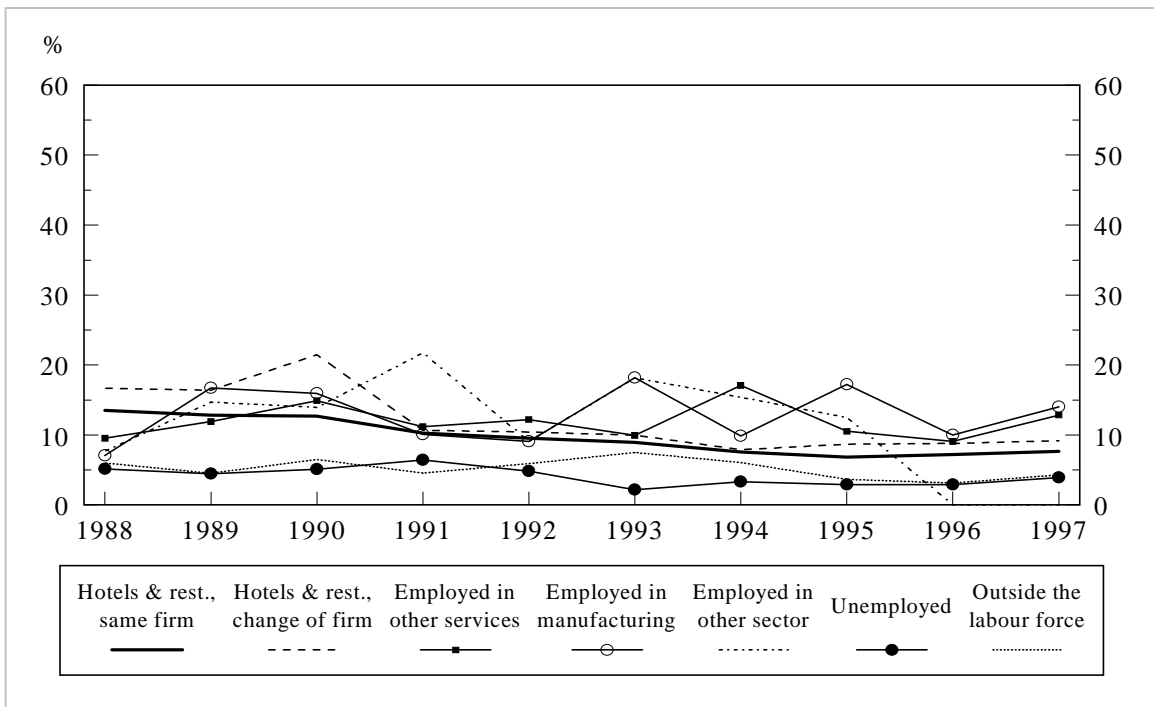


Figure A28. Hotels and restaurants: share of those having entered the highest 30% of the earnings distribution of all employees, by labour force status in the previous year, 1988–97



ELINKEINOELÄMÄN TUTKIMUSLAITOS (ETLA)

THE RESEARCH INSTITUTE OF THE FINNISH ECONOMY

LÖNNROTINKATU 4 B, FIN-00120 HELSINKI

Puh./Tel. (09) 609 900

Telefax (09) 601753

Int. 358-9-609 900

Int. 358-9-601 753

<http://www.etla.fi>

KESKUSTELUAIHEITA - DISCUSSION PAPERS ISSN 0781-6847

- No 720 RITA ASPLUND, Private Returns to Education in Finland: Back to Basics. 20.06.2000. 14 p.
- No 721 RITA ASPLUND, Inhimillinen pääoma ja palkat Suomessa: Paluu perusmalliin. 20.06.2000. 14 s.
- No 722 HANNU HERNESNIEMI, Evaluation of Estonian Innovation System. 30.06.2000. 68 p.
- No 723 MARKUS PAUKKU, European Union and United States Trade Relations. 01.08.2000. 14 p.
- No 724 HELI KOSKI, Regulators and Competition Spurring or Retarding Innovation in the Telecommunications Sector? 03.08.2000. 21 p.
- No 725 HELI KOSKI, Feedback Mechanisms in the Evolution of Networks: The Installed User Base and Innovation in the Communications Sector. 03.08.2000. 16 p.
- No 726 KARI E.O. ALHO, Implications of EMU on Industrial Relations – The Country Report on Finland. 17.08.2000. 83 p.
- No 727 ESA VIITAMO, Metsäklusterin palvelut – kilpailukykyanalyysi. 21.08.2000. 70 s.
- No 728 ERKKI KOSKELA – MARKKU OLLIKAINEN, Optimal Forest Conservation: Competitiveness versus Green Image Effects. 31.08.2000. 22 p.
- No 729 SINIMAARIA RANKI, Does the Euro Exchange Rate Matter? 01.09.2000. 24 p.
- No 730 TOPI MIETTINEN, Poikkeavatko valtionyhtiöt yksityisistä? – Valtionyhtiöiden tavoitteiden kehitys ja vertailu yksityisomistettuihin yrityksiin. 05.09.2000. 41 s.
- No 731 ERKKI KOSKELA – RONNIE SCHÖB – HANS-WERNER SINN, Green Tax Reform and Competitiveness. 06.09.2000. 15 p.
- No 732 MATTI VIRÉN, Financing the Welfare State in the Global Economy. 06.09.2000. 16 p.
- No 733 LAURA PAIJA, ICT Cluster – The Engine of Knowledge-driven Growth in Finland. 07.09.2000. 29 p.
- No 734 STEFAN NAPEL – MIKA WIDGRÉN, Inferior Players in Simple Games. 14.09.2000. 35 p.
- No 735 KARI E.O. ALHO, Optimal Fiscal and Monetary Policies in a Recession: Is There a Way Out of the Trap in an Open Economy? 26.09.2000. 34 p.

- No 736 ERIK PLUG – WIM VIJVERBERG, Schooling, Family Background, and Adoption: Is it Nature or is it Nurture? 27.09.2000. 22 p.
- No 737 ERKKI KOSKELA – MATTI VIRÉN, Is There a Laffer Curve between Aggregate Output and Public Sector Employment? 10.10.2000. 19 p.
- No 738 PASI HUOVINEN, Työhön ja vapaa-aikaan liittyvä matkailu Helsinkiin. Analyysi majoitus-tilastosta. 24.10.2000. 21 s.
- No 739 HANNU PIEKKOLA, Unobserved Human Capital and Firm-Size Premium. 08.11.2000. 33 p.
- No 740 JOHANNA ALATALO – JUHA HONKATUKIA – PETRI KERO, Energiaturpeen käytön taloudellinen merkitys Suomessa. 08.11.2000. 51 s.
- No 741 JUKKA LASSILA – TARMO VALKONEN, Pension Prefunding, Ageing, and Demographic Uncertainty. 01.12.2000. 21 p.
- No 742 PENTTI SYDÄNMAANLAKKA, The New Challenges, Roles and Competencies of Human Resource Management. 01.12.2000. 6 p.
- No 743 EVA M. MEYERSSON-MILGROM – TROND PETERSEN – RITA ASPLUND, Pay, Risk, and Productivity. The Case of Finland, 1980-1996. 15.12.2000. 26 p.
- No 744 MATTI VIRÉN, Fiscal Policy, Automatic Stabilisers and Policy Coordination in EMU. 21.12.2000. 30 p.
- No 745 JAAKKO KIANDER – MATTI VIRÉN, Measuring Labour Market Flexibility in the OECD Countries. 21.12.2000. 15 p.
- No 746 HANNU HERNESNIEMI – PEKKA LINDROOS, Socio-economic Impact of European Single Market on Lithuanian Companies. Methodology Manual. 27.12.2000. 73 p.
- No 747 PEKKA ILMAKUNNAS – MIKA MALIRANTA, The Turnover of Jobs and Workers in a Deep Recession: Evidence from the Finnish Business Sector. 08.01.2001. 20 p.
- No 748 ARI HYYTINEN, Loan Market Equilibrium with Difference of Opinion and Imperfect Competition. 18.01.2001. 41 p.
- No 749 ARI HYYTINEN, Information Production, Banking Competition and The Market Structure of The Banking Industry. 18.01.2001. 43 p.
- No 750 PASI HUOVINEN – HANNU PIEKKOLA, Unemployment and Early Retirements of the Aged Workers in Finland. 07.02.2001. 40 p.
- No 751 ERKKI KOSKELA – MARKKU OLLIKAINEN – MIKKO PUHAKKA, Renewable Resources in an Overlapping Generations Economy without Capital. 12.02.2001. 26 p.
- No 752 KARI ALHO – COLIN HAZLEY– HANNU HERNESNIEMI – MIKA WIDGRÉN, EU:n itälaajenemisen vaikutukset Suomen tuotantorakenteeseen. 22.02.2001. 34 s.
- No 753 RITA ASPLUND, Mobility and Earnings. An analysis of Finnish manufacturing and services. 08.03.2001. 48 p.

Elinkeinoelämän Tutkimuslaitoksen julkaisemat "Keskusteluaiheet" ovat raportteja alustavista tutkimustuloksista ja väliraportteja tekeillä olevista tutkimuksista. Tässä sarjassa julkaistuja monisteita on mahdollista ostaa Taloustieto Oy:stä kopiointi- ja toimituskuluja vastaavaan hintaan.

Papers in this series are reports on preliminary research results and on studies in progress. They are sold by Taloustieto Oy for a nominal fee covering copying and postage costs.