

Wage Structure and Labor Mobility in Norway 1980-1997

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Preliminary

1. Introduction

These notes present figures for wage structures and labor mobility in Norwegian firms covering all sectors for the years 1981, 1985, 1993 and 1997. The particular years in the 20 years period have been chosen since they cover both recessions and peaks in the business cycle. The years 1981 and 1993 are years with high unemployment rates and low growth rates, while 1985 and 1997 are with low unemployment rates and high growth rates. Notice also that the unemployment rate has been rising over time so that the unemployment rate is higher in the 1990s compared to the 1980s both for peak and recession years.

2. Data

The data set consists of employment and wage data for *white collar* workers based on data from the main employers' association in Norway, the Confederation of Norwegian Business and Industry (NHO). NHO has about 16,000 member companies of which 73% have less than 20 man-labor year. The member companies employ about 450,000 workers covering mainly craftsmanship, services and manufacturing in Norway. There is a bias towards manufacturing. The total labour force in Norway is about 2 million workers all together where about half is employed in the public sector in 2000, hence the data set covers roughly 45 percent of private sector employment. In terms of private sector GDP, the members of NHO produce about 40 percent.

The data is based on establishment records for all workers employed by firms that are members of the NHO confederation. Norwegian law bounds all employers to report data on wages and employment to Statistics Norway. Until 1997 NHO collected data for their member plants under this law, and Statistics Norway collected data for the rest of the economy. From 1997 Statistics Norway collects data from all sectors. The data set we use is considered to be very precise in terms of hourly and monthly wages as well as hours worked, since the wage data was a major input in the collective bargaining process in Norway between the employers' organisation and the unions. See Holden and Salvanes (2003) for an assessment of the wage data from this data source as compared to other sources of earnings data from Norwegian registers.

Our data set covers on average 98,027 white collar workers a year in different industries during the period 1980-1997. CEOs, and in larger firms, vice CEOs are not included. The average number of plants is 5,000 and the average number of firms is 2,700 per year. We have information on wages and on each worker's hierarchical level in the firm. We have matched all workers to plants and firms in the Norwegian register of establishments and firms since it is unclear whether the unit for establishment used in the NHO statistics is plant or firm or a combination of the two. On average we could match 97% of the workers with plants and 93% of the workers with firms. We can also match our NHO data to a larger administrative matched employer-employee database which we have established previously. This database contains a rich set of information on workers and plants for the period 1986-2000. For a further description of the administrative data set, see Møen, Salvanes and Sørensen (2003). In principle, this matching allow us identify CEOs and vice CEOs indirectly.

Variables

Occupation

Each worker is assigned an occupational group and a level within the occupational group. The groups are labeled A-F: Group A is technical white collar workers; Group B is foremen; Group C is administration; Group D is shops and Group E is storage. Group F is a miscellaneous group consisting of workers that do not fit in any of the other categories. Hierarchical level is given by a number where zero represents the top level. The number of levels defined vary by group and ranges from 1 (F) to 7 (A). In total we have 22 different combinations of groups and levels. These codes are made by NHO for wage bargaining purposes, and as such they are similar across firms and industries.

We define an occupation as identical with one of the 22 combinations, i.e. we have a maximum of 22 occupations¹. In order to create levels, i.e a hierarchy within a firm, we aggregate the different occupations into seven different levels. This gives a maximum of seven levels in a single firm. [*More information on how levels are harmonized across groups is to be added.*]

Wage

We use monthly salary (per September 1st) for white collar workers *including* the value of fringe benefits and *exclusive* of overtime and bonuses. Indirect costs to the firm such as employers' fee, pensions etc are not included. We transform nominal wages to real wages using the Consumer Price Index with base year 1990 (Statistics Norway, 2004).

Restrictions on the sample

We put the following restrictions on the sample:

- 1) The workers' age is 16 or above.
- 2) The number of hours worked per week is 30 or above, i.e. we look at fulltime workers.
- 3) The number of full time employed workers, 16 years of age or above, in each firm is at least 25.

Since our data set only contains white collar workers, this means that we are looking at large firms by Norwegian standard. A firm with 25 full time employed white collar workers have on average **xx** blue collar workers. [*A table showing how the number of observations in each year is affected by the sample restrictions is to be added.*]

¹ In the data set we also have a much richer set of 4 digits job codes. These are less consistently used across firms and perhaps also within firms across time. We have therefore not yet utilized this information.

3. Macroeconomic Conditions

Table 1 shows unemployment and economic growth in Norway 1971 to 2002. The unemployment rate is taken from the Norwegian Labour Force Survey (AKU) published by Statistics Norway (1974, 1978, 1984, 1997 and 2003).

The Growth numbers are computed based on numbers from Statistic Norway (2003). In the computation the GDP numbers are fixed at 2000 prices. The formula used is

$$growth_{GDP} = 100 \cdot (\ln GDP_t - \ln GDP_{t-1}) / yr$$

where $t = 1971, \dots, 2002$ and $yr \in \{1, 2, 5\}$.

Based on Table 1 we provide Figure 1 giving a graphical illustration of the business cycles in the Norwegian economy.

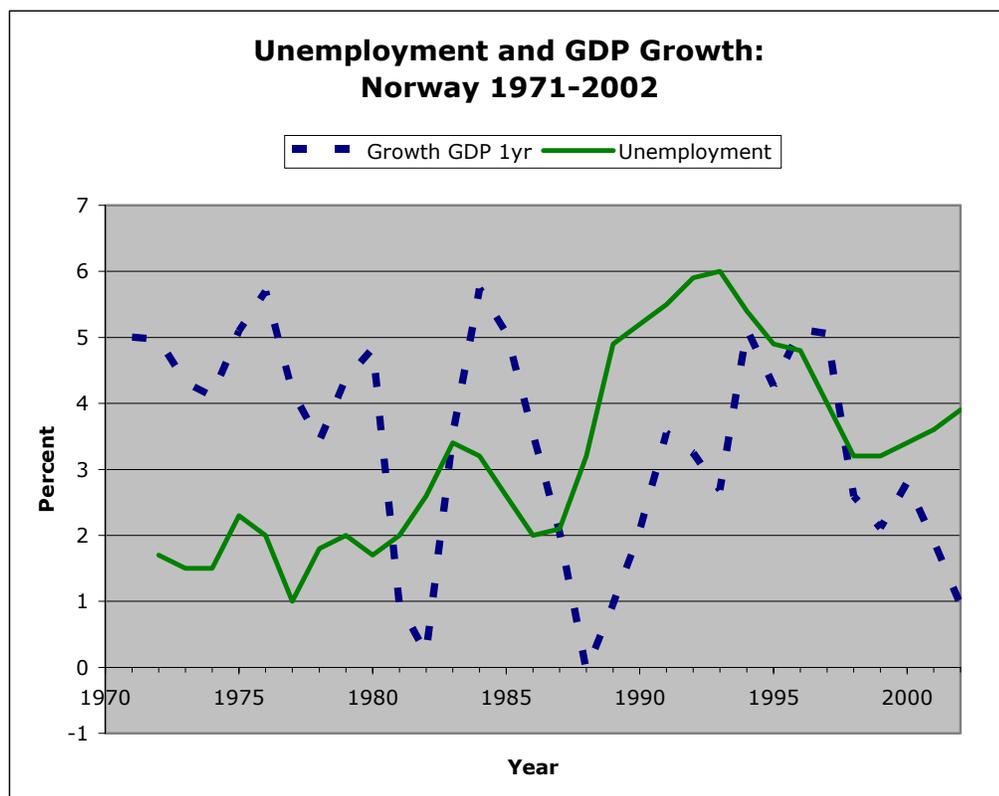


Figure 1. Unemployment and GDP growth in Norway, 1971-2002.

4. Institutional setting

Costs of hires and separations.

The costs of changing employment are of course affected by the institutional setting and legislation introduced to protect workers against unfair dismissal. Both the rules regarding individual and collective dismissals, and the flexibility of plants with respect to temporary hiring and the use of subcontractors, are important in explaining the costs of adjustment for plants. The different types of constraints regulating the hiring and firing of workers are not completely transparent, since, in addition to national laws, collective agreements between employer and workers organization also are very important in regulating the adjustment of the labor factor. These agreements may differ across industries and workers, depending upon age, tenure, etc.

Two main laws govern the labor relations in Norway: the law on employment (“Sysselsettingsloven”) and the law on labor relations (“Arbeidsmiljøloven”). The law on employment mainly regulates changes in labor during a period of restructuring and mass lay-offs by the firm. The law on labor relations was enacted in 1982 and it includes standards for general working conditions, overtime regulations and legal regulation for employment protection. According to this law, dismissals for individual reasons are limited to cases of disloyalty, persistent absenteeism etc. In general it is possible but very difficult to replace an individual worker in a given job with another worker. Hence, in general, there is a strong degree of employment protection in Norway. The law on employment states that the general rule for laying off a worker *for economic reasons* is that it layoffs can occur only when the job is “redundant” and the worker cannot be retained in another capacity. This regulation

covers all workers independent of how long ago he/she has been hired. Requirements for collective dismissals in Norway basically follow the common minimum rules for EU-countries. It is important to notice that a firm can dismiss workers not only when it is making losses but also when it has poor performance. There is not actually any rule on the selection of workers to be dismissed. However, the legal practice narrows down which workers can be dismissed. Conversations with lawyers in the employees' organizations indicate that many, if not most, of the cases of dismissals are taken to court, which is costly for the firms.

When it comes to other costs of dismissal, according to the employment law, employment is terminable with one month's notice for workers with tenure less or equal to five years. This one-month notice is at the lower end of the spectrum compared to many countries. However, most workers have a three months' notice requirement for both parties of the contract. Although there is no generalized legal requirement of severance pay in Norway, agreements in the private sector require lump-sum payments to workers who have reached age 50-55. As an example, in the contract between LO (the largest blue collar workers organization) and NHO (the employers' association), a worker who is 50 and has been working for 10 consecutive years or 20 years in the firms is eligible for one to two months pay. Comparable agreements exist for the other unions. Some EU-countries actually have even stronger job protection rules, including also general compensation, a social plan for re-training or transfer to another plant within a firm for instance. Although not mandatory, some of these other requirements are also commonplace in Norway. For this set of dismissal restriction, Norway is ranked slightly below average among OECD countries. Note finally that while some costs of reducing the workforce (such as

redundancy payments) are related to the size of the reduction, others (such as advance notice requirements, legal and other administrative costs, etc.) may have significant fixed components.

The work force flexibility of an economy can be enhanced by allowing fixed-term contracts in addition to standard contract, and the use of temporary work agencies. In many OECD countries there has been a strong trend in liberalizing the use of these two schemes. In Norway, the use of fixed term contracts is allowed only for limited situations, such as specific projects, seasonal work or the replacement of workers who are absent temporary. However, it may not necessarily be as restrictive as it appears since defining a specific project for a firm is partly open to discretion. Repeated temporary contracts are possible with some limitations, and there is no rule limiting the cumulated duration of successive contract. In general the use of temporary work agencies are prohibited, but wide exceptions exists for service sector occupations. Restrictions for the number of renewals exist also here, and two years is the maximum for cumulated contracts. Compared to other OECD countries, Norway is ranked a little bit above average with respect to strictness in use of temporary employment (OECD, 1999).

Very few comparative studies of the overall degree of employment protection exist. A much-sited study by Emerson (1987), ranks Italy as having the strongest employment protection rules while the UK and partly Denmark are at the other end of the spectrum. Norway is ranked together with Sweden, France and partly Germany (when all regulations are taken together) as an intermediate country with a fairly high degree of protection. Obviously inter-country comparisons are difficult. The most recent

comparison was made by OECD in 1999, where Norway is ranked as number 12 out of 19 OECD countries for the late 1980s, and as number 19 out of 26 OECD countries for the late 1990s in the degree of restrictiveness (OECD, 1999). Evidence on the flexibility of the Norwegian economy from job and worker flows data suggests that it is about average for OECD countries, although worker flows are a bit below average (Salvanes, 1997 and Salvanes and Førre, 2003). The overall impression is that legislation, contracts, and common practice impose important additional costs in Norway when adjusting the labor force downward, and possibly upward as well. See Nilsen, Salvanes and Sciantarelli (2003) for an analysis of the effect of labor adjustment costs in Norway.

Wage setting.

Broadly speaking, wage bargaining in Norway takes place in two stages, which also represent different levels of bargaining: Central bargaining and local level bargaining. At the central level, every second year there is a main bargaining between the dominating employees' and employers' associations. In addition to a wage tariff agreement, these main bargains settle the length of the agreement, and other issues concerning working conditions. Generally, the tariff period lasts for two years. However, in most cases mid-term wage adjustments are agreed for intermediate years. These "main" and "intermediate" year settlements take place either at the national or sectoral level.

National or sectoral level wage bargaining reflect to a large degree the general condition within the economy. Local wage setting, at the other hand, will reflect the economic conditions in each firm. Hence, it is at the central bargaining level that

inflation has an impact. Every year a report on the general condition of the economy including wage changes from the previous period, inflation, unemployment rate and other macro economic measures are collected and used as the basis for the central wage negotiations. It is reasonable to say that the main issue at the centralised wage bargains, taking place either at a national or a sectoral level, is the determination of a minimum wage for a sector or an occupational group. All workers within a covered firm will usually be paid at least the minimum wage bargained at central levels, independent of union membership state. Importantly, there is no national, statutory minimum wage for all workers so that the minimum wage differ across sectors. The bargained sector minimum wage is the minimum wage to be paid by firms that are covered by the specific agreement.

How many firms that have local bargaining, and how important wage drift, i.e. the change in wages due to local negotiations, is for the total wage increases varies quite a lot over sectors. Figure 2 shows total wage change in the period 1970 to 1996. As is noticed from the figure quite a large proportion of the total wage gains is realised at the local level, see also Holden and Rødseth (1990). This means that the sector minimum wage will not be binding for a large number of firms, since they have locally contracted higher wages. In our data a relatively small proportion of the workforce is paid at or near the minimum wage, and local bargaining could be one reason why this is so.

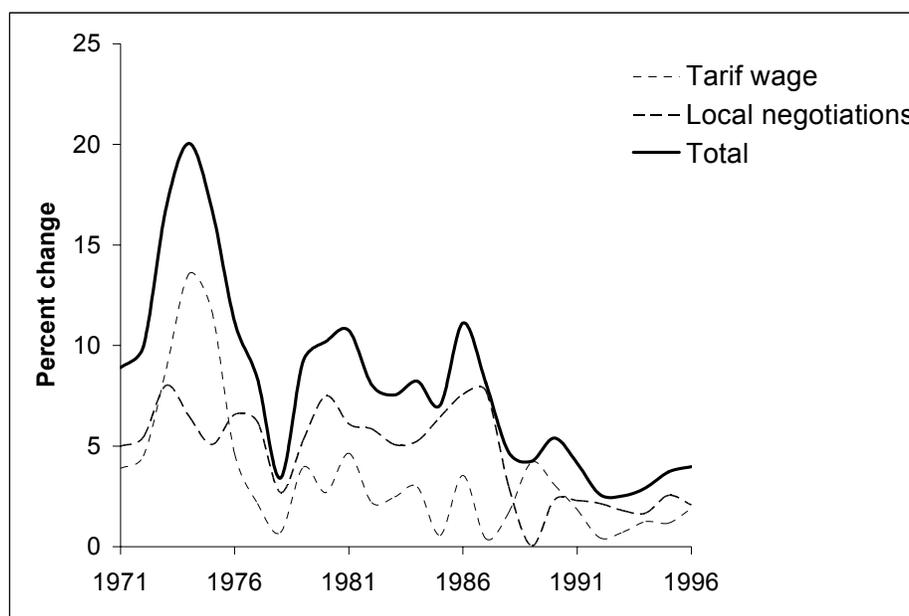


Figure 2. Total wage change in Norway decomposed by central and local bargained wage

Within the private sector of the economy the main parties in the wage negotiations are LO, the main blue collar union, represented by its relevant branch union, on one side, and NHO, the employers' main association represented by its relevant employer branch organization, on the other side. LO and NHO agree ahead of each tariff adjustment at which level bargaining is to take place. Sometimes some general decisions are made nationally, whereas the wage adjustments occur at the sectoral level. Both union density, i.e. the share of workers unionized, and coverage, i.e. the share of workers covered by collective agreements, are relatively high in Norway. Furthermore, there is a high union concentration with one dominating nation wide union, namely LO, see Wallerstein et al. (1997). The traditional stronghold of LO is among blue-collar workers in the manufacturing industry. LO has a high membership

rate also in some private service sectors, and for non-professionals and unskilled employees in the public sector. LO, is organized in union branches, to a large degree covering different industrial sectors. In later years several union branches have merged, so now some of the larger branches cover several sectors. Nevertheless, the unions will bargain separate agreements for the different industry groups or groups of workers. Some unions cover workers across a large number of industry branches, according to occupation. These union branches often represent high skilled workers, for whom the traditional minimum wage discussion is less relevant. Generally, a rate of unionization at 50% is considered enough for the workers within a firm to require the firm to adhere to tariff agreements. Wallerstein et al. (1997) report a rate of unionization in Norway of 53.8% in 1989. However, coverage is higher. In 1992, 75% of the workers were covered by a collective agreement defining a minimum wage. An important reason for the higher coverage is of course that the tariff will be paid to all workers within a covered firm.

5. Comments on the results²

[To be added.]

6. Computational notes

-- Employees are white collar workers.

-- Following the Finnish contribution by Uusitalo and Vartiainen, all restrictions on the sample (working hours at least 30 hours per week and the number of workers in the firm at least 25) are by year t . This contrasts, e.g. the procedure used in the

² We are still in the process of fine tuning the data set and the estimation procedures, hence the current version of the tables may differ slightly from the final version.

Swedish contribution where the sample is restricted to firms with more than 25 workers in both year t and $t-1$. We fear that this procedure will bias the entry and exit rates.

-- All statistics involving two periods are calculated based on the years $t-1$ and t , except the exit rates where we use the years t and $t+1$. This procedure gives us the same sample regardless of whether we are looking at exit or entry rates. (This is also in line with the Finnish contribution.) Formally, let a_{ijt} be a dummy variable representing the presence of worker i in firm j in year t . $\sum_i a_{ijt} = A_{jt}$ is then the number of workers in firm j in year t .

The entry rate is given by

$$entry_{jt} = \frac{\sum_i en_{ijt}}{A_{jt}} \text{ where } en_{ijt} = 1 \text{ if } a_{ijt} = 1 \text{ and } a_{ijt-1} = 0.$$

Note that this is the share of workers present at time t but not at time $t-1$. The entry rate defined this way can not be interpreted as a job creation rate, since the denominator is year t firm size, and it is bounded between zero and one.

The exit rate is given by

$$exit_{jt} = \frac{\sum_i ex_{ijt}}{A_{jt}} \text{ where } ex_{ijt} = 1 \text{ if } a_{ijt} = 1 \text{ and } a_{ijt+1} = 0.$$

The more common approach to calculating entry and exit rates is

$$entry_{jt} = \frac{2 \sum_i en_{ijt}}{A_{jt-1} + A_{jt}}$$

$$exit_{jt} = \frac{2 \sum_i ex_{ijt-1}}{A_{jt-1} + A_{jt}}$$

Using these definitions, however, the entry rate should be calculated on a year t-1 sample, i.e. firms with more than 25 workers in year t-1 instead of firms with more than 25 workers in year t. Otherwise, the entry rate will be biased by conditioning sample inclusion on firms being present in year t-1 and reaching at least size 25 by year t. Likewise, the exit rate should in this case be calculated on a year t-1 sample in order not to bias the rate by excluding firms that fall below 25 workers in year t. Furthermore, using these definitions, calculating exit rates, and in particular, entry rates, for various percentile ranges seems problematic.

-- Employment growth is calculated as:

$$growth_{employment} = \frac{2(firmsize_t - firmsize_{t-1})}{firmsize_{t-1} + firmsize_t}.$$

-- The number for “new jobs” reported is the ratio between those who change jobs internally and all those who change jobs (regardless of whether they are internal or external).

-- We create the tenure variable as tenure within the sample. Work histories start in 1980, hence our tenure variable is left censored for workers who were already in the sample at that time and do not change job. Note that a worker appearing in a firm in year t is given tenure 1, not 0.

-- The jobs are categorized into High and Low level jobs as described in the letter from Ed and Kathryn (November 10). The number of high level jobs is 6 and the number of low level jobs is 4. This leaves 12 “mid level” jobs.

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[References to section 4 to be added.]

Internet addresses:

www.nho.no

Tables

Table 1: Macroeconomic Conditions.

| <i>Year</i> | <i>Unemployment rate</i> | <i>Economic growth (% change in GDP)</i> | | |
|-------------|--------------------------|--|---------------|---------------|
| | | <i>1 year</i> | <i>2 year</i> | <i>5 year</i> |
| 1971 | . | 5.00 | . | . |
| 1972 | 1.7 | 4.97 | 4.99 | . |
| 1973 | 1.5 | 4.32 | 4.64 | . |
| 1974 | 1.5 | 4.11 | 4.21 | . |
| 1975 | 2.3 | 5.10 | 4.60 | 4.70 |
| 1976 | 2.0 | 5.70 | 5.40 | 4.84 |
| 1977 | 1.0 | 4.18 | 4.94 | 4.68 |
| 1978 | 1.8 | 3.43 | 3.80 | 4.50 |
| 1979 | 2.0 | 4.38 | 3.91 | 4.56 |
| 1980 | 1.7 | 4.83 | 4.61 | 4.50 |
| 1981 | 2.0 | 0.96 | 2.90 | 3.56 |
| 1982 | 2.6 | 0.21 | 0.58 | 2.76 |
| 1983 | 3.4 | 3.52 | 1.86 | 2.78 |
| 1984 | 3.2 | 5.74 | 4.63 | 3.05 |
| 1985 | 2.6 | 5.07 | 5.40 | 3.10 |
| 1986 | 2.0 | 3.54 | 4.30 | 3.61 |
| 1987 | 2.1 | 2.03 | 2.79 | 3.98 |
| 1988 | 3.2 | -0.04 | 1.00 | 3.27 |
| 1989 | 4.9 | 0.95 | 0.45 | 2.31 |
| 1990 | 5.2 | 2.06 | 1.51 | 1.71 |
| 1991 | 5.5 | 3.55 | 2.81 | 1.71 |
| 1992 | 5.9 | 3.25 | 3.40 | 1.95 |
| 1993 | 6.0 | 2.69 | 2.97 | 2.50 |
| 1994 | 5.4 | 5.12 | 3.91 | 3.33 |
| 1995 | 4.9 | 4.27 | 4.69 | 3.78 |
| 1996 | 4.8 | 5.12 | 4.69 | 4.09 |
| 1997 | 4.0 | 5.06 | 5.09 | 4.45 |
| 1998 | 3.2 | 2.60 | 3.83 | 4.43 |
| 1999 | 3.2 | 2.11 | 2.35 | 3.83 |
| 2000 | 3.4 | 2.80 | 2.45 | 3.54 |
| 2001 | 3.6 | 1.91 | 2.35 | 2.89 |
| 2002 | 3.9 | 0.95 | 1.43 | 2.07 |

Table 2: Structure of Wages Within and Between Firm

| | <i>Monthly wages in 1990 kroner</i> | | | | <i>Log monthly wages in 1990 kroner</i> | | | |
|--|-------------------------------------|-------------|-------------|-------------|---|-------------|-------------|-------------|
| | <i>1981</i> | <i>1985</i> | <i>1993</i> | <i>1997</i> | <i>1981</i> | <i>1985</i> | <i>1993</i> | <i>1997</i> |
| Avg wage, obs = a person | 18192 | 19075 | 20015 | 21823 | 9.76 | 9.81 | 9.86 | 9.94 |
| (s.d) | 5775 | 6293 | 6459 | 7096 | .29 | .30 | .30 | .31 |
| (90%-ile) | 25734 | 27752 | 29189 | 31889 | 10.16 | 10.23 | 10.28 | 10.37 |
| (10%-ile) | 12169 | 12670 | 13445 | 14586 | 9.41 | 9.45 | 9.51 | 9.59 |
| [N - workers] | 60657 | 72011 | 81196 | 87965 | 60657 | 72011 | 81196 | 87976 |
| Avg of firm avg wage, obs = a firm | 17180 | 17668 | 18710 | 20366 | 9.71 | 9.73 | 9.79 | 9.88 |
| (s.d) | 2325 | 2431 | 269 | 3073 | .13 | .14 | .14 | .14 |
| (90%-ile) | 20036 | 20777 | 22118 | 24411 | 9.87 | 9.90 | 9.96 | 10.06 |
| (10%-ile) | 14094 | 14563 | 15631 | 16664 | 9.52 | 9.56 | 9.62 | 9.69 |
| [N - firms] | 532 | 564 | 587 | 680 | 532 | 564 | 587 | 680 |
| Avg of s.d. of wage, obs = a firm | 4554 | 4816 | 5126 | 5601 | .25 | .25 | .25 | .26 |
| (s.d) | 1202 | 1390 | 1647 | 1714 | .05 | .06 | .06 | .06 |
| (90%-ile) | 6035 | 6454 | 6856 | 7443 | .30 | .31 | .31 | .32 |
| (10%-ile) | 3072 | 3147 | 3537 | 3745 | .19 | .19 | .20 | .20 |
| [N - firms] | 532 | 564 | 587 | 680 | 532 | 564 | 587 | 680 |
| Avg Coefficient of variation of wage, obs = a firm | .26 | .27 | .27 | .27 | .026 | .026 | .026 | .026 |
| (s.d) | .05 | .06 | .06 | .06 | .005 | .006 | .006 | .006 |
| (90%-ile) | .33 | .34 | .34 | .34 | .031 | .031 | .032 | .032 |
| (10%-ile) | .20 | .20 | .21 | .21 | .020 | .020 | .020 | .020 |
| [N - firms] | 532 | 564 | 587 | 680 | 532 | 564 | 587 | 680 |
| Correlation (avg wage, s.d. of wage), obs = a firm | .72 | .71 | .73 | .74 | .15 | .06 | .33 | .23 |
| Avg wage for workers between 25 and 30, obs = a person | 15463 | 16363 | 16316 | 17608 | 9.63 | 9.68 | 9.68 | 9.76 |
| (s.d) | 3186 | 3626 | 3303 | 3596 | .20 | .22 | 0.20 | 0.21 |
| (90%-ile) | 19725 | 21265 | 20603 | 22188 | 9.89 | 9.96 | 9.93 | 10.00 |
| (10%-ile) | 11743 | 12162 | 12479 | 13384 | 9.37 | 9.41 | 9.43 | 9.50 |
| [N - workers] | 7920 | 10838 | 11588 | 10471 | 7920 | 10838 | 11588 | 10471 |

| | | | | | | | | |
|--|-------|-------|-------|-------|-------|-------|-------|-------|
| Avg wage for workers between 45 and 50, obs = a person | 19918 | 20759 | 21362 | 23264 | 9.86 | 9.89 | 9.92 | 10.00 |
| (s.d) | 6266 | 6957 | 7315 | 7861 | .29 | .30 | 0.31 | .32 |
| (90%-ile) | 28624 | 31081 | 31578 | 34392 | 10.26 | 10.34 | 10.36 | 10.45 |
| (10%-ile) | 13578 | 13964 | 14093 | 15218 | 9.52 | 9.54 | 9.55 | 9.63 |
| [N - workers] | 7669 | 9021 | 15508 | 15272 | 7669 | 9021 | 15508 | 15272 |

Table 3: Wage Dynamics.

| | <i>Change in monthly wages in 1990 kroner</i> | | | | <i>Change in log monthly wages in 1990 kroner</i> | | | |
|--|---|-------------|-------------|-------------|---|-------------|-------------|-------------|
| | <i>1981</i> | <i>1985</i> | <i>1993</i> | <i>1997</i> | <i>1981</i> | <i>1985</i> | <i>1993</i> | <i>1997</i> |
| Avg change in wage, obs = a person | -93 | 728 | 357 | 753 | -.004 | .038 | .019 | .035 |
| (s.d.) | 1231 | 1126 | 1518 | 1623 | .066 | .056 | .074 | .091 |
| (90%-ile) | 1283 | 1970 | 1284 | 2164 | .075 | .106 | .067 | .098 |
| (10%-ile) | -1233 | -127 | -312 | -145 | -0.67 | -.007 | -.019 | -.008 |
| [N – workers] | 52366 | 60169 | 71023 | 75146 | 52366 | 60169 | 71023 | 75146 |
| Avg of firm avg change in wage, obs = a firm | -174 | 591 | 283 | 686 | -.008 | .033 | .016 | .035 |
| (s.d.) | 632 | 454 | 413 | 543 | .037 | .025 | .026 | .028 |
| (90%-ile) | 524 | 1127 | 713 | 1343 | .032 | .063 | .041 | .069 |
| (10%-ile) | -886 | 100 | -155 | 126 | -.050 | .006 | -.009 | .007 |
| [N - firms] | 496 | 500 | 552 | 613 | 496 | 500 | 552 | 613 |
| Avg of s.d. of change in wage, obs = a firm | 952 | 886 | 996 | 1341 | .053 | .047 | .061 | .076 |
| (s.d.) | 400 | 520 | 869 | 861 | .024 | .029 | .052 | .060 |
| (90%-ile) | 1381 | 1412 | 1724 | 2171 | .096 | .072 | .113 | .137 |
| (10%-ile) | 549 | 407 | 388 | 523 | .029 | .025 | .022 | .027 |
| [N - firms] | 494 | 497 | 550 | 608 | 494 | 497 | 550 | 608 |
| Avg Coefficient of variation of change in wages, obs = a firm | -2.66 | 1.76 | 3.07 | 2.28 | -42.10 | -.65 | 2.65 | .79 |
| (s.d.) | 32.69 | 5.61 | 34.63 | 8.89 | 689.25 | 47.44 | 58.77 | 26.42 |
| (90%-ile) | 4.76 | 3.37 | 7.66 | 4.51 | 6.17 | 3.25 | 7.80 | 4.60 |
| (10%-ile) | -7.58 | .60 | -4.18 | .67 | -7.03 | .59 | -4.06 | .59 |
| [N – firms] | 494 | 497 | 550 | 608 | 494 | 497 | 550 | 608 |
| Avg change in wage for people who change firms, obs = a person | 113 | 701 | 465 | 952 | .009 | .037 | .024 | .045 |
| (s.d.) | 1587 | 1370 | 1616 | 1947 | .087 | .065 | .101 | .100 |
| (90%-ile) | 1978 | 2044 | 1776 | 2926 | .112 | .109 | .087 | .133 |
| (10%-ile) | -1393 | -210 | -422 | -328 | -.069 | -.012 | -.021 | -.017 |

| | | | | | | | | |
|---|--------------------|-------|-------|-------|------|-------|-------|-------|
| [N – workers] | 2789 | 4945 | 4213 | 7176 | 2789 | 4945 | 4213 | 7176 |
| Avg change in wage for people with tenure < 3 yrs, obs = a person | <i>to be added</i> | 833 | 455 | 927 | N/A | .045 | .025 | .046 |
| (s.d.) | | 1295 | 1333 | 1994 | | .065 | .086 | .105 |
| (90%-ile) | | 2181 | 1609 | 2692 | | .122 | .085 | .128 |
| (10%-ile) | | -135 | -356 | -261 | | -.007 | -.021 | -.014 |
| [N - workers] | | 14293 | 15437 | 17243 | | 14293 | 15437 | 17243 |
| Avg change in wage for people with tenure ≥ 3 yrs, obs = a person | <i>to be added</i> | 695 | 330 | 701 | N/A | .037 | .017 | .032 |
| (s.d.) | | 1066 | 1564 | 1491 | | .053 | .070 | .086 |
| (90%-ile) | | 1907 | 1191 | 1980 | | .100 | .061 | .088 |
| (10%-ile) | | -125 | -296 | -122 | | -.007 | -.017 | -.006 |
| [N – workers] | | 45876 | 55586 | 57903 | | 45876 | 55586 | 57903 |

Table 4: Mobility. Panel A. All Jobs.

| | <i>All firms</i> | | | | <i>Firms with 100+ employees</i> | | | |
|--|------------------|-------------|-------------|-------------|----------------------------------|-------------|-------------|-------------|
| | <i>1981</i> | <i>1985</i> | <i>1993</i> | <i>1997</i> | <i>1981</i> | <i>1985</i> | <i>1993</i> | <i>1997</i> |
| Employees | 114.02 | 127.68 | 138.32 | 129.36 | 276.94 | 320.36 | 336.92 | 340.41 |
| (s.d.) | 188.42 | 248.34 | 280.35 | 289.09 | 288.03 | 399.21 | 439.39 | 488.69 |
| [N - firms] | 532 | 564 | 587 | 680 | 156 | 164 | 184 | 189 |
| Number of occupations | 12.65 | 12.54 | 12.54 | 11.97 | 16.30 | 16.20 | 15.74 | 15.45 |
| (s.d.) | 3.78 | 3.81 | 3.80 | 3.89 | 2.46 | 2.46 | 3.19 | 3.17 |
| [N - firms] | 532 | 564 | 587 | 680 | 156 | 164 | 184 | 189 |
| Number of levels | 6.05 | 6.06 | 6.09 | 5.96 | 6.72 | 6.80 | 6.68 | 6.64 |
| (s.d.) | .92 | .94 | .90 | .96 | .49 | .42 | .57 | .59 |
| [N - firms] | 532 | 564 | 587 | 680 | 156 | 164 | 184 | 189 |
| Employment growth | .13 | .29 | .09 | .21 | .14 | .24 | .09 | .17 |
| (s.d.) | .60 | .67 | .58 | .68 | .57 | .60 | .49 | .58 |
| [N - firms] | 532 | 564 | 587 | 680 | 156 | 164 | 184 | 189 |
| Exit rate, obs = a person | .19 | .16 | .20 | .22 | .17 | .14 | .18 | .23 |
| Exit rate | .22 | .22 | .25 | .22 | .21 | .16 | .22 | .22 |
| (s.d.) | .26 | .16 | .31 | .22 | .25 | .17 | .29 | .23 |
| [N - firms] | 532 | 564 | 587 | 680 | 156 | 164 | 184 | 189 |
| Exit rate, top quartile of firm wages | .19 | .19 | .25 | .22 | .18 | .15 | .22 | .22 |
| (s.d.) | .28 | .25 | .33 | .24 | .26 | .18 | .30 | .24 |
| [N - firms] | 532 | 564 | 587 | 680 | 156 | 164 | 184 | 189 |
| Exit rate, bottom quartile of firm wages | .27 | .25 | .26 | .23 | .26 | .20 | .24 | .24 |
| (s.d.) | .26 | .25 | .32 | .24 | .24 | .18 | .29 | .23 |
| [N - firms] | 532 | 564 | 587 | 680 | 156 | 164 | 184 | 189 |
| Exit rate, top decile of firm wages | .20 | .20 | .26 | .22 | .17 | .16 | .22 | .23 |
| (s.d.) | .29 | .27 | .34 | .27 | .26 | .19 | .30 | .26 |
| [N - firms] | 532 | 564 | 587 | 680 | 156 | 164 | 184 | 189 |
| Exit rate, bottom decile of firm wages | .30 | .29 | .28 | .25 | .29 | .22 | .26 | .24 |

| | | | | | | | | |
|--|--------|--------|--------|-------|--------|-------|--------|-------|
| (s.d.) | .29 | .28 | .33 | .27 | .24 | .19 | .30 | .23 |
| [N - firms] | 532 | 564 | 587 | 680 | 156 | 164 | 184 | 189 |
| Entry rate | .20 | .27 | .20 | .27 | .21 | .24 | .18 | .23 |
| (s.d.) | .25 | .24 | .26 | .29 | .26 | .27 | .23 | .26 |
| [N - firms] | 532 | 564 | 587 | 680 | 156 | 164 | 184 | 189 |
| Entry rate, top quartile of firm wages | .16 | .22 | .18 | .24 | .16 | .19 | .17 | .19 |
| (s.d.) | .27 | .32 | .28 | .31 | .27 | .28 | .25 | .27 |
| [N - firms] | 532 | 564 | 587 | 680 | 156 | 164 | 184 | 189 |
| Entry rate, bottom quartile of firm wages | .28 | .37 | .24 | .33 | .29 | .34 | .21 | .29 |
| (s.d.) | .27 | .29 | .27 | .31 | .26 | .25 | .24 | .27 |
| [N - firms] | 532 | 564 | 587 | 680 | 156 | 164 | 184 | 189 |
| Entry rate, top decile of firm wages | .15 | .22 | .18 | .24 | .15 | .19 | .18 | .19 |
| (s.d.) | .28 | .33 | .29 | .32 | .28 | .29 | .26 | .27 |
| [N - firms] | 532 | 564 | 587 | 680 | 156 | 164 | 184 | 189 |
| Entry rate, bottom decile of firm wages | .34 | .43 | .25 | .36 | .35 | .41 | .23 | .31 |
| (s.d.) | .30 | .32 | .29 | .33 | .27 | .26 | .25 | .29 |
| [N - firms] | 532 | 564 | 587 | 680 | 156 | 164 | 184 | 189 |
| % of employees who switch jobs internally | .10 | .09 | .10 | .09 | .11 | .09 | .10 | .10 |
| (s.d.) | .10 | .09 | .09 | .09 | .10 | .09 | .07 | .09 |
| [N - firms] | 532 | 564 | 587 | 680 | 156 | 164 | 184 | 189 |
| % of new jobs filled internally | .42 | .31 | .44 | .36 | .43 | .35 | .48 | .40 |
| (s.d.) | .31 | .24 | .28 | .28 | .28 | .22 | .22 | .24 |
| [N - firms] | 527 | 560 | 577 | 672 | 156 | 164 | 182 | 187 |
| % of workers who have been at firm 5+ yrs) | N/A | .41 | .42 | .41 | N/A | .47 | .49 | .48 |
| (s.d.) | | .31 | .32 | .33 | | .30 | .30 | .32 |
| [N - firms] | | 564 | 587 | 680 | | 164 | 184 | 189 |
| Correlation (exit rate, avg wage) | -.0741 | -.0538 | -.0048 | .0927 | -.0088 | .0395 | .0036 | .2038 |
| [N - firms] | 532 | 564 | 587 | 680 | 156 | 164 | 184 | 189 |
| Correlation (exit rate, avg wage change) | .0318 | -.0226 | -.0351 | .0583 | .0504 | .0504 | -.1520 | .0775 |

| | | | | | | | | |
|---|--------|--------|-------|--------|--------|--------|--------|--------|
| [N - firms] | 496 | 500 | 552 | 613 | 147 | 150 | 178 | 178 |
| Correlation (exit rate, s.d. of wage) | -.0277 | -.0505 | .0262 | .1451 | -.0431 | .0792 | -.0225 | .2558 |
| [N - firms] | 532 | 564 | 587 | 680 | 156 | 164 | 184 | 189 |
| Correlation (entry rate, avg wage) | -.0395 | -.0536 | .0538 | -.0469 | -.0073 | .0130 | .1304 | -.0438 |
| [N - firms] | 532 | 564 | 587 | 680 | 156 | 164 | 184 | 189 |
| Correlation (entry rate, avg wage change) | .0941 | .2029 | .0906 | .1784 | .1789 | .4764 | .0668 | .2058 |
| [N - firms] | 496 | 500 | 552 | 613 | 147 | 150 | 178 | 178 |
| Correlation (entry rate, s.d. of wage) | .0117 | -.0370 | .0450 | .0189 | -.0207 | -.0215 | .0497 | .0347 |
| [N - firms] | 532 | 564 | 587 | 680 | 156 | 164 | 184 | 189 |

Table 4: Mobility. Panel B. High Level Jobs.

| | <i>All firms</i> | | | | <i>Firms with 100+ employees</i> | | | |
|--|------------------|-------------|-------------|-------------|----------------------------------|-------------|-------------|-------------|
| | <i>1981</i> | <i>1985</i> | <i>1993</i> | <i>1997</i> | <i>1981</i> | <i>1985</i> | <i>1993</i> | <i>1997</i> |
| Employees | 16.66 | 21.09 | 27.27 | 25.98 | 39.00 | 52.81 | 68.85 | 72.08 |
| (s.d.) | 27.30 | 65.64 | 101.55 | 129.64 | 42.22 | 115.13 | 173.55 | 235.90 |
| [N - firms] | 529 | 559 | 582 | 658 | 156 | 164 | 184 | 189 |
| Number of occupations | 3.23 | 3.25 | 3.24 | 3.08 | 4.33 | 4.46 | 4.31 | 4.27 |
| (s.d.) | 1.29 | 1.36 | 1.43 | 1.42 | .95 | .96 | 1.20 | 1.18 |
| [N - firms] | 529 | 559 | 582 | 658 | 156 | 164 | 184 | 189 |
| Number of levels | 2.21 | 2.23 | 2.22 | 2.18 | 2.73 | 2.80 | 2.71 | 2.68 |
| (s.d.) | .74 | .78 | .78 | .76 | .49 | .41 | .53 | .55 |
| [N - firms] | 529 | 559 | 582 | 658 | 156 | 164 | 184 | 189 |
| Employment growth | .15 | .27 | .13 | .23 | .19 | .25 | .15 | .18 |
| (s.d.) | .60 | .71 | .62 | .72 | .57 | .62 | .53 | .59 |
| [N - firms] | 529 | 559 | 582 | 658 | 156 | 164 | 184 | 189 |
| Exit rate, obs = a person | .16 | .15 | .19 | .24 | .14 | .12 | .18 | .24 |
| Exit rate | .20 | .20 | .25 | .22 | .17 | .15 | .22 | .22 |
| (s.d.) | .29 | .27 | .34 | .27 | .26 | .19 | .30 | .24 |
| [N - firms] | 529 | 559 | 582 | 658 | 156 | 164 | 184 | 189 |
| Exit rate, top quartile of firm wages | .21 | .21 | .27 | .22 | .18 | .19 | .23 | .22 |
| (s.d.) | .34 | .32 | .37 | .33 | .28 | .23 | .31 | .27 |
| [N - firms] | 539 | 559 | 582 | 658 | 156 | 164 | 184 | 189 |
| Exit rate, bottom quartile of firm wages | .20 | .20 | .24 | .23 | .18 | .13 | .23 | .22 |
| (s.d.) | .32 | .32 | .37 | .33 | .27 | .22 | .32 | .26 |
| [N - firms] | 529 | 559 | 582 | 658 | 156 | 164 | 184 | 189 |
| Exit rate, top decile of firm wages | .21 | .24 | .28 | .21 | .18 | .20 | .25 | .22 |
| (s.d.) | .37 | .38 | .41 | .37 | .30 | .28 | .34 | .31 |
| [N - firms] | 529 | 559 | 582 | 658 | 156 | 164 | 184 | 189 |
| Exit rate, bottom decile of firm wages | .21 | .20 | .24 | .23 | .19 | .15 | .23 | .25 |

| | | | | | | | | |
|--|--------|--------|--------|-------|--------|-------|--------|-------|
| (s.d.) | .37 | .36 | .40 | .37 | .30 | .27 | .35 | .31 |
| [N - firms] | 529 | 559 | 582 | 658 | 156 | 164 | 184 | 189 |
| Entry rate | .15 | .22 | .17 | .23 | .15 | .19 | .17 | .18 |
| (s.d.) | .27 | .33 | .29 | .33 | .27 | .29 | .25 | .28 |
| [N - firms] | 529 | 559 | 582 | 658 | 156 | 164 | 184 | 189 |
| Entry rate, top quartile of firm wages | .14 | .23 | .20 | .25 | .14 | .19 | .19 | .21 |
| (s.d.) | .30 | .36 | .33 | .37 | .29 | .30 | .28 | .29 |
| [N - firms] | 529 | 559 | 582 | 658 | 156 | 164 | 184 | 189 |
| Entry rate, bottom quartile of firm wages | .14 | .22 | .17 | .22 | .16 | .20 | .15 | .17 |
| (s.d.) | .30 | .35 | .32 | .36 | .28 | .30 | .27 | .30 |
| [N - firms] | 529 | 559 | 582 | 658 | 156 | 164 | 184 | 189 |
| Entry rate, top decile of firm wages | .14 | .25 | .20 | .26 | .15 | .21 | .19 | .22 |
| (s.d.) | .33 | .40 | .37 | .41 | .30 | .33 | .30 | .33 |
| [N - firms] | 529 | 559 | 582 | 658 | 156 | 164 | 184 | 189 |
| Entry rate, bottom decile of firm wages | .14 | .23 | .17 | .22 | .16 | .20 | .15 | .18 |
| (s.d.) | .33 | .38 | .34 | .39 | .30 | .32 | .28 | .33 |
| [N - firms] | 529 | 559 | 582 | 658 | 156 | 164 | 184 | 189 |
| % of employees who switch jobs internally | .13 | .12 | .10 | .10 | .15 | .14 | .11 | .11 |
| (s.d.) | .19 | .16 | .15 | .16 | .15 | .13 | .12 | .13 |
| [N - firms] | 529 | 559 | 582 | 658 | 156 | 164 | 184 | 189 |
| % of new jobs filled internally | .58 | .48 | .50 | .46 | .62 | .54 | .52 | .53 |
| (s.d.) | .42 | .39 | .39 | .40 | .37 | .35 | .35 | .35 |
| [N - firms] | 393 | 436 | 420 | 481 | 147 | 157 | 174 | 172 |
| % of workers who have been at firm 5+ yrs) | N/A | .49 | .47 | .46 | N/A | .57 | .53 | .55 |
| (s.d.) | | .38 | .38 | .38 | | .35 | .34 | .35 |
| [N - firms] | | 559 | 582 | 658 | | 164 | 184 | 189 |
| Correlation (exit rate, avg wage) | -.0430 | -.0280 | -.0398 | .0543 | -.0547 | .0359 | -.0585 | .1381 |
| [N - firms] | 529 | 559 | 582 | 658 | 156 | 164 | 184 | 189 |
| Correlation (exit rate, avg wage change) | .0379 | -.0048 | -.0086 | .0111 | .0435 | .0566 | -.0278 | .0058 |

| | | | | | | | | |
|---|--------|--------|-------|-------|--------|--------|--------|--------|
| [N - firms] | 490 | 492 | 538 | 580 | 144 | 150 | 176 | 175 |
| Correlation (exit rate, s.d. of wage) | -.0208 | .0718 | .0558 | .0726 | -.0572 | .0182 | .0101 | .0692 |
| [N - firms] | 521 | 549 | 566 | 628 | 156 | 164 | 184 | 189 |
| Correlation (entry rate, avg wage) | -.0345 | -.0542 | .1187 | .0616 | -.0604 | -.1056 | .0642 | .0720 |
| [N - firms] | 529 | 559 | 582 | 658 | 156 | 164 | 184 | 189 |
| Correlation (entry rate, avg wage change) | .0455 | .0972 | .0194 | .0561 | .0995 | .2595 | -.0550 | -.0373 |
| [N - firms] | 490 | 492 | 538 | 580 | 144 | 150 | 176 | 175 |
| Correlation (entry rate, s.d. of wage) | .0270 | .0035 | .0542 | .0131 | -.0176 | -.1976 | .0085 | -.0031 |
| [N - firms] | 521 | 549 | 566 | 628 | 156 | 164 | 184 | 189 |

Table 4: Mobility. Panel C. Low Level Jobs.

| | <i>All firms</i> | | | | <i>Firms with 100+ employees</i> | | | |
|--|------------------|-------------|-------------|-------------|----------------------------------|-------------|-------------|-------------|
| | <i>1981</i> | <i>1985</i> | <i>1993</i> | <i>1997</i> | <i>1981</i> | <i>1985</i> | <i>1993</i> | <i>1997</i> |
| Employees | 18.42 | 18.09 | 15.15 | 13.60 | 41.05 | 40.13 | 32.04 | 30.53 |
| (s.d.) | 27.46 | 30.13 | 30.51 | 28.65 | 40.89 | 47.14 | 48.63 | 48.24 |
| [N - firms] | 519 | 550 | 564 | 644 | 156 | 164 | 183 | 186 |
| Number of occupations | 2.09 | 2.03 | 1.89 | 1.79 | 2.49 | 2.38 | 2.26 | 2.21 |
| (s.d.) | .83 | .81 | .82 | .77 | .75 | .82 | .89 | .77 |
| [N - firms] | 519 | 550 | 564 | 644 | 156 | 164 | 183 | 186 |
| Number of levels | 1.57 | 1.55 | 1.47 | 1.45 | 1.74 | 1.65 | 1.58 | 1.60 |
| (s.d.) | .50 | .50 | .50 | .50 | .44 | .48 | .49 | .49 |
| [N - firms] | 519 | 550 | 564 | 644 | 156 | 164 | 183 | 186 |
| Employment growth | .06 | .31 | -.06 | .08 | .08 | .21 | -.10 | .03 |
| (s.d.) | .68 | .77 | .73 | .86 | .62 | .65 | .65 | .74 |
| [N - firms] | 519 | 550 | 564 | 644 | 156 | 164 | 183 | 186 |
| Exit rate, obs = a person | .24 | .21 | .23 | .22 | .21 | .17 | .21 | .21 |
| Exit rate | .27 | .26 | .27 | .23 | .25 | .20 | .26 | .22 |
| (s.d.) | .29 | .28 | .34 | .29 | .26 | .19 | .31 | .26 |
| [N - firms] | 519 | 550 | 564 | 644 | 156 | 164 | 183 | 186 |
| Exit rate, top quartile of firm wages | .22 | .23 | .25 | .21 | .19 | .17 | .23 | .19 |
| (s.d.) | .34 | .34 | .38 | .35 | .29 | .23 | .34 | .30 |
| [N - firms] | 519 | 550 | 564 | 644 | 156 | 164 | 183 | 186 |
| Exit rate, bottom quartile of firm wages | .32 | .30 | .30 | .25 | .32 | .23 | .30 | .23 |
| (s.d.) | .34 | .35 | .39 | .35 | .29 | .24 | .36 | .29 |
| [N - firms] | 519 | 550 | 564 | 644 | 156 | 164 | 183 | 186 |
| Exit rate, top decile of firm wages | .21 | .22 | .25 | .22 | .19 | .16 | .23 | .20 |
| (s.d.) | .37 | .37 | .41 | .39 | .33 | .29 | .37 | .35 |
| [N - firms] | 519 | 550 | 564 | 644 | 156 | 164 | 183 | 186 |
| Exit rate, bottom decile of firm wages | .34 | .31 | .31 | .25 | .36 | .22 | .32 | .24 |

| | | | | | | | | |
|--|--------|--------|--------|--------|--------|--------|--------|--------|
| (s.d.) | .40 | .40 | .43 | .40 | .33 | .27 | .40 | .34 |
| [N - firms] | 519 | 550 | 564 | 644 | 156 | 164 | 183 | 186 |
| Entry rate | .27 | .35 | .21 | .32 | .28 | .32 | .21 | .27 |
| (s.d.) | .30 | .33 | .29 | .34 | .28 | .28 | .26 | .31 |
| [N - firms] | 519 | 550 | 564 | 644 | 156 | 164 | 183 | 186 |
| Entry rate, top quartile of firm wages | .21 | .26 | .19 | .27 | .19 | .21 | .18 | .23 |
| (s.d.) | .34 | .38 | .34 | .39 | .30 | .32 | .30 | .34 |
| [N - firms] | 519 | 550 | 564 | 644 | 156 | 164 | 183 | 186 |
| Entry rate, bottom quartile of firm wages | .38 | .48 | .24 | .37 | .39 | .50 | .26 | .32 |
| (s.d.) | .37 | .39 | .35 | .41 | .32 | .31 | .32 | .35 |
| [N - firms] | 519 | 550 | 564 | 644 | 156 | 164 | 183 | 186 |
| Entry rate, top decile of firm wages | .20 | .25 | .19 | .26 | .19 | .20 | .19 | .22 |
| (s.d.) | .36 | .41 | .36 | .41 | .33 | .34 | .32 | .36 |
| [N - firms] | 519 | 550 | 564 | 644 | 156 | 164 | 183 | 186 |
| Entry rate, bottom decile of firm wages | .43 | .54 | .24 | .39 | .46 | .62 | .27 | .32 |
| (s.d.) | .43 | .44 | .39 | .45 | .38 | .35 | .36 | .38 |
| [N - firms] | 519 | 550 | 564 | 644 | 156 | 164 | 183 | 186 |
| % of employees who switch jobs internally | .04 | .04 | .07 | .05 | .05 | .04 | .07 | .06 |
| (s.d.) | .10 | .10 | .14 | .13 | .08 | .08 | .10 | .09 |
| [N - firms] | 519 | 550 | 564 | 644 | 156 | 164 | 183 | 186 |
| % of new jobs filled internally | .18 | .13 | .32 | .21 | .19 | .13 | .32 | .26 |
| (s.d.) | .30 | .24 | .38 | .31 | .27 | .20 | .33 | .30 |
| [N - firms] | 402 | 459 | 396 | 466 | 146 | 159 | 156 | 149 |
| % of workers who have been at firm 5+ yrs) | N/A | .31 | .36 | .39 | N/A | .36 | .43 | .47 |
| (s.d.) | | .30 | .34 | .37 | | .28 | .32 | .35 |
| [N - firms] | | 550 | 564 | 644 | | 164 | 183 | 186 |
| Correlation (exit rate, avg wage) | -.1136 | -.1160 | -.0832 | -.1100 | -.0692 | -.1755 | -.0950 | -.0464 |
| [N - firms] | 519 | 550 | 564 | 644 | 156 | 164 | 183 | 186 |
| Correlation (exit rate, avg wage change) | .0271 | -.0487 | -.0119 | -.0314 | -.0024 | .1032 | -.0660 | -.0043 |

| | | | | | | | | |
|---|--------|--------|--------|--------|--------|--------|--------|--------|
| [N - firms] | 470 | 472 | 522 | 545 | 144 | 148 | 174 | 166 |
| Correlation (exit rate, s.d. of wage) | -.0365 | .0412 | .0471 | -.0365 | .0506 | .1063 | .0105 | -.0758 |
| [N - firms] | 494 | 527 | 529 | 582 | 155 | 163 | 180 | 182 |
| Correlation (entry rate, avg wage) | -.1461 | -.2482 | -.1148 | -.2324 | -.1778 | -.2202 | -.2086 | -.2038 |
| [N - firms] | 519 | 550 | 564 | 644 | 156 | 164 | 183 | 186 |
| Correlation (entry rate, avg wage change) | .1315 | .1016 | -.0556 | .0735 | .0925 | .3291 | -.1042 | .0854 |
| [N - firms] | 470 | 472 | 522 | 545 | 144 | 148 | 174 | 166 |
| Correlation (entry rate, s.d. of wage) | .0342 | .0666 | .0713 | -.0085 | -.0896 | .1399 | .1974 | .0185 |
| [N - firms] | 494 | 527 | 529 | 582 | 155 | 163 | 180 | 182 |