

This thesis consists of four self-contained studies in empirical labor economics. Micro data on both employers and workers are used to analyze the questions asked in the essays. By using disaggregated information, issues related to firm and individual heterogeneity can be studied.

The first essay, *The Impact of Temporary Contracts on Gross Job and Worker Flows* (with Mahmood Arai), examines job and worker flow dynamics for temporary and permanent contracts. The micro approach to job flows concerns changes in employment at the plant or firm level. Data used in earlier research on gross labor flows do not allow for a distinction between different types of employment contracts (an exception is Abowd *et al.* (1999)). This distinction is especially important in Europe since several European countries discriminate between permanent and temporary contracts in their employment legislation.

The data contain quarterly information on the stock of permanent and temporary contracts, as well as direct information on hires and separations for permanent and temporary workers. The information is from a representative sample of around 10,000 Swedish private establishments.

The results indicate that temporary contracts, covering only around 10 percent of all contracts, stand for half of all gross job (and worker) flows. This means that gross job (and worker) flow rates for temporary contracts are around 10 times larger than job (and worker) flows for permanent contracts. Our results imply that job reallocation associated with temporary contracts is acyclical in both manufacturing and non-manufacturing sectors. For permanent contracts, job reallocation only exhibits a countercyclical pattern in manufacturing, characterized by a low fraction of temporary contracts. Services employing a higher fraction of temporary contracts exhibit no cyclical pattern in job reallocation, implying that establishments in services use temporary contracts as an adjustment buffer and can adjust its labor input more smoothly.

The share of temporary contracts varies with the industry structure and changes as a result of sectoral shifts. This implies that cross-country comparisons, as well as studies of the dynamics of job and worker flows, based on aggregated time-series data, can be distorted by the impact of the fraction of temporary labor on gross labor flows. This, in turn, makes the distinction between permanent and temporary contracts crucial in analyzing job and worker flows, especially when labor protection laws discriminate between short- and long-term employment contracts.

The second essay, *Wage Dispersion and Allocation of Jobs*, investigates the relationship between job turnover and the distribution of wages. One possible explanation for similar labor reallocation rates across labor markets with very different employment-protection legislations is related to differences in wage setting institutions. Bertola and Rogerson (1997) argue that although job-security laws lead to lower job flows, their impact might be reduced if differences in wage-setting institutions have opposite effects. Bertola and Rogerson's conclusion is that when labor protection laws and wages are jointly considered, the result might very well be that job flows in countries with high adjustment costs and a compressed wage structure mimic those in countries with low adjustment costs and decentralized wages.

Using establishment data on job turnover and wages for a panel of around 10,000 establishments in the Swedish private sector, the relationship between wage compression and job reallocation is studied at the industry level.

Estimating industry fixed-effects models for 14 two-digit industries yield results indicating large sector differences regarding the effect of the degree of wage dispersion on job reallocation. In accordance with the Bertola and Rogerson hypothesis, this effect is positive in the manufacturing sector. Running separate regressions for job creation and job destruction shows a negative and significant effect of wage dispersion on job destruction, whereas it is insignificant in the job-creation equation. These results are in accordance with wages being more rigid downwards than upwards. The quantitative effect of the impact of wage dispersion on job turnover is limited, however. A one standard deviation increase in wage dispersion reduces the total job reallocation by around 10 percent. Turning to the non-manufacturing sector, the Bertola and Rogerson hypothesis is not supported.

Further results include (i) a strong positive effect of the industry-share of temporary employees on job reallocation and (ii) a negative relationship between the use of overtime and job turnover.

In the third essay, *Wages, Profits and Individual Unemployment Risk: Evidence from Matched Worker-Firm Data* (with Mahmood Arai), the impact of firm performance on individual wages is studied. Several studies have found a positive and significant effect of profits on wages. The most widely suggested interpretation for this phenomenon is that employers and employees engage in rent-sharing, thereby splitting the profits created between themselves.

The purpose of this study is to examine the extent of rent-sharing and the impact of individual and aggregated unemployment risk on wages of individual workers. We use a sample of over 170,000 Swedish employees for 1991 and 1995 matched with their employing firm's profits and the unemployment registers. The matched data contain detailed information on individual characteristics, including their unemployment experience during 1992-1995 as well as annual profits as reported in the firms' balance-sheet reports.

The contribution of this paper is that it provides evidence on the wage determination, based on disaggregated individual and firm data dealing with the problems of firm and worker heterogeneity, and the endogeneity of profits. Our results imply positive effects of profits on wages, both in 1991 and 1995. The reported elasticities imply that the wage inequality in Sweden due to the spread in profits is as high as 13% of the mean wages in 1991, according to Lester's range of pay. These correlations are robust for controlling for time-invariant unobserved individual- and firm characteristics.

Using firm-reported short-term product market elasticity and the number of competitors as instruments for profits suggest Lester's measure of wage inequality due to profits to be as high as 50% of the mean wages.

Finally, we investigate the impact of individual heterogeneity with respect to unemployment risk that might also affect wages. We include the individuals' unemployment event record in our regressions, and our results confirm that individuals with a higher unemployment risk also have lower wages. Including aggregated measures along with individual unemployment risk in our estimations show results suggesting that there exists a robust negative correlation between unemployment risk and wages at various aggregation levels.

The final essay, *Pay Inequality and Firm Performance: Evidence from Matched Employer-Employee Data*, tests several implications from tournament models on the same matched employer-employee data set as in essay 3.

According to a variety of theories, the wage distribution both within and between firms can have important effects on individual productivity and firm performance. One argument for high wage differentials, based on incentive effects, is found in Lazear and Rosen's (1981) tournament theory. Higher wage differentials lead to higher individual effort, and are therefore productivity enhancing. This, in turn, suggests that there is a positive relationship between wage dispersion and productivity. The opposite relationship is found in theories stressing fairness and cooperation between co-workers.

For white-collar workers, the results show a positive effect of intra-firm pay spread on firm performance for 1991 and 1995. This applies to different measures of wage dispersion, capturing both raw differences and differences corrected for the fact that part of the wage spread is due to differences in human capital accumulation. To take firm heterogeneity into account, difference equations are estimated on a panel of firms. Once more, consistent with tournament theory, a positive and significant effect of wage dispersion on profits is found.

The results for managers are based on information on about 10,000 managers. For various measures of wage dispersion and specifications, a positive and significant association between managerial pay and profits is found.

No support is found for the hypothesis of a positive relationship between the number of managers (contestants) and wage spread. Instead, the results show a negative and significant effect of the number of executives and pay spread among managers.

Finally, consistent with tournament theory, higher wage dispersion is found in firms operating in volatile product markets characterized by a high degree of output uncertainty.