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## Explaining the desire for local bargaining: Evidence from a Finnish survey of employers and employees

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## Keskusteluaiheita – Discussion papers

No. 910

Anni Heikkilä – Hannu Piekkola\* \*\*

### **EXPLAINING THE DESIRE FOR LOCAL BARGAINING:**

### **Evidence from a Finnish Survey of Employers and Employees**

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**HEIKKILÄ, Anni – PIEKKOLA, Hannu, EXPLAINING THE DESIRE FOR LOCAL BARGAINING: EVIDENCE FROM A FINNISH SURVEY OF EMPLOYERS AND EMPLOYEES.** Helsinki: ETLA, Elinkeinoelämän Tutkimuslaitos, The Research Institute of the Finnish Economy, 2004, 20 p. (Keskusteluaiheita, Discussion Papers, ISSN 0781-6847; No. 910).

**ABSTRACT:** The aim of this paper is to describe divergences in employers' and employees' opinions on the proper share of local bargaining in contract wage gains, and explain when these divergences are particularly large or small. The paper shows that employers want the locally bargained wage share to be approximately half of the total wage rise, while the majority of employees would prefer this share to be in the region of 1-24%. Employers in firms that are large or operate in the financial services industry desire the largest locally bargained share of contract wages. Employees in large firms are, instead, afraid of losing their bargaining power and tend to resist local bargaining. Employees in firms with profit sharing plans believe that local bargaining should be afforded a large role. It is likely that employer and employees agree on not having much local bargaining in firms that operate in an uncompetitive product market and that they agree on substantial local bargaining in firms that are domestically owned and whose majority of employees work abroad.

**JEL: J31, J59, C24**

**Keywords:** Firm-Level Wage Setting, Labour Market Unions

**HEIKKILÄ, Anni – PIEKKOLA, Hannu, EXPLAINING THE DESIRE FOR LOCAL BARGAINING: EVIDENCE FROM A FINNISH SURVEY OF EMPLOYERS AND EMPLOYEES.** Helsinki: ETLA, Elinkeinoelämän Tutkimuslaitos, The Research Institute of the Finnish Economy, 2004, 20 s. (Keskusteluaiheita, Discussion Papers, ISSN 0781-6847; No. 910).

**TIIVISTELMÄ:** Tässä tutkimuksessa selitetään eroja työnantajien ja työntekijöiden mielipiteissä koskien palkankorotusten yritysکوhtaisten järjestelyvaran suuruutta. Suomalaiset työnantajat toivovat yritysکوhtaisten järjestelyvaran kattavan noin puolet palkkojen sopimuskorotuksesta, kun taas työntekijöiden mielestä riittävä järjestelyvaran osuus olisi 1-24% sopimuskorotuksesta. Suurta yritysکوhtaista järjestelyvaraا kannattavat erityisesti suuryritysten ja rahoitussektorilla toimivien yritysten työnantajat. Sen sijaan suuryritysten työntekijät vastustavat laajamittaisia paikallisia palkkaneuvotteluja. Jos yrityksessä on käytössä tulospalkkausjärjestelmä, työntekijät suhtautuvat myös yritysکوhtaiseen järjestelyvaraan ennakkoluulottomasti. Työnantaja ja työntekijät pääsevät helpoiten yhteisymmärrykseen paikallisten palkkaneuvottelujen laajuudesta silloin, kun yritys ei pidä kireää hyödykemarkkinakilpailua haasteena sekä silloin kun yritys on kotimaisesti omistettu, mutta valtaosa sen työntekijöistä työskentelee ulkomailla.



# 1. Introduction

The Finnish labour market has traditionally been comprehensively organised (for a description, see Vartiainen 1998, Pekkarinen and Alho 2004 and Uusitalo 2004). Wage bargaining is coordinated at the national level, and the wages of most employees are regulated by collective agreements. Collective bargaining covers over 90% of wages including also those of most non-union members (union membership is over 80%). However, at the beginning of the 21<sup>st</sup> century, the Finnish labour market and its wage bargaining system confront new circumstances and challenges (Alho et al. 2003). Economic integration and globalisation are intensifying the competitive environment of many Finnish firms, which, heightens the need for local flexibility in wage setting.

The main elements of Finnish collectively negotiated wage increases are a centrally agreed overall increase and an increase left to be bargained either at the industry or firm level (for a survey, see Marjanen 2002). In addition to these, wage drift occurs when employers voluntarily pay more than the wage increases bargained for. In the centralised incomes policy agreement for 2003-2004, the share of wage increases negotiated either on a firm or industry level accounts for 31 percent (in 2003) and 23 percent (in 2004) of the total centrally bargained wage increase. Industry unions and employers' federations can agree on a partial transfer of this wage share to be bargained at the firm level. Previously, collective agreements have been applied rather mechanically at the firm level, with employers simply raising all wages by the amount negotiated collectively (Vartiainen 1998). However, recent changes in the business environment of Finnish companies may force employers to apply local wage bargaining more efficiently than before.

Piekkola and Marjanen (2003) argue that wage negotiations in Finland have already changed since 1992 in the sense that they now allow more flexibility both at the industry and local level. New work relations have emerged particularly in individual wage settlements (especially for white-collar employees) and there has been a remarkable increase in the use of performance-related pay (PRP). Despite these developments towards locally flexible wage setting, the locally bargained share of contract wage increases is still a relatively new and unexamined concept of the Finnish wage bargaining system. In this paper, we examine Finnish employers' and employees' opinions on the locally bargained share of contract wage increases. The present pa-

per takes a wider perspective on local bargaining in Finland than the previous studies of Heikkilä (2003) and Heikkilä and Piekkola (2004), which concentrated on analysing employer opinions. Our empirical results indicate that employers and employees diverge in their desire for local bargaining.

We assume there are three possible motives for local bargaining: 1) it enables bargaining for lower wages to prevent lay-offs during difficult economic times, 2) it motivates workers and lowers supervision costs because locally flexible wages can be used as efficiency wages and 3) it can lead to stable job relations. The reasoning behind these motives is clarified when we present our estimation results. These motives are more useful in explaining employers' desire for local bargaining, since employee attitudes depend more on their relative bargaining power in centralised, industry level and local wage negotiations. Our employer estimation results give some support to the first and second motives but the third remains unconfirmed.

This paper is organised as follows. Section 2 explains the empirical data, variables and methods used. Section 3 provides the empirical analysis of the desire of Finnish employers and employees for local bargaining under the current system of centralised wage negotiations. Section 4 concludes.

## **2. Data and Methods**

### **Data**

The data are from a questionnaire study, 'The Performance of the Finnish Wage Bargaining System 2002-2003,' carried out by The Research Institute of the Finnish Economy and The Labour Institute for Economic Research. The firm level questionnaire was sent to a sample of 2074 members of the Confederation of Finnish Industry and Employers and the Employers' Confederation of Service Industries (for sample weights and sizes see Table A.1 in the Appendix). More specifically, the questionnaire was sent to the representatives of the following four groups in each firm: employer, blue-collar workers, white-collar workers and upper white-collar workers. The total response rate was 22.9%, which can be regarded as satisfactory. The response rate was higher among the members of the Confederation of Finnish Industry and

Employers (27%) than among those of the Employers' Confederation of Service Industries (16%).

The dependent variable of our study is the respondent's answer to the question, "One part of the collectively bargained wage increase is determined at the local level. In your opinion, how large should the locally bargained share of contract wage increases be?" The respondents were given five mutually exclusive alternative answers: 0, 1-24, 25-49, 50-74 or 75-100%. This question was stated separately for employers, blue-collar workers, white-collar workers and upper white-collar workers. A representative employee answer of the firm is formed based on which personnel group forms the majority. Blue-collar workers form the majority in 53% of the firms in our estimation sample, white-collar workers in 39% and upper white-collar workers in 8% of our sample firms, respectively. Summary statistics on employers' and employees' desired share of locally determined wages are presented in Table A.2 in the Appendix.

The independent variables of our empirical estimations are based on the background information inquired from the firms in the employers' questionnaire forms. The variable 'challenges of low product market competition' is, however, generated from answers to the question on how challenging low competition in the product market is considered for labour market relations (see Appendix). We interpret the challenge created by low competition to be an indication of inefficiency or even monopoly power in the product market, which may generate frictions in labour market relations (e.g., employees insisting on receiving their share of the abnormal profits). Because of the relatively small number of observations, we have used a rougher classification of independent variables, particularly the industry variable, than in the original questionnaire. The independent variables used are described in greater detail in the Appendix.

## **Methods**

The dependent variable in our estimations, the answer to the question of the desired share of locally bargained wages, is multinomial, with five categories, and these categories are ordered. We use an interval regression model to describe the probability of favouring a certain locally bargained share of contract wage increases (0, 1-24, 25-49, 50-74 or 75-100%) as a function of the independent variables. We use interval regression since the quantitative outcome we are explaining is grouped into intervals, and thus the cut points don't need to be estimated as is the case when using an ordered probit model (Wooldridge 2002, 508-509). When it comes to esti-

imating the distance of employer and employee local bargaining opinions, we apply an ordered probit model. This dependent variable has four categories which are ordered but not interval coded.

Interval regression allows us to interpret the magnitude (marginal effect) of the positive or negative effects that estimated coefficients have on the dependent variable. For example, when considering the ‘size of the firm’ variable, a coefficient value of 0.066 for the size category of 30-99 employees implies that when the firm size increases from 5-29 to 30-99 employees, the desired locally bargained wage share increases by 6.6%. Due to the nonlinearity of the ordered probit model, the estimated parameters cannot be interpreted as marginal effects. Thus, with respect to our ordered probit estimation results, we are only able to interpret the sign of the effects, not the magnitude.

The questionnaire data of this study were collected using a weighted sampling method so that in different firm size groups the sample proportion of the population varies. The conventional way to do sample weighting for the estimations would be to use the inverses of the sample proportions as estimation weights. In the present study, however, conventional sample weighting would overemphasise smaller firms’ opinions since larger firms’ employer opinions represent a significantly larger number of employees and their wage negotiation systems. Thus, we multiplied the inverses of sample proportions by the average number of personnel in each firm size group. This measure restored the importance of large firms’ opinions compared to small firms’ opinions and thus made the sample weights reasonable in the context of our empirical research problem.

### **3. Results Concerning the Desire for Local Bargaining**

#### **3.1 *Employers’ and Employees’ Opinions***

In this section, we present and analyse our estimation results concerning Finnish employers’ and employees’ opinions on the proper locally bargained share of contract wages. We begin with employer opinions, which are shown in Table 1.



**Table 1. Employers' desired locally bargained share of contract wages**

Variable	Employers Tobit Intreg	
	Coefficient	S.E.
<b>Firm Variables</b>		
Firm Size 30-99	0,066	(0,035)*
100-299	0,101	(0,035)***
300-	0,114	(0,034)***
Export Share 40-59%	0,070	(0,046)
60%-	0,019	(0,033)
Challenges of Low Competition Moderate	-0,104	(0,04)***
High	-0,087	(0,037)**
Net Profits per Sales/100	0,002	(0,002)
Share of Employees Abroad 60%-	0,045	(0,044)
Foreign Owned Partly or Wholly	0,053	(0,029)*
Food, Forest and Other Industries	0,066	(0,035)*
Electronics Industry and IT-Sector	-0,017	(0,048)
Construction and Transportation	0,037	(0,048)
Trade	0,062	(0,045)
Financial Services	0,270	(0,079)***
Other Private Sector Services	0,061	(0,045)
Education and Welfare Services	0,042	(0,048)
<b>Personnel Variables</b>		
Profit Sharing Used	0,007	(0,025)
Share of Salaried Employees 40%-	-0,026	(0,024)
Share of Professionals 40%-	0,047	(0,037)
Share of Female Employees 60%-	-0,079	(0,029)***
Average Age of Employees 40- years	-0,024	(0,026)
Share of Permanent Employments 80%-	0,039	(0,031)
Constant	0,284	(0,065)***
No. Observations	573	
Log Likelihood	-445813,94	

Note. The dependent variable is the desired locally bargained share of contract wages (0-100%). Table reports coefficients and standard errors using robust estimates. The base for firm size dummy is firms with 5-29 employees. The base for industry dummies is metal industry. \* Significant at 90% confidence level. \*\* Significant at 95% confidence level. \*\*\* Significant at 99% confidence level.

### Firm Variables

Our results in Table 1 indicate that employers in large firms clearly prefer a higher share of local bargaining than employers in small firms. The increase of the firm size variable from 5-29 employees to 30-99 employees increases the desired locally bargained wage share by approxi-

mately 7%. Employers of firms employing 100-299 people demand a 10% larger locally bargained wage share than employers of the smallest firms. When it comes to the largest firms employing at least 300 people, the desired share is 11% larger than in the smallest firms. These results suggest that large firm size may be connected to the use of *local bargaining for employee motivation*. Large firms are likely to have significant employee supervision costs stemming from incomplete information of on-the-job performance. Large firms use more PRP schemes than smaller firms because profit sharing may help them to decrease supervision costs, see Piekola and Kauhanen (2002). Supervision costs and, hence, the need to allocate local wage increases in a motivating way may explain large firms' desire for locally determined wages in general. Another explanation for the positive firm-size effect may be that employers in small firms want to avoid complex and time-consuming local wage negotiations, and thus they are relatively more satisfied with common, centrally negotiated wage increases.

*The desire for local bargaining in order to ensure labour cost flexibility* can depend on the severity of product market competition, the profitability of the firm or how volatile the industry the firm operates in is. The export activities of the firm may also be related to the need for local wage bargaining. Bernard and Jensen (1999) find that exporters have significantly lower failure rates than non-exporting firms with similar characteristics, which may indicate a weaker need for local bargaining for labour cost flexibility reasons. The coefficients on the export share dummies in Table 1 are positive but insignificant. Thus, employers of export-intensive firms are not significantly more interested in local bargaining than employers of firms producing mainly for the domestic market.

The low competition variable ('challenges of low product market competition') has statistically significant, negative coefficients in Table 1. Low product market competition can be interpreted as an indication of inefficiency or even monopoly power in the market. Thus, the existence of abnormal profits can possibly explain employers' weak demand for large locally bargained wage shares that enable labour cost flexibility. The negative effect of low product market competition on wage flexibility demands is slightly larger when an uncompetitive product market is regarded as a moderate challenge compared to when it is regarded as a high challenge. However, these results indicate that centralised wage setting seems to be preferred under low product market competition circumstances.

Local pay setting enables employers of low-profitability firms to negotiate for lower wages instead of laying off workers. However, our results in Table 1 indicate that firm profitability has

a surprisingly small effect on the desire for local bargaining among Finnish employers. The coefficient of our profitability variable is positive but very small and insignificant. One explanation for this finding may be that profitable firms have a lesser need to cut wages. Another explanation can be that employers of profitable firms are reluctant to increase the scope of local bargaining because it may encourage employees to demand a higher share of the firm's profits. Finally, firm profitability is later shown to interact strongly with competitiveness of product market.

Industry dummies are expected to have positive coefficients when industries are more volatile than the reference industry (metal industry) and negative coefficients in the opposite case. The forest and construction industries as well as the financial services sector can be regarded as cyclically volatile and are expected to have positive coefficients in our estimations. Also, current rigidities in the wage setting of a specific industry may generate a greater need for more locally flexible wages. Most of our industry coefficients in Table 8 have the expected signs, except for the negative (but insignificant) coefficient on the electronics and IT sector dummy.<sup>1</sup> Only the positive coefficients on the financial services and food, forest and other industry dummies are statistically significant. Compared to all other coefficients in Table 1, financial services have an exceptionally large coefficient indicating that employers in this sector would like to have 27% larger locally bargained wage shares than employers in the reference metal industry. The Finnish financial services sector suffered more than most other Finnish industries from the economic downturn in the beginning of the 21st century and wage cuts became an everyday event for these firms.

In many countries, the USA probably being the best example, firm level wage setting is substantially more flexible than in Finland. Thus, we assume that employers of Finnish companies with a majority of their workforce working abroad would like to adopt this flexibility also in Finland. In Table 1 the share of employees working abroad has a positive but insignificant coefficient. On the other hand, it is seen that employers of partially or wholly foreign-owned firms demand significantly larger locally bargained wage shares than employers of domestically owned firms. To be precise, when the firm is at least partially foreign owned, employers demand approximately 5% larger locally bargained wage shares than employers of domestically owned firms. This result may be explained by Finnish employers' desire to meet the prof-

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<sup>1</sup> The IT sector relies mainly on the efficient use of PRP schemes and seniority wages (entry-level workers are paid less).

itability demands of foreign (institutional) investors by increasing the scope of wage flexibility of their firms.

### **Personnel Variables**

We assume that the same *flexibility seeking motives* that explain the use of profit sharing (see Kruse 1996, Alho 1998 and Kauhanen and Piekkola 2002) may also explain employer demand for local bargaining. In Table 1 the profit sharing coefficient is positive but small and remains statistically insignificant. Hence, Finnish employers already using PRP schemes seem to think that they don't need large locally bargained wage shares to ensure flexibility in their labour costs. This is perhaps not surprising, since Alho et al. (2003) report almost unanimous satisfaction with profit sharing among Finnish employers currently using it.

*Locally bargained wage shares* can be used to *motivate employees*. Employers are able to differentiate local wage increases in order to motivate specific employee groups and thus decrease shirking-related monitoring costs. White-collar workers' effort is likely to be more difficult to monitor than blue-collar workers' effort in all firms. When the proportion of white-collar workers increases, the employer may become more interested in large locally bargained wage shares for motivation reasons. On the other hand, when nearly the whole workforce consists of white-collar workers the employer may lose his interest in large locally bargained wage shares because he cannot differentiate local wage increases amongst specific groups anymore. Our estimation results in Table 1 indicate that a high share of white-collar workers has a negative but insignificant effect on the employer's demand for locally bargained wage share. A high share of upper white-collar workers has a positive, though still insignificant, effect.

The share of female employees in a firm is the only significant personnel variable in Table 1. In firms where more than 60% of the workforce comprises of women, employers demand approximately 8% smaller locally bargained wage shares than employers employing a smaller proportion of women. One explanation for this result might be differences in firm- and individual-level wage negotiating cultures in female and male employee dominated firms. However, one has to bear in mind that the effect of female dominance is highly dependent on the industry the firm operates in, and our roughly classified industry dummies may not control all of this effect. The positive coefficient on the average age of personnel variable is statistically insignificant, so we are unable to draw any conclusions about whether employers with a young workforce would be more interested in local bargaining than other employers.

Azfar and Danninger (2001) show that profit sharing decreases worker mobility. Similarly, *local bargaining can also create stable job relations* between employee and employer that enable the accumulation of firm-specific human capital. Also, the more stable and established the workforce, the easier it may be for the employer to implement extensive local wage bargaining processes.<sup>2</sup> Our estimation results in Table 1 do not confirm a positive relationship between the share of permanent employees and the desire for large locally bargained shares of contract wages, since the positive coefficient of the share of permanent employment variable remains insignificant.

Table 2 shows Finnish employees' local bargaining opinions.

**Table 2. Employees' desired locally bargained share of contract wages**

Variable		Employees Tobit Intreg	
		Coefficient	S.E.
<b>Firm Variables</b>			
Firm Size	30-99	-0,035	(0,047)
	100-299	-0,087	(0,046)*
	300-	-0,092	(0,046)**
Export Share	40-59%	-0,061	(0,029)**
	60%-	-0,041	(0,026)
Challenges of Low Competition	Moderate	0,035	(0,027)
	High	0,017	(0,024)
Net Profits per Sales/100		-0,007	(0,002)***
Share of Employees Abroad	60%-	0,005	(0,031)
Foreign Owned Partly or Wholly		0,008	(0,024)
<b>Personnel Variables</b>			
Profit Sharing Used		0,052	(0,016)***
Share of White-Collar Workers	40%-	0,032	(0,021)
Share of Upper White-Collar Workers	40%-	-0,042	(0,033)
Share of Female Employees	60%-	-0,020	(0,023)
Average Age of Employees	40- years	-0,023	(0,022)
Share of Permanent Employments	80%-	0,072	(0,028)***
Constant		0,155	(0,061)**
No. Observations		418	
Log Likelihood		-227515,58	

See note for Table 1, includes equivalent industry dummies.

<sup>2</sup> On the other hand, the effect of workforce stability might as well be opposite because an unstable workforce may have less bargaining power, which in turn could increase employers' interest in local wage bargaining.

## Firm Variables

The estimation results in Table 2 show that employees in larger firms with at least 100 employees have less desire for large locally bargained wage shares than employees in smaller firms. The increase of the firm size variable from 5-29 employees to 100-299 employees or at least 300 employees reduces the desired locally bargained wage share by approximately 9%. This result is opposite to the positive relationship found between these variables in the employer estimations presented before. One explanation for the opposite result is that trade unions may be perceived as having greater negotiating power in industry-level talks. Hence, increasing the scope of local bargaining may be considered a threat to employees' bargaining power and wage stability especially in large firms.

The results in Table 2 indicate that when the extent of the firm's export activities increases, employees seem to be happy with a smaller locally bargained share of contract wages compared to employees in firms producing predominantly for domestic markets. This result is statistically significant and the size of the negative effect is approximately 6% when we compare employee opinions in firms exporting 40-59% of their turnover to employee opinions in firms exporting less than 40% of their turnover. One explanation for employees' preference for small locally bargained wage shares in exporting firms and large firms may be that both kinds of firms operate predominantly in the manufacturing sector, where unions have relatively strong bargaining power. Bargaining power of unions seems to be related to employees' preference for wage setting at the industry level.

When it comes to low product market competition we assume that employees of firms operating in an uncompetitive product market may believe in getting their share of possible abnormal profits through local bargaining. Both coefficients on the uncompetitive product market dummies are positive, in accordance with our assumption, but remain insignificant. Hence, employees are less concerned with uncompetitive product markets than employers.

Blanchflower, Oswald and Sanfey (1996) show that when firms become more prosperous, workers eventually receive some of the gains in the form of higher wages. Thus, employees of profitable firms are expected to demand large locally bargained wage shares, even in the short run, to help them in their attempt to receive their share of the profits. In Table 2, the profitability of the firm variable receives a negative and statistically significant coefficient. Thus, opposite to our expectations, higher firm profitability leads to employees demanding less local bargaining. This indicates that employees do not seem to believe in rent sharing by means of locally bargained

wage shares. However, we will show later that the interaction of profitability with product market competition modifies this result.

Industry dummies are not reported in Table 2 because education and welfare services is the only industry that is statistically significant; employees in this industry would like 10% larger locally bargained wage shares than employees in the reference industry (metal industry). This result reflects employee views on the inflexibility of wage setting in the public sector. Finally, both the share of employees abroad and foreign ownership variables do not appear to be significant factors behind employee opinions.

### **Personnel Variables**

Kruse (1996), Alho (1998) and Kauhanen and Piekkola (2002) argue that firms needing local flexibility in their wages are more likely to use PRP schemes. Our employer estimation results in Table 1 showed, however, that employers already using PRP schemes might not be interested in greater local bargaining. Alho et al. (2003) find the general opinion on profit sharing schemes to be very positive, both among Finnish employers and employees. It is seen from Table 2 that employees in firms with PRP schemes are significantly more positive towards locally bargained wage shares than employees in firms with no profit sharing. This may be explained by employees' good experiences from profit sharing (e.g., in the form of higher wages), which may increase their willingness to extend the scope of local wage setting in general.

In contrast to employers' responses, a higher share of white-collar workers raises employees' demand for local bargaining, while a higher share of upper white-collar workers lowers the demand for it, but both coefficients remain statistically insignificant. These estimation results may still give some support to the idea that representatives of employees in firms dominated by white-collar workers regard local bargaining as an effective way to ensure that employees have a say when their wages are set. On the other hand, upper white-collar workers appear to rely more on individual wage negotiations that take place outside the general wage setting schemes.

The 'share of female employees more than 60%' dummy gets a negative but statistically insignificant coefficient in the employee estimations presented in Table 2. This negative relationship, although not significant, is similar to our previous finding that there is resistance to large scale local bargaining in firms with a large share of female workers. The 'average age of employees' variable also remains insignificant in the employee estimations.

We assume that employees in firms with mostly permanent jobs would favour large locally bargained wage shares because they have a more established bargaining position than employees in firms with a substantial share of temporary workforce. The positive and significant coefficient of the ‘share of permanent employments more than 80%’ dummy in Table 2 gives support to this hypothesis. Specifically, when the share of permanent employment is at least 80% of the workforce, employees desire an approximately 7% larger locally bargained wage share than employees in firms with a lower share of permanent jobs.

### **3.2 Divergence of Opinions and Interactions**

In what follows, we present estimations with various interaction terms including the difference between employer and employee opinions of local bargaining. In the interaction estimations, we use the tobit interval regression technique and in difference of opinions estimations the ordered probit technique for the reasons explained in Section 2 of this paper. Firm size, profitability, export share and low product market competition all turned out to be important determinants of employer and employee desire for local bargaining. It is thus interesting to consider the interactions of these and other factors as shown in Table 3.

The interaction term of firm size of at least 30 employees and export share of 60% or more has a positive and statistically significant coefficient not only for employers but also for employees. Earlier (in Table 2) we found that employees in firms with 40-59% export shares object to local bargaining. According to our estimation results in Table 3, this employee resistance appears to be true especially in small (5-29 employees) export-intensive firms. The positive employer interaction coefficient clarifies the previous positive but insignificant export share coefficient (in Table 1) indicating that sufficiently large export-intensive firms need leeway and flexibility when setting wages.

The variable for the share of employees working abroad received earlier a positive but insignificant coefficient in both employer and employee estimations. The interaction of this variable with foreign ownership in Table 3 creates a divisional line between employer and employee opinions. When the share of workers abroad is substantial in a foreign-owned firm, local bargaining is favoured by employers and opposed to by employees. Hence, foreign ownership (even partial) and the majority of the firm’s workforce working abroad are factors that push



employers for local bargaining but at the same time create a divergence of opinions between employers and employees.

**Table 3. Employers' and employees' desired locally bargained share of contract wages, interactions and distance of opinions**

Variable	Employer's opinion Tobit Intreg		Employee's opinion Tobit Intreg		Employer's opinion - Employee's opinion Ordered Probit	
	Coefficient	S.E.	Coefficient	S.E.	Coefficient	S.E.
<b>Firm Variables</b>						
Firm-size > 30	0,104	(0,038)***	-0,104	(0,047)**	0,858	(0,302)***
Export Share 40-59%	0,112	(0,215)	-0,077	(0,027)***	0,556	(0,245)**
Export Share 60%-	-0,145	(0,043)***	-0,181	(0,056)***	0,507	(0,369)
Firm Size 30-, Export Share 40-59%	-0,036	(0,219)				
Firm Size 30-, Export Share 60%-	0,172	(0,047)***	0,124	(0,052)**	-0,212	(0,353)
Challenges of Low Competition Moderate	-0,108	(0,039)***	0,043	(0,026)	-0,810	(0,207)***
High	-0,093	(0,035)***	0,031		-0,762	(0,187)***
Net Profits per Sales/100	-0,287	(0,775)	0,764	(0,385)**	-4,496	(3,236)
Net Profits per Sales/100, Challenges of Low Competition Moderate	0,798	(0,829)	-1,121	(0,493)**	7,025	(3,611)*
Net Profits per Sales/100, Challenges of Low Competition High	0,290	(0,775)	-0,772	(0,385)**	4,553	(3,237)
Share of Employees Abroad 60%-	-0,140	(0,051)***	0,226	(0,032)***	-0,799	(0,241)***
Foreign Owned Partly or Wholly	0,049	(0,03)*	0,009	(0,024)	0,233	(0,178)
Share of Employees Abroad 60%-, Foreign Owned Partly or Wholly	0,206	(0,067)***	-0,221	(0,044)***	1,190	(0,335)***
Food, Forest and Other Industries	0,073	(0,035)**	0,021	(0,022)	0,258	(0,197)
Electronics Industry and IT-Sector	-0,023	(0,049)	0,008	(0,038)	0,137	(0,288)
Construction and Transportation	0,045	(0,047)	-0,014	(0,026)	0,042	(0,22)
Trade	0,072	(0,045)	0,036	(0,041)	0,338	(0,272)
Financial Services	0,274	(0,08)***	0,101	(0,078)	0,381	(0,612)
Other Private Sector Services	0,065	(0,047)	0,037	(0,036)	0,005	(0,274)
Education and Welfare Services	0,042	(0,048)	0,093	(0,044)**	-0,276	(0,29)
<b>Personnel Variables</b>						
Profit Sharing Used	0,011	(0,025)	0,042		-0,095	(0,138)
Share of White-Collar Workers 40%-	0,018	(0,06)	-0,043	(0,108)	0,657	(0,703)
Firm Size 30- and Share of White-Collar Workers 40%-	-0,043	(0,065)	0,077	(0,11)	-1,052	(0,717)
Share of Upper White-Collar Workers 40%-	0,042	(0,037)	-0,042	(0,034)	0,389	(0,248)
Share of Female Employees 60%-	-0,080	(0,029)***	-0,019	(0,023)	-0,102	(0,173)
Average Age of Employees 40- years	-0,020	(0,026)	-0,030	(0,022)	0,225	(0,156)
Share of Permanent Employments 80%-	0,038	(0,031)	0,070	(0,028)**	-0,118	(0,208)
Constant	0,279	(0,066)***	0,184	(0,064)***		
No. Observations	573		418		418	
Log Likelihood	-444657,63		-223808,17		-371,17	
Pseudo R <sup>2</sup>					0,086	

See note for Table 1, includes equivalent industry dummies.

We saw from Table 1 that employers oppose large locally bargained wage shares when low competition in the product market is regarded as a challenge. Employees' opinion in Table 2, on the other hand, was not statistically significant. The interaction of uncompetitive product market with firm profitability in Table 3 reveals that, in fact, employees support local bargaining both when the firm is profitable and product market is competitive and when firm profitability is low and the product market is uncompetitive. Equivalent employer opinion distributions are presented in Table A.3 in the Appendix. When the firm is profitable (net profits per

sales more than 5%) and faces severe competition, employers seem to demand larger locally bargained wage shares compared to the general employer opinion. On the other hand, when firm profitability is low (net profits per sales equal to or less than 5%), despite low competition, employers seem to be satisfied with a relatively small locally bargained wage share. In the latter case, the employer opinion also approaches the general employee opinion, which may help reaching agreement on local wage increases.

The last column in Table 3 indicates the factors that unite and separate employers' and employees' local bargaining opinions. The difference in opinion is constructed simply by subtracting the employee's local bargaining preference from that of the employer. It is noteworthy that in none of the 7% of firms where the employer prefers a 75-100% role for local bargaining, employees are willing to have a locally bargained wage share smaller than 25-49% of contract wage increases. The divergence of opinions has four categories in the data after combining the most negative category, -3 (two observations where the employer prefers a 1-24% share and the employee a 75-100% share), with the second most negative, -2, and the most positive value, 3 (one observation where employer prefers 50-75% share and employee 0% share), with the second most positive value, 2. The negative value for the distance variable indicates that the representative of employees favours larger locally bargained wage shares than his employer. The correlation between employer and employee opinions is very low at around 0.0056. The distance between employer and employee opinions correlates positively with the employer's opinion (0.6) and negatively with the employee's opinion (-0.6).

Difference of opinions estimations give fairly similar coefficients compared to employers' own responses, which is also evident from the significant positive correlation between the distance variable and employers' opinions. The negative coefficients in the last column of Table 3 indicate similarity of opinions between employers and employees and thus agreement on local bargaining can be reached with a higher probability. Our results indicate that low product market competition and the majority of employees working abroad in a domestic-owned firm are significant factors increasing the likelihood that employer and employees can reach an agreement on local bargaining.

## 4. Concluding Remarks

In this paper, we studied Finnish employers' and employees' desire for local wage bargaining and the divergence of opinions under the current, predominantly centralised Finnish wage bargaining system. Our results indicate that there exists a substantial difference between employer and employee opinions on the proper locally bargained share of contract wages. Employers prefer, on average, half of the rise in wages to be negotiated at the local level, whereas the majority of employees would prefer a 1-24% share. Generally speaking, employers may want greater local wage bargaining in order to increase the flexibility of their labour costs or to motivate their workers and reduce supervision costs by using locally flexible wages as efficiency wages. Employees, on the other hand, have relatively little variation in their local bargaining opinions across different firms. One apparent explanation for this is that employee respondents often represent industry level unions at the firm level, which may give rise to an overall attitude in favour of maintaining any pay setting flexibility at the industry level rather than transferring it to firms.

Employers of large firms clearly prefer a larger share of local bargaining than employers of smaller firms. When the firm employs at least 100 people, the employer wants an approximately 10% larger locally bargained wage share than an employer of a firm with 5-29 workers. Firm size has the opposite effect on employee opinions than it has on employer opinions. An increase in firm size from 5-29 employees to at least 100 employees reduces employees' desired locally bargained wage share by approximately 9%. Thus, in large firms the divergence of employer and employee opinions is remarkably large, making it difficult to implement local bargaining.

Firm profitability has a surprisingly little effect on the desire for local bargaining among Finnish employers. On the other hand, higher profitability leads to employees demanding less local bargaining. This indicates that employees do not seem to believe in rent sharing by means of locally bargained wage shares. However, in firms using PRP schemes employee opinions are different, favouring large locally bargained wage shares. Employees may have had good experiences from profit sharing, which in turn may increase their willingness to extend the scope of local wage setting in general. In contrast, employers using profit sharing do not press for large locally bargained wage shares. If they use profit sharing for flexibility-seeking reasons it may be that they don't need large locally bargained wage shares anymore to ensure the flexibility of their labour costs.

There exists a set of firms where local bargaining is more easily implemented than elsewhere. Our distance of opinions estimations showed that employees and employers may agree not to have large share of local bargaining particularly in less profitable firms that face low product market competition. Local bargaining is instead relatively favoured by both parties in firms that are domestically owned and have the majority of their employees working.

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## Appendix

In the estimation the independent variables are generated as follows:

*Firm size:* 5-29 employees, 30-99 employees, 100-299 employees, at least 300 employees.

*Export share of the firm's turnover:* 0-39%, 40-59%, 60-100%.

*Respondent's estimation of the challenge of low product market competition:* Based on questionnaire question E1\_14: "How big a challenge do you consider low product market competition is for the Finnish wage bargaining system?" 1=No challenge at all, ..., 5=Very big challenge. We created a new variable for the estimations: Challenges of uncompetitive product market: minor (category 1), moderate (category 2), high (categories 3, 4 and 5).

*Profitability of the firm:* Net profits per sales (net profit percentage). We divide net profits per sales by one hundred to obtain a reasonable coefficient for this independent variable.

*Share of employees working abroad:* 1-59%, 60-100%.

*Foreign ownership:* No foreign ownership, partial or whole foreign ownership.

*Industry:* Metal industry, food, forest and other industries, electronics industry and IT-sector, construction and transportation, trade, financial services, other private services, education and welfare services.

*Use of profit sharing:*

1 if profit sharing is used for at least one of the following personnel groups: workers, salaried employees, professionals,

0 if profit sharing is not used for any of the groups mentioned above.

Based on the background information asked in the questionnaire form: "What kind of payroll systems are used in your firm?" Either more or less than half of the amount of profit sharing may depend on the net profit of the firm.

*Share of white-collar workers:* 0-39%, 40-100%.

*Share of upper white-collar workers:* 0-39%, 40-100%.

*Share of female employees:* 0-59%, 60-100%.

*Average age of employees:* less than 40 years, 40 years or more.

*Share of permanent employments:* 0-79%, 80-100%.

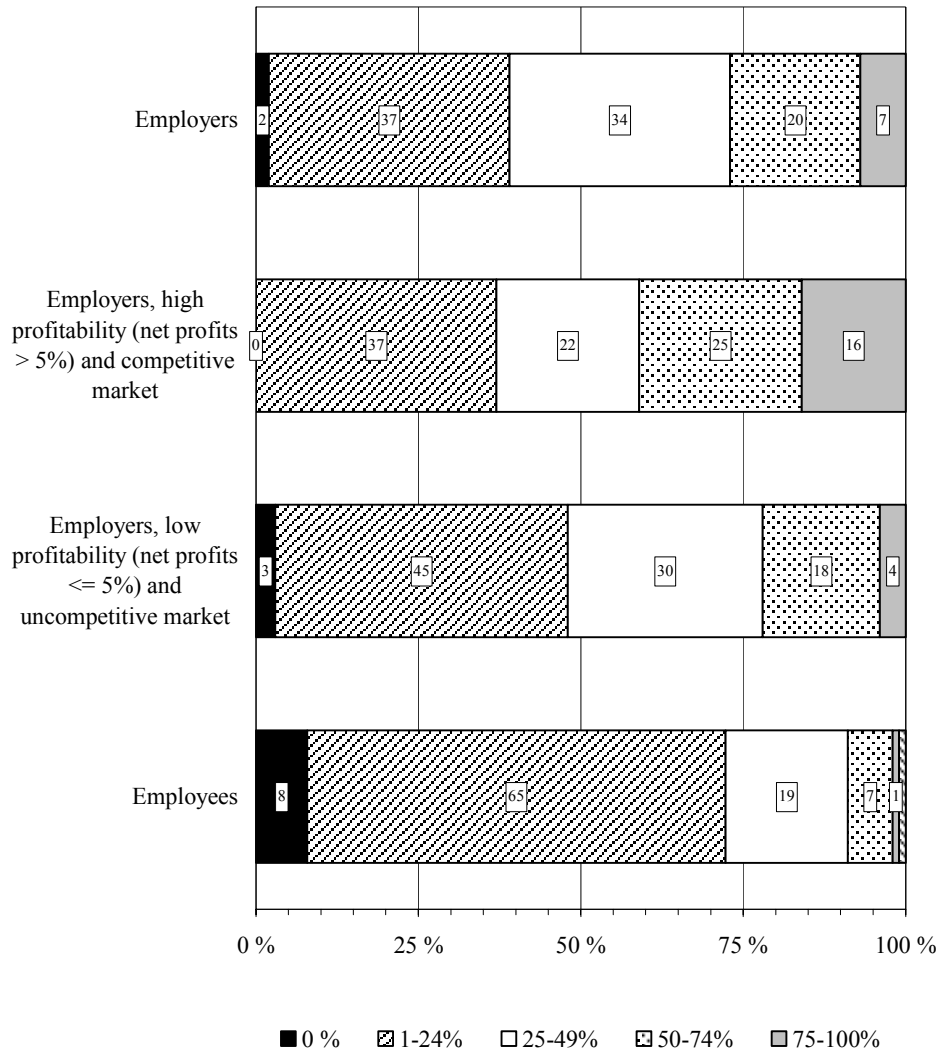
**Table A.1 Sample weights and sizes in the questionnaire**

Firm size	TT Employers Federation Manufacturing		PT Employers Federation Service	
	Sample weight %	Obs	Sample weight %	Obs
over 300	100	356	100	184
100–299	40	300	50	163
30–99	20	300	20	221
less 300	10	300	5	250
All		1256		818

**Table A.2 Distribution of the desired share of locally determined wages**

Locally determined %	Employers		Employees	
	Observations	Share %	Observations	Share %
0% (1)	13	2.0 %	38	8.4 %
1-24 % (2)	242	37.8 %	296	65.3 %
25-49 % (3)	213	33.2 %	84	18.5 %
50-74 % (4)	128	20.0 %	31	6.8 %
75-100 % (5)	45	7.0 %	4	0.9 %
	641	100.0 %	453	100.0 %
Average		2.9		2.2

**Table A.3 Desired locally bargained share of wage rise**





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