

HANNU PIEKKOLA
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Editors

Collective Bargaining and Wage Formation

Performance
' and
Challenges

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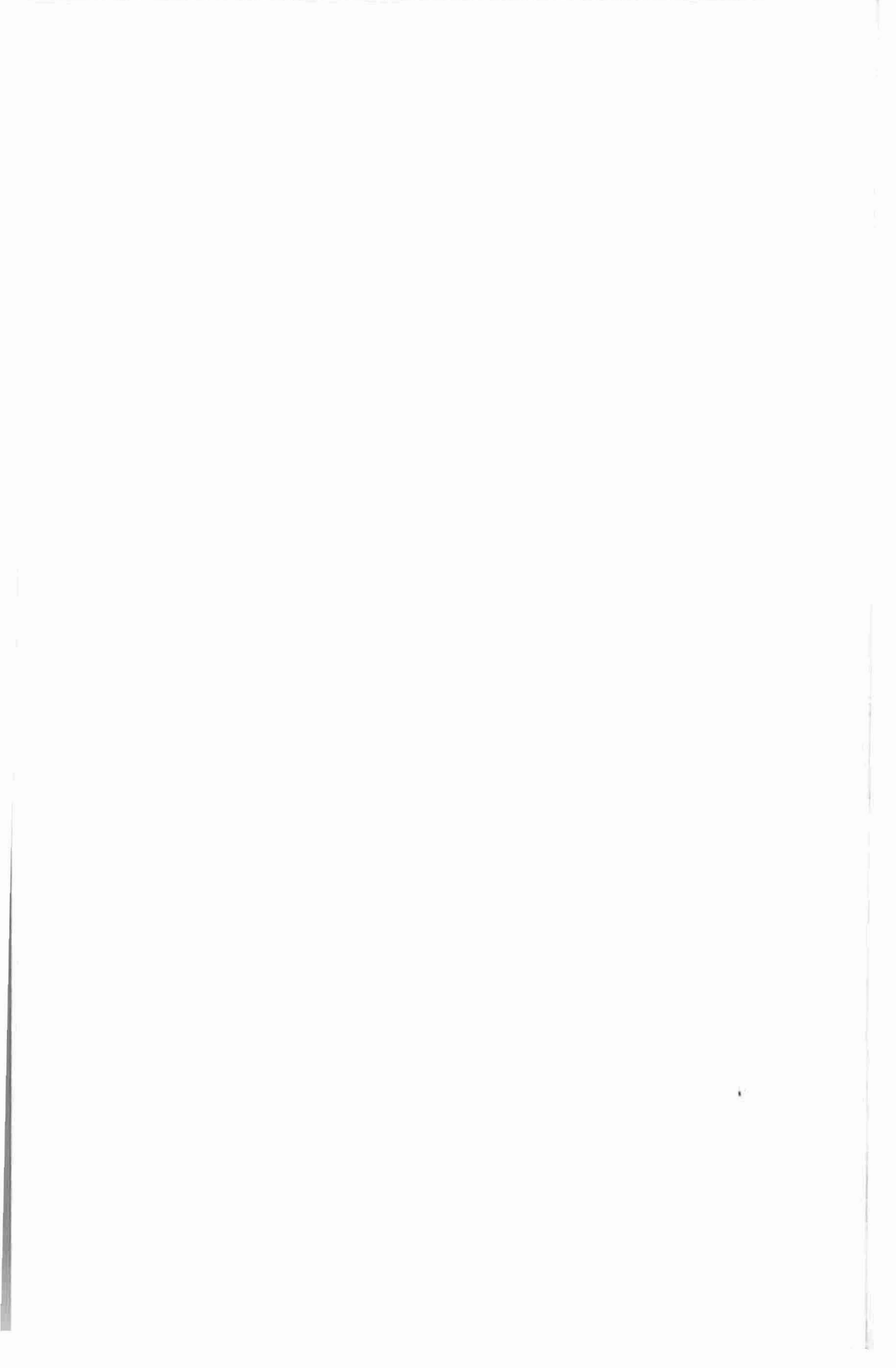
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Collective Bargaining and Wage Formation



ETLA – The Research Institute of the Finnish Economy

Series A39 (ISSN 0356-7435)



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Hannu Piekola · Kenneth Snellman
(Editors)

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Performance and Challenges

With 48 Figures and 28 Tables

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Cataloging-in-Publication Data
Library of Congress Control Number: 2004111081

ISBN 3-7908-1558-6 Physica-Verlag Heidelberg New York

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Printed in Germany

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Cover-Design: Erich Kirchner, Heidelberg

SPIN 11019503

88/3130-5 4 3 2 1 0 – Printed on acid-free paper

Preface and Acknowledgements

In recent years, new ways to adjust to changes in industrial organisation and the labour market have been tested in the process of collective bargaining. Globalization, EMU, and the increase in (intra-)industrial trade have reshaped wage setting in European countries. Collective bargaining and continuous interplay between employee and employer organisations have faced new challenges.

To study these issues, a project "Rules of the game in the labour market: Industrial relations, the bargaining system and income policies in the 2000s", financed by the Finnish Work Environment Fund and carried out jointly by ETLA (The Research Institute of the Finnish Economy) and the Labour Institute for Economic Research, was initiated in 2001. A seminar on "Collective Bargaining and Wage Formation" was organised by ETLA and the Labour Institute for Economic Research in Helsinki, Finland, on December 15, 2003.

This volume contains refereed versions of these papers. The Finnish contributions were part of the above research project. Financial support from the Finnish Work Environment Fund is gratefully acknowledged.

Helsinki,
June 2004

Hannu Piekola
Kenneth Snellman

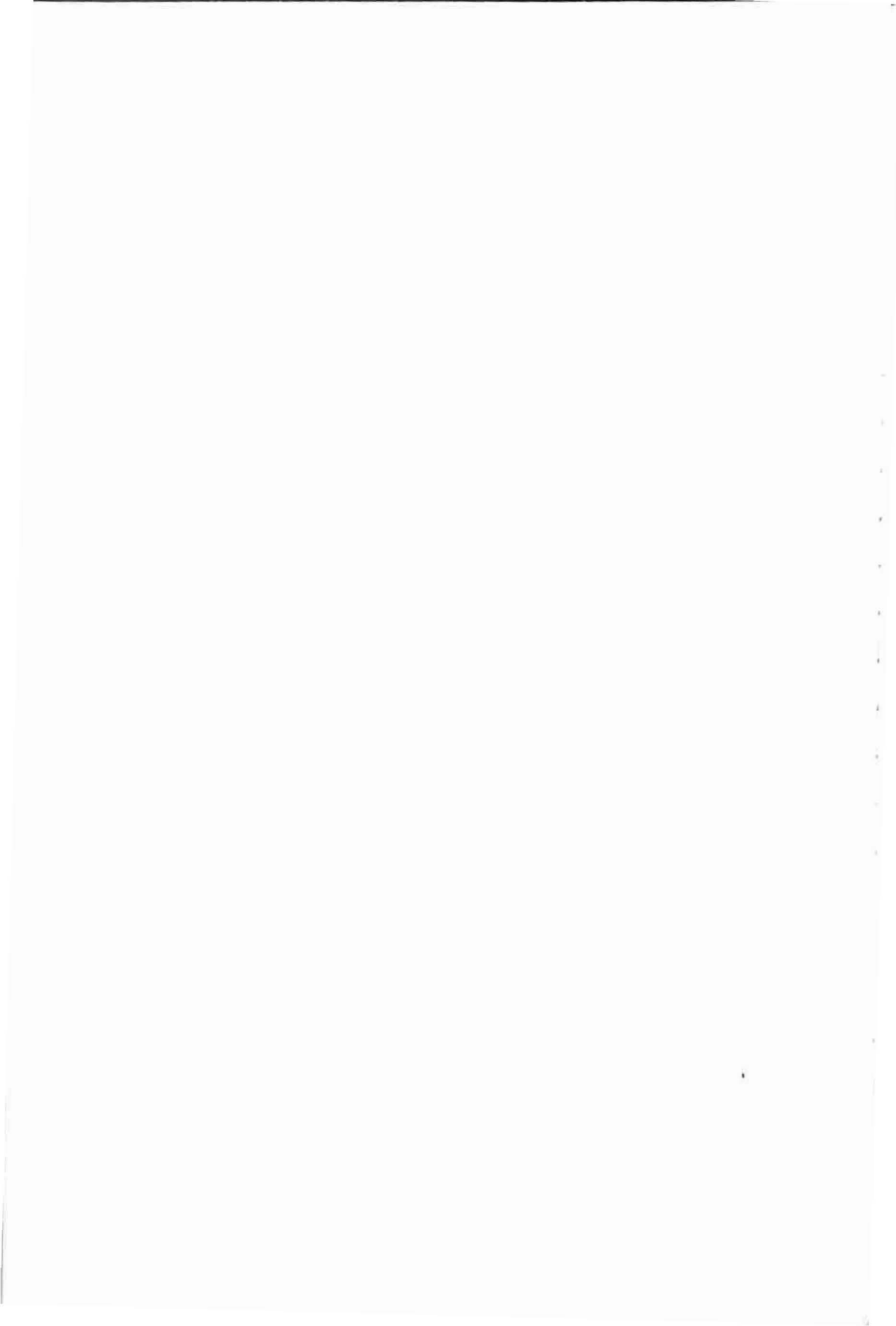


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Introduction and Summary

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1 The Basic Issues

Wages have traditionally been agreed on collectively in Europe. The articles in this volume examine the current state of collective bargaining as well as the challenges it is currently facing. The issues examined in these papers have a wide applicability to problems on the European labour markets. Torben M. Andersen and Steinar Holden review challenges from globalisation and inter-industry trade and the adaptation to a low-inflation environment. The other contributions are part of the project investigating collective bargaining in Finland, carried out by ETLA (the Research Institute of the Finnish Economy) and the Labour Institute for Economic Research. Some of them use results from a Finnish survey carried out by the two institutes ETLA and the Labour Institute on the views of employers and employees about labour relations and the labour market negotiation system.

Bargaining systems are complex and their future development depends on their historical evolution, recent and past experiences, and the current situation in the labour market, as well as changes in the international environment. By examining the past functioning of the bargaining system one can observe how different elements in it have interacted with various factors in the environment of the system. We think that the articles analysing the functioning of the Finnish labour market also have important implications for other European countries with similar wage bargaining regimes.

We aim at providing a thorough investigation of the properties, advantages and drawbacks of collective bargaining in different forms. The aim of this publication is also to supply an examination of the most significant current pressures on the collective bargaining system and to examine how it should respond to them. For this purpose one inevitably has to consider the changes occurring in the economy that forms the setting of the wage bargaining.

An issue of much current interest is the implications of a low-inflation environment, anchored by the EMU, for collective bargaining and wage formation in the EU. Entry into the monetary union has implied a radical shift from the times of high inflation in the 1970s and 1980s. The monetary union may have raised the demand for coordination in the labour market to hold pay rises down, as the costs of high pay rises have risen. On the other hand, there may be more need for flexi-

bility in wage setting as inflation and exchange rate adjustments no longer correct possible errors made in setting nominal wages. This constrains the labour markets and reshapes the institutions as the bargaining parties search for more appropriate ways to settle in the new environment.

Besides the obvious change in the expectations concerning inflation and monetary policy, there have been other more subtle changes in the environment of the bargaining system. These include changes in the structure and location of production. Firms have become ever more interdependent, as specialisation has grown and intra-industrial trade has increased. Competition has increased, as it has been possible to buy an ever-larger part of the labour services needed in a firm from outside. Stronger dependence on other firms also means a need to respond more often to changes in their environment. Increasing specialisation has also meant relocations of production to places abroad, and more import of goods and services needed to assemble the final product. Both inexpensive, unskilled labour and, to an ever larger extent, also skilled labour is available from the new member countries of the EU and outside Europe, and this has implied increasing competition for the workers employed in these industries in the old EU.

These changes in the economic environment form the background to the studies on the performance of the labour market and the wage bargaining included in this volume. Because of the complexity of the bargaining systems one has to simplify and focus on a small number of the systems' characteristics. One such simplification is the concept of the degree of centralisation that the bargaining has.

Finland can be considered as an example of a centralised bargaining system. The Finnish labour market is highly organised. Approximately 80 per cent of the salaried employees belong to unions, and the coverage of collective agreements is over 90 per cent. Similarly, most employers are organised in their federations and confederations. Wage bargaining takes place mainly at the sectoral or industry level, and there are usually different collective agreements for workers who are paid on an hourly basis and for salaried employees. The collective agreements usually stipulate the minimum tariff wages at different job-complexity levels and educational levels in a given industry. The wage bargaining usually starts with negotiation between the central organisations of the employees' unions and the employers' confederations. If a central nationwide agreement is reached between them, the employees' unions and employers' federations decide whether it is acceptable or not for the industry and the employee group concerned. If they accept the central framework agreement, the process stops there. On the other hand, if they reject it, they will negotiate their own collective agreement separately from the central agreement. The government has often taken part in these negotiations in an intermediating role, even though there is no formal basis for this.

The centralised bargaining and tripartite system in economic and labour market policies has been seen as a way to keep nominal wage increases and inflation down. However, it has turned out to be difficult to take into account industry- or firm-specific issues in the centralised bargaining. Although union density has been slightly declining in many European countries, collective bargaining of one kind or another is still a central feature of wage formation. Collective bargaining can take many forms from firm-wise via industry-level to economy-wide centralised

bargaining; in the future there may even be Europe-wide bargaining. Thus, there is a range of alternative ways of bargaining collectively, and in the countries which have experienced a decentralisation of bargaining there has not been an unequivocal transformation of the bargaining systems towards bargaining only on the level of the firm. What will be the share of local bargaining at the firm level and what will be the role of individual-level bargaining, which is customary for professional, salaried employees? This collection of papers provides a scientific look at these issues in a field with much political interest.

2 The Articles in this Volume

Torben M. Andersen highlights the increasing importance of trade, especially intra-industry trade, caused by the reduction of trade frictions. About 75% of global trade is intra-industrial. Thereby, the relocation of activities and production has become easier, which clearly affects labour markets, too. Labour demand will become more elastic with respect to wage claims in this globalisation process. The Volkswagen agreement in 2001 was an example of a case where relocation of production shifted the firm's threat point in case a wage agreement was not reached. Another aspect of globalisation is an increase in foreign direct investments (FDI). Jobs are transferred within multinationals to plants in low-wage countries. *Pekka Ilmakunnas*, in his comment on Andersen, emphasises that this will happen, especially in a later stage of the industry life cycle, when production is more standardised. Andersen notes that these wage pressures have caused more flexible wage setting, while centralised elements have remained in the Nordic labour markets, especially in other issues like bargaining on working hours and working conditions.

Andersen uses a stylised partial equilibrium approach, but adheres to his general equilibrium analysis in Andersen and Skaksen (2003). He carefully examines the consequences of the globalisation process, which also has its advantages for the industrial countries. Despite the weakening of their negotiating power, employees may actually be better off, both in terms of employment and wages. However, he also discusses an eventual increase in demand for an insurance mechanism if globalisation brings more risk to one's position in the labour market. Both Andersen and Ilmakunnas also discuss the union's problems in setting wage demands, especially in the timing of the wage demands. Early wage moderation may slow down later relocation, but if it is known that relocation is inevitable, it may be optimal to demand high wages in the beginning.

Steinar Holden considers the labour market in a low-inflation environment. He reviews the literature on the effects of low steady-state inflation on wage formation that can be approached from four different viewpoints. The first effect is that, under low inflation, downward nominal wage rigidity may prevent real wage cuts, which would have been achieved with higher inflation. There may be several reasons for this. One reason is that contracts need to be renegotiated as in Holden (1994) and MacLeod and Malcomson (1993). Another reason is fairness considerations and money illusion. The second effect concerns the notion that wages are

given by nominal contracts, and that inflation affects both how often wages are adjusted, and to what extent wages are set in a forward-looking manner. The third effect considered concerns the fact that with incomplete contracts firms are forced to raise nominal wages to prevent workers from inflicting costs on the firm. Under low inflation this leads to higher real wage pressures and higher unemployment. Fourth, Holden considers the idea that moderate positive inflation reduces wage pressure when effort depends on wages relative to a reference level, and workers and firms underweight inflation when updating the reference level. Holden then ends the article by discussing to what extent labour markets may adapt to a low-inflation environment. The conclusion is that there are good reasons to believe that moderate inflation increases employment in the long run from what it would be at zero inflation. Economic institutions and expectations may, to some extent, adapt to low inflation, but this is unlikely to eliminate the effect on wage formation and employment. Fixed wage contracts may be good for inducing investments, but this does not always compensate for the reduction in flexibility (Holden 2001). In his comment *Tapio Palokangas* discusses some of the microeconomic foundations of the bargaining process and their role in accomplishing downward nominal wage rigidity. He especially emphasises the role of risk in wage formation.

Jukka Pekkarinen and Kari E.O. Alho present results from a unique survey of bargaining agents' perceptions of the Finnish bargaining system. As opposed to earlier surveys like Agell and Lundborg (1995), the survey also covers employees, and the same questionnaire was addressed both to employers and to employees in a sample of firms that cover the private sector in Finland. The questionnaire was also sent – with minimal changes – to the representatives of the unions and employer federations and the representatives of the respective central organisations in the labour market. The survey reveals differences in the opinions on labour market flexibility between employers and employees. Employers view the current labour market flexibility as insufficient and many would like to have the option to offer employment at a somewhat lower wage than the going tariff wages. Employees, on the other hand, oppose flexibility that entails higher wage dispersion on the grounds that it would adversely affect the position of the weakest segment of the labour force. This dispute remains unresolved, not least because of divergent opinions as to what degree greater wage dispersion would actually raise employment.

One topic in which these differences in opinions are reflected is the role of tariff wages, which set a minimum wage for each skill level and industry and thus a minimum wage for all employees. Tariff wages may create a constraint for the recruitment of less productive low-wage workers. According to the survey results, employers partly agree with the view that such contractual wage floors do prevent the creation of low-wage jobs. Employees also consider it very important that tariff wages set a minimum level for the pay, thus affording them security.

Based on the survey results, the general opinion among the labour market actors is fairly positive on both sides of the current wage negotiation system. However, wide support for greater company-level wage bargaining prevails among employers. This does not, however, imply support for atomistic wage setting, because the peace clause included in industry-level agreements is highly valued. Some caution in interpreting the results is also appropriate. First of all, the

employee opinions are those of union representatives, i.e. shop stewards in the firm. The expressed opinions may thus not perfectly reflect the opinions of employees in the firms, which may partly explain the relatively low variation in employee responses between firms. One should also note that opinions reflect desires, while the existing level of flexibility in wage setting differs between employees and salaried workers and may vary from one industry to another.

Kari E.O. Alho challenges Finnish centralised wage bargaining about the way in which it can produce incentives for a skilled workforce. Alho argues that the Finnish wage bargaining system has rested on the implicit agreement that the labour unions obey, on average, a moderate wage and incomes policy, but at the same time the largest of them have the power to influence the pattern of wage rises over the wage scale in a decisive way. This has led to solidaristic wage formation and excessive rises in the wages at the lower end of the income distribution and in firms and industries with lower-than-average productivity. Alho shows that the wage level in the five lowest-productivity industries relative to average in all industries exceeds the equivalent productivity ratio between low and average productivity industries by 17 percentage points. This is three times as much as in the US. What are the consequences of negotiated wages that are possibly set at too high a level for low-skilled workers in the low productivity industries? He first shows the expected outcome that the wages of skilled workers will be scaled down, as the productivity of the skilled labour is lower in an equilibrium for this type of labour. However, Alho then shows in an efficiency wage framework that the wages of the highly skilled will be adjusted upwards. The intuition behind this is the aim to maintain wage differences in order not to decrease the effort of high-skilled workers too excessively. This can also be explained by considerations of envy, since the effort of highly skilled workers depends, in his model, on the relative wages between high-skilled and low-skilled workers. The relative wages tend to remain unchanged, even though there is a regulation raising the low wages. Overall, Alho is worried about sufficient incentive mechanisms and labour demand in centralised bargaining. As the final item, Alho raises the issue as to what the relationship is between productivity and its reward in wages within a firm. This is an important topic which deserves more attention, as some recent analysis, see Moen and Rosén (2003), suggests that the marginal reward should be rising in terms of productivity, while in practice it seems to be more the case that a reverse relationship holds between productivity and the wage rate.

Anni Heikkilä and Hannu Piekkola analyse the opinion of the proper, locally bargained share of contract wages using the unique survey of bargaining agents' perceptions of the Finnish bargaining system. They show that Finnish employers and employees diverge in their desire for local wage bargaining. The employers want the locally bargained wage share to be approximately half of the total wage rise, while the majority of employees prefer this share to be below 25%. Finnish employers thus want the locally bargained wage share to be significantly larger than the locally bargained share in the current centralised wage agreement. However, employers' attitudes towards local bargaining vary a lot with the firm characteristics. It is shown that employers in large firms and in the financial services sector demand the largest locally bargained share of contract wages.

Heikkilä and Piekkola also show that employers are willing to incorporate employees into local bargaining decisions when the firm size is 30–299 employees or when the firm is profitable and operates in the service sector. The divergence of opinions of employees and employers in large firms and the employers' reluctance to incorporate employees in decision-making creates a major challenge to the local wage bargaining.

Roope Uusitalo considers the consequences of centralised bargaining for the level of the wage increases in the economy. According to his results, centralised bargaining rounds in Finland have given both lower bargained and lower actual nominal wage increases. The effect remains and even becomes stronger when the negative effect of unemployment on wage changes is taken into account. This indicates that centralised bargaining can be an important method for holding inflation at a low level. However, Uusitalo emphasises that a part of the effects on wage changes may be a result of the fact that the government has often participated in centralised bargaining, changing government policies in a way that has benefited employees. He also points out that the choice to bargain on the industry level is sometimes made as a consequence of the fact that centralised bargaining has failed. The industry-level bargaining that follows may then have a worse starting point.

Kenneth Snellman examines wage changes under centralised and industry-level bargaining in Finland and shows that, in addition to the average level of wage changes, the relative wage changes between industries have differed in centralised and industry-level rounds. Parting from a centralised agreement has led to a relative rise in the bargained wage changes in food, saw-milling, and building construction, as well as the hotel and restaurant industries. To some extent, wage drift has compensated for the differences in changes in bargained wages. However, in years with bargaining at the industry level covering all industries food, saw-milling, and building construction industries have not experienced a higher increase in bargained wages relative to the average. Snellman also examines whether the opinions expressed by employees and employers in the survey can explain the observed behaviour in recent decades. However, he concludes that differences in employees' opinions are small across industries and, hence, do not seem to reflect the differences observed in the propensity to participate in centralised agreements.

Pekka Sauramo analyses the drastic decline in the labour share of income which took place in Finland during the 1990s. He examines whether the low level of the labour share can be regarded as a new equilibrium level or whether it reflects a macro-economic disequilibrium. In the analysis, he utilises the concept of ELIS (equilibrium labour income share) originally employed by Draper and Huizinga (2000). Within the framework, the ELIS is affected by three major factors: movements in relative prices, changes in technology and alternations in the intensity of competition in the product market. The main conclusion Sauramo draws is that the decline in the labour share cannot be explained as a decline in the ELIS, i.e. it cannot be explained by the three factors. The low labour share is therefore an indication of a macro-economic disequilibrium. Furthermore, the disequilibrium is characterised by abnormally high levels of profitability and unemployment. The

equilibrium can therefore be achieved through a process during which the labour share increases and the unemployment rate decreases. Consequently, the increase in the labour share should not automatically be interpreted as a worrisome sign of weakening economic developments. Sauramo argues that this assessment can be taken as a starting point in future negotiations on incomes policy. However, he also emphasises that the labour share, which is too low, should not be restored immediately. As long as the unemployment rate is above the NAIRU, the labour share should be below the ELIS. The openness of the economy and shocks from abroad may also influence future development.

Jukka Lassila presents the recent reform of the earnings-related pension system in the private sector in Finland. The reform was heavily influenced by tripartite participation of the employers and the employee organisations and the central government, since all partners had to agree on the reform. Lassila points out the role of the labour market parties, and examines the mechanisms of the pension system as well as the welfare outcomes for citizens. In particular, he analyses the effects on the income of different cohorts in an Auerbach-Kotlikoff type of dynamic general equilibrium model. According to his analyses current young workers lose somewhat because of the reform, while future workers will gain. For current old workers the effect of the reform is small. Because early retirement was punished in the reform, the total effect on income is more positive for those with higher education who generally retire later. Lassila also emphasises that the pension system will interact with wage bargaining as the current wage changes affect capital accumulation, current pensions and thereby the future pensions of the current workers. To raise future pensions the workers may reduce their wage claims somewhat.

The book ends with two general notes by representatives of Finnish employer and employee organisations. *Risto Alanko* is head of the department of Labour Market Policy in The Confederation of Finnish Industry and Employers TT and *Leena Kostiainen* is director at the Finnish Confederation of Salaried Employees STTK. Alanko emphasises that the flexibility of labour market agreements is not necessarily related to the level at which negotiations are made: central or sectoral. Both central and industry levels are centralised levels from the point of view of an individual company. Kostiainen points out the importance of determining the role of local bargaining and how it can be used to attain flexibility.

The articles in this volume clearly indicate challenges for the collective bargaining created by international trade and a new area of collective bargaining under low inflation. The articles analyse many relevant aspects, such as the appropriate labour share in total valued added, the desired locally bargained share of contract wages and flexibility in terms of industry-level or firm-level productivity differences, or the adaptation of collective bargaining in other fields closely related to the labour market, such as the pension system. The volume thus gives new insights into how the labour market has evolved and how labour market institutions have or should adapt to a globalised environment.

References

- Agell, J. and Lundborg, P. (1995): Theories of Pay and Unemployment: Survey Evidence of Swedish Manufacturing Firms. *Scandinavian Journal of Economics* 97, 295–307.
- Andersen, T.M. and Skaksen, J.R. (2003): Product Market Integration, Comparative Advantages and Labour Market Performance, IZA Working Paper, No. 698.
- Draper, N. and Huizinga, F. (2000): ELIS: Equilibrium Labour Income Share, *De Economist*, vol. 148, nro5, s. 345–371.
- Holden, S. (1994): Wage bargaining and nominal rigidities, *European Economic Review* 38, 1994, 1021–1039.
- Holden, S. (2001): Does price stability exacerbate labour market rigidities in the EMU? *Empirica* 28, 403–418.
- Ilmakunnas, P. and Maliranta, M. (2003): “Foreign medicine: A treatment effect analysis of the productivity effects of foreign ownership”, mimeo.
- MacLeod, W. B. and Malcolmson, J.M. (1993): Investment, hold-up, and the form of market contracts. *American Economic Review*, 37, 343–354.
- Moen, E. and Rosén, Å. (2003): “Equilibrium Incentive Contracts”, CEPR Discussion paper, No. 3790.

International Product Market Integration and Wage Bargaining

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Abstract

The consequences of further international product market integration for wage bargaining are discussed. It is argued that current changes in international interactions pose new challenges for wage formation. In particular, the scope for appropriating rents may be affected, and it may become more difficult or costly to maintain centralized wage bargaining arrangements with solidaristic elements. At the same time, the demand for insurance mechanisms may increase, which is a particular challenge for the Nordic countries.

1 Introduction

It is recurrently questioned whether labour markets will have to adapt to the ongoing process of international integration. In particular, it is debated as to whether centralized systems of wage formation can be maintained, and whether observed trends towards more decentralization in some countries can be attributed to international integration. A related issue is the issue of whether a Europeanization of labour markets is taking place in the sense that the integration process forces national labour markets to become more similar in structure and whether the need for international cooperation increases.

These issues are particularly important for the Nordic countries, since these have historically been characterized by relatively centralized wage formation, which among other things has included more solidaristic wage outcomes (see e.g. Barth et al. (2003)). This is often seen as complementary to the development of an extended welfare state based on universalistic principles, since centralized wage formation, among other things, makes it possible to internalize the public budget and therefore avoid the strong distortionary effects of wage income taxation (Summers et al. (1993), Andersen (2003)).