TURUN YLIOPISTON JULKAISUJA
ANNALES UNIVERSITATIS TURKUENSIS

SARJA – SER. B OSA – TOM. 353
HUMANIORA

The Finnish Paper Workers' Union at a crossroads: Labor union representativeness in a changing environment, 1980-2008

by

Paul Jonker-Hoffrén

TURUN YLIOPISTO
Turku 2012

From the Department of Social Research
Faculty of Social Sciences
University of Turku
Turku, Finland

Supervised by

Visiting Professor Antti Ainamo
Department of Management
and International Business
Aalto University
Helsinki, Finland

Professor Harri Melin
Faculty of Social Sciences
University of Tampere
Tampere, Finland

Process coordinator and Custos:

Professor Hannu Ruonavaara
Department of Social Research/Sociology
University of Turku
Turku, Finland

Reviewed by

Professor Kari Lilja
Department of Management
and International Business
Aalto University
Helsinki, Finland

Professor Arne Kalleberg
Department of Sociology
University of North Carolina
United States of America

Opponent

Professor Axel van den Berg
Department of Sociology
McGill University
Montreal, Canada

ISBN 978-951-29-5080-5 (PDF)
ISSN 0082-6987

Preface

As I finish the final corrections to this dissertation, I am reflecting on the documentary about the last roll of paper to come out of the Myllykoski paper mill on May Day, 2012. Some time ago, I watched the documentary *Red Forest Hotel* by Mika Koskinen regarding Stora Enso's eucalyptus plantations in China. These two Finnish documentaries sum up the current state of the Finnish paper industry quite well – domestically, it is a sector in decline, but globally there is still possibility for growth – albeit with its own problems. In this dissertation, however, I do not discuss the sustainability dimensions of these developments nor the corporate social responsibility related to the Finnish forest industry's business abroad, because they actually require their own dedicated research.

Furthermore, as the whole future of the Eurozone is currently in jeopardy, it is impossible to know what the consequences of this economic crisis will be for the Finnish paper industry, apart from apparently even weaker demand in (Western) Europe than earlier predicted, while on the other hand the euro exchange rate may be beneficial. The Finnish Paper Workers' Union is caught in the middle of the forces of globalization. In the documentary, when meeting employees of the Myllykoski mill, the current President of the union laments that in the midst of crisis the labor union cannot do very much. This dissertation is not concerned with that problem, but it is concerned with how the union can represent its members.

There are many people to be thanked in this preface.. For their support, comments and other help in working on this dissertation, I wish to thank professors Antti Ainamo and Harri Melin, my supervisors, and professor Pertti Koistinen, of the LabourNet Graduate School. Also, I am greatly indebted to pre-examiners Professor Kari Lilja and Professor Arne Kalleberg for their insightful comments on the manuscript, which helped me see some sections from new and different perspectives. I especially wish to thank Veli-Matti Ritakallio, Dean of the Faculty, for his support through some difficult times. Our Department's Hannu Ruonavaara has been invaluable for seeing this dissertation go through all the right channels. I also wish to express my appreciation to the several commenters on the many papers I presented in various seminars and venues.

Within the Finnish Paper Workers' Union and Finnish Forest Industries Federation, there are many people to be thanked for their openness. Petri Vanhala, current President of the union, Secretary-General Juhani Siira, laywers Juha Koivisto and Jouni Salminen, and Timo Byman all helped in various ways to get a grip on the functions of the union in practice. Also Juha Sutela and Jari Forss of the employers' federation helped me understand various issues regarding to the industry's collective agreements. Thanks to their input this dissertation does not exist merely in a vacuum but has a connection to the 'real world'.

Of my direct and indirect colleagues, I also wish to thank Johanna Nurmi, Mari Toivanen, Liisa Lähteenmäki, Ismo Kantola, Tiina Ristikari, Antti Kouvo and Olli Pyyhtinen for all the interesting lunches, discussions and coffee-breaks. Last but not least, Jaana Tähti and Marja Andersson deserve many thanks for answering all the bigger and smaller questions that relate to the practical aspects of being a doctoral student with financing coming from everywhere and anywhere.

This dissertation would not have been possible without the support of my parents and my grandfather's dictum of 'If you don't know, ask.' My curious and critical nature comes from them. I wish to thank them and my sister Sylvia for being there for me even though I moved to Finland – it has not always been easy for them. Last but not least, I wish to thank my wife, Mia, for her support and toleration for my sociological incursions into Finnish law. My bonus daughter Meeri also knows where *this* dissertation is. And in particular my son Jelmer has been a constant source of joy as well – being on paternal leave was a wonderful time to get to know my child well during a very important phase. Jelmer, *dit boek is voor jou. Het gaat een beetje over de papierfabriek.*

Acknowledgements

I wish to express my appreciation to the many organizations that provided financial support for the writing of this dissertation between 2006 and 2012. Apart from the Department of Sociology – now the Department of Social Research, where I have found a workplace – I am much obliged to Palkansaajasäätiö [the 'Employee Foundation'], the Finnish Cultural Foundation and Finnish Work Environment Fund for grants that helped me finish this project. The support of these organizations gave me much motivation to continue with a fairly unfashionable subject. Also, the Edward Wäiniö Aaltonen Fund should be thanked for their support. Near the end of my dissertation, I had the great honour to work for a year at the LabourNet graduate school, which was a very stimulating experience – thanks to all who were involved.

Summary

This thesis consists of four articles and an introductory section. The main research questions in all the articles refer to the changes in the representativeness of the Finnish Paper Workers' Union. Representativeness stands for the entire entity of external, internal, legal and reputational factors that enable the labor union to represent its members and achieve its goals. This concept is based on an extensive reading of quantitative and qualitative industrial relations literature, which includes works based on Marxist labor-capital relations (such as Hyman's industrial relations studies), and more recent union density studies as well as gender- and ethnic diversity-based 'union revitalization' studies. Müller-Jentsch's German studies of industrial relations have been of particular importance as well as Streeck's industrial unionism and technology studies. The concept of representativeness is an attempt to combine the insights of these diverse strands of literature and bring the scientific discussion of labor unions back to the core of a union's function: representing its members. As such, it can be seen as a theoretical innovation. The concept helps to acknowledge both the heterogeneity of the membership and the totality of a labor union organization. The concept of representativeness aims to move beyond notions of 'power'.

External representativeness can be expressed through the position of the labor union in the industrial relations system and the economy. Internal representativeness focuses on the aspects of labor unions that relate to the function of the union as an association with members, such as internal democracy. Legal representativeness lies in the formal legal position of the union – its rights and instruments. This includes collective bargaining legislation, co-decision rules and industrial conflict legislation. Reputational representativeness is related to how the union is seen by other actors and the general public, and can be approximated using data on strike activity. All these aspects of representativeness are path-dependent, and show the results of previous struggles over issues. The concept of representativeness goes beyond notions of labor union power and symbolizes an attempt to bring back the focus of industrial relations studies to the union's basic function of representing its members.

The first article shows in detail the industrial conflict of the Finnish paper industry in 2005. The intended focus was the issue of gender in the negotiations over a new collective

agreement, but the focal point of the industrial conflict was the issue of outsourcing and how this should be organized. Also, the issue of continuous shifts as an issue of working time was very important. The drawn-out conflict can be seen as a struggle over principles, and under pressure the labor union had to concede ground on the aforementioned issues. The article concludes that in this specific conflict, the union represented its' female members to a lesser extent, because the other issues took such priority. Furthermore, because of the substantive concessions. the union lost some of its internal representativeness, and the stubbornness of the union may have even harmed the reputation of the union. This article also includes an early version of the representativeness framework, through which this conflict is analyzed.

The second article discusses wage developments, union density and collective bargaining within the context of representativeness. It is shown that the union has been able to secure substantial benefits for its members, regardless of declining employment. Collective agreements have often been based on centralized incomes policies, but the paper sector has not always joined these. Attention is furthermore paid to the changing competition of the General Assembly, with a surprisingly strong position of the Left Alliance still. In an attempt to replicate analysis of union density measures, an analysis of *sectoral* union density shows that similar factors as in aggregate data influence this measure, though – due to methodological issues – the results may not be robust. On this issue, it can be said that the method of analysis for aggregate union density is not suitable for sectoral union density analysis. The increasingly conflict-ridden industrial relations predicted have not actually materialized. The article concludes by asking whether the aim of ever-increasing wages is a sustainable one in the light of the pressures of globalization, though wage costs are a relatively small part of total costs.

The third article discusses the history and use of outsourcing in the Finnish paper industry. It is shown using Hyman's framework of constituencies that over time, the perspective of the union changed from 'members of the Paper Workers' Union' to a more specific view of who is a core member of the union. Within the context of the industrial unionism that the union claims to practice, this is an important change. The article shows that the union more and more caters for a core group, while auxiliary personnel is less important to the union's

identity and constituencies, which means that the union's internal representativeness has decreased. Maintenance workers are an exception; the union and employers have developed a rotating system that increases the efficient allocation of these employees. The core reason of the exceptional status of maintenance personnel is their high level of non-transferable skills. In the end it is debatable whether the compromise on outsourcing solves the challenges facing the industry.

The fourth article shows diverging discourses within the union with regard to union-employer partnership for competitiveness improvements and instruments of local union representatives. In the collective agreement of 2008, the provision regulating wage effects of significant changes in the organization or content of work was thoroughly changed, though this mainly reflected decisions by the Labor Court on the pre-2008 version of the provision. This change laid bare the deep rift between the Social Democratic and Left Alliance (ex-Communist) factions of the union. The article argues that through the changed legal meaning of the provision, the union was able to transform concession bargaining into a basis for partnership. The internal discontent about this issue is nonetheless substantial and a threat to the unity of the union, both locally and at the union level.

On the basis of the results of the articles, other factors influencing representativeness, such as technology and EU law and an overview of the main changes in the Finnish paper industry, it is concluded that, especially in recent years, the Finnish Paper Workers' Union has lost some of its representativeness. In particular, the loss of the efficiency of strikes is noted, the compromise on outsourcing which may have alienated a substantial part of the union's membership, and the change in the collective agreement of 2008 have caused this decline. In the latter case, the internal disunion on that issue shows the constraints of the union's internal democracy. Furthermore, the failure of the union to join the TEAM industrial union (by democratic means), the internal conflicts and a narrow focus on its own sector may also hurt the union in the future, as the paper industry in Finland is going through a structural change. None of these changes in representativeness would have been so drastic without the considerable pressure of globalization - in particular changing markets, changing technology and a loss of domestic investments to foreign investments, which in the end have benefited the corporations more than the Finnish employees of these

corporations. Taken together, the union risks becoming socially irrelevant in time, though it will remain formally very strong on the basis of its institutional setting and financial situation.

List of cases

Commission decisions

M.646, *Repola/Kymmene,* 30/10/1995

C73/2003 Investment aid under the environmental guidelines in favour of Stora Enso Langerbrugge N.V. (JOCE L/053/2005, Corrigendum 2005/164/EC)

M.5283, *Sappi/M-Real acquisition,* 31/10/2008

M.6342, *UPM-Kymmene/Myllykoski,* 31/8/2011

N 900/2006**,** *MSF 2002 - Aid to CELBI,* 27/6/2007

Regulations

Council Regulation 659/1999 of 22 March 1999, laying down detailed rules on the application of Art. 93 (now Art. 88) of the EC Treaty [1999] OJ L83/1, 27/3/1999

Commission Regulation 794/2004 on implementing rules and notification, OJ L140, 30/4/2004

Commission Regulation (EC) No 1125/2009 of 23 November 2009, amending Regulation (EC) No 794/2004, OJ L 308, 24.11.2009

Judgements of the European Court of Justice

C-25/62, Plaumann & Co. v Commission of the European Economic Community , 1963 ECR 95

C-26/76, Metro SB-Großmärkte GmbH & Co. KG v Commission of the European Communities, 1977 ECR 01875

C-169/84, Société CdF Chimie azote et fertilisants SA (COFAZ) and Société chimique de la Grande Paroisse SA v Commission of the European Communities, 1990 ECR I-03083

C-67/96, Albany International BV v Stichting Bedrijfspensioenfonds Textielindustrie, 1999 ECR I-05751

C-219/97, Maatschappij Drijvende Bokken BV v Stichting Pensioenfonds voor de Vervoer- en Havenbedrijven, 1999 ECR I-06121

C-22/98, Criminal proceedings against Jean Claude Becu, Annie Verweire, Smeg NV and Adia Interim NV - Reference for a preliminary ruling: Hof van Beroep Gent – Belgium, 1999 ECR I-05665

C-78/03P, Commission of the European Communities v Aktionsgemeinschaft Recht und

Eigentum eV, 2005 ECR I-10737

C-487/06P, British Aggregates Association v Commission of the European Communities and United Kingdom, 2008 ECR I-10515

C-319/07 P**,** 3F v Commission of the European Communities, 2009 ECR I-05963

List of figures

CONTENTS

II Articles

1. Gender Aspects of Labour Union Representativeness: the Case of the Finnish Paper Industry Conflict of 2005, *Theory in Action,* 1(1): 48-70
2. The Finnish Paper Workers' Union: Becoming a Paper Tiger? Collective bargaining, Wage developments and Union Density between 1980 and 2005, *Theory in Action,* 2(1): 185-210
3. Whose Constituency? Representativeness of the Finnish Paper Workers' Union, Innovation Strategies, and Outsourcing in the Finnish Paper Industry between 1980 and 2008 *Industrial Relations Journal,* 42(4): 375-391
4. Discourses on Partnership and Competitiveness: Concession bargaining, internal democracy and senior shop stewards in the Finnish paper industry (Revised and Resubmitted, Industrial Relations Journal)

I. INTRODUCTION

1. Introduction

This thesis deals with the representativeness of labor unions – in particular, the representativeness of the Finnish Paper Workers' Union within the context of its social and economic environment. By this is meant the *internal, external, legal and reputational representation of the union's members.* Because representation is relational, the context or environment of the labor union is of significant importance. The key actors and elements under discussion here are the labor union as representative of employees, the factions within the labor union, its local representatives (shop stewards) and the policies of the labor union. To make sense of these actors and elements, the context and environment of the union are considered: legal aspects, the business environment of the Finnish paper industry, relevant European legislation, the role of technology and vocational schooling. These elements connect the representativeness of a national union to questions of globalization and the viability of national systems of industrial relations. What is a labor union? There are many different definitions in the literature, starting with the Webbs' definition (1898), but a modern, comprehensive definition can be found from the European Industrial Relations Observatory's dictionary:

> 'A union is a legal entity consisting of employees or workers having a common interest, such as all the assembly workers for one employer, or all the workers in a particular industry. A union is formed for the purpose of collectively negotiating with an employer (or employers) over wages, working hours and other terms and conditions of employment. Unions also often use their organizational strength to advocate for social policies and legislation favorable to their members or to workers in general.' (EIRO 2011)

The thesis focuses in particular on the second and third elements of the definition; it can be said that the notion of representativeness enables a critical enquiry of the union as the representative of labor. The strength of the notion lies in sensitizing the analysis to path-dependency, internal democracy and changes in the environment of the sector whose employees it represents. More so than a simplistic analysis of power based on a (Marxist) labor-capital antithesis, the concept of representativeness leaves open the possibility of cooperation between labor union and employer. Furthermore, the notion of representativeness puts the analysis of labor unions and industrial relations back to where it belongs: the interests of and effects on employees. There is no need for abstract definitions of power and how to measure it. The idea of representativeness is explained further in section 3 on Industrial Relations

and Representativeness.

The main research question of the dissertation is the following:

> How does labor union representativeness explain the changes in organizational and strategic capacity of the labor union of the paper industry in Finland between 1980 and 2008, and how do changes in the industry affect the union's capacity in this respect?

This question can be subdivided into the following questions:

1. What is labor union representativeness?
2. What is the organizational and strategic capacity of labor unions?
3. How has this capacity changed in the labor unions of the paper industry in Finland between 1980 and 2008?
4. How does representativeness explain the changes in the organizational and strategic capacities of labor unions?
5. How do changes in the paper industry affect the union's representative capacity?

The four articles and this introduction answer all these questions. The first question is partly answered in the first article, but the theory section in this introduction provides more precise answers. Labor union representativeness is the entire entity of internal, external, legal and reputational factors that enable the labor union to represent its members. These are path-dependent and affect the organizational and strategic capacity of the labor union; in short to what extent the union is able to achieve its goals using its membership and position. This concept is based on an extensive reading of quantitative and qualitative industrial relations literature, which includes works based on Marxist labor-capital relations (such as Hyman's industrial relations studies) and more recent union density studies as well as gender- and ethnic diversity based 'union revitalization' studies. Of particular importance has been Müller-Jentsch's German studies of industrial relations as well as Streeck's industrial unionism and technology studies. The concept of representativeness is an attempt to combine the insights of these diverse strands of literature and bring the scientific discussion of labor unions back to the core of a union's function: representing its members. The concept helps to acknowledge both the heterogeneity of the membership and the totality of a labor union organization. The concept of representativeness aims to move beyond notions of 'power'.

Regarding the elements of external, internal, legal and reputational representativeness, it can be said that the literature on industrial relations is very scattered and that many authors pay attention to certain parts only (an exception is Korpi 1978). The union density literature has recently paid more interest to the question of why people join labor unions, to which e.g., Checchi and Visser (2005) give a 'social customs' explanation atop of institutional and economic factors, i.e., they tried to move beyond purely quantitative explanations. But they do not explicate what union density means or what its function is in industrial relations. Authors such as Wrench (2004) try to move beyond union density and include elements of gender-equality and diversity management. Also in this literature it is often unclear what the aims of the labor union are in this respect, not least because internally there may be an ongoing discussion about these issues. The legal factors surrounding the labor union are seldom taken into account, though some attention is paid to strike law and recently to the influence of diverse EU policies on the labor union's function. Factors influencing the market of the sector in which the union operates (i.e., in this case the state aid legislation) are hardly ever discussed outside legal studies, though they are to some extent part of economic sociology-based interests (e.g., Aspers 2011; Fligstein 2001). The issue of a labor union's reputation is not often analyzed, and also here it is restricted to the analysis of strikes. In newspapers, sometimes surveys on a labor union's particular actions are published. Booth and Chatterji (1993) analyze some aspects of the reputation of a labor union membership on wages, through the theory of social custom. This approach nonetheless fails to account for the relatively strong 'power' of French labor unions, though these sport very low union densities. The aspect of reputational representativeness aims to put the actions of a union, in particular on strikes, in its societal context. As shown below, the concept of representativeness then allows for a critical understanding of labor union policy, strategy and decisions through taking into account the relevant and enabling factors for its existence. The concept also accounts for the different influence of path-dependent elements and 'day-to-day' actions as well as the machinations of internal union democracy. Labor union representativeness is then a concept which may bring the discussion of labor union policy back to its roots, the representation of its members.

The first article (Jonker 2008) analyzes the industrial conflict of 2005. Although the prime focus was intended to be the gender dimension, this industrial conflict has proven to be a critical junction for the Finnish Paper Workers' Union. Since the 1980s, the share of female employees in the paper industry has decreased due to the loss of certain types of work, but regardless of this, the union takes gender equality issues seriously. In this particular industrial conflict, these issues were relegated to the

background, though maternity and paternity leave issues are an important component of the collective agreement. The article contains a first attempt at the framework of representativeness.

The second article (Jonker 2009) discusses issues of internal and external representativeness. Central here are collective agreements and union density, but also the internal balance of power between (ex-)Communists and Social Democrats. Within the limits imposed on analysing a sectoral union density rate, it is clear that the same factors affect this rate (statistically) as when analyzing the national union density rate. The article furthermore focuses on the labor-capital balance and how a globalized industry affects the position of a national union. Because labor costs are one cost which the employer can manage somewhat, it is argued that within the context of declining employment and globalizing pressure on the Finnish (domestic) paper industry, the Finnish Paper Workers' Union is in a very difficult position, because it is quite dependent on domestic investments, which have decreased strongly.

The third article (Jonker-Hoffrén 2011) traces the history and outcome of the issue of outsourcing in the Finnish paper industry. It is shown that in other industries this issue has been resolved much earlier, and that though the special position of the Finnish paper industry outsourcing of cleaning, security and maintenance personnel has been a contentious issue for quite some time, the matter was not resolved until 2005. The current solution is that related personnel can be outsourced, but their wages are determined by the paper industry's collective agreement in the event that they do not have a valid collective agreement of their own. If they have an, e.g., cleaners' collective agreement, this applies to these workers. Through the framework of Hyman's constituencies of labor unions, it is shown why the labor union relates in a different way to maintenance personnel: even though combined, all the personnel that potentially can be outsourced represents about a third of the union's membership. The article shows the influence on legal aspects on the representativeness of the union – not only are issues from domestic competition law considered, but also European law (since 1995) is relevant. The collective agreement concluded in 2005 shows that even the legal representativeness of the union changes over time.

The fourth article-manuscript shows diverging discourses within the union with regard to union-employer partnership for competitiveness improvements and instruments of local union representatives. In the collective agreement of 2008, the provision regulating wage effects of significant changes in the organization or content of work was thoroughly changed, though this mainly reflected

decisions by the Labor Court on the pre-2008 version of the provision. This change laid bare the deep rift between the Social Democratic and Left Alliance (ex-Communist) factions of the union. The article argues that through the changed legal meaning of the provision the union was able to transform concession bargaining into a basis for partnership. The internal discontent about this issue is nonetheless substantial and a threat to the unity of the union, both locally and at the union level.

Taken together, these articles give a nuanced view of the Finnish Paper Workers' Union as a representative actor which goes beyond notions of 'labor aristocracy' (Lilja et al. 1992:148) or measures of union density and collective bargaining centralization (e.g., Visser 2006 and Boeri et al 2001:86-99) and show the union in its societal context.

2. Case and Methodology

The case in this dissertation is the Finnish Paper Workers' Union and its representativeness, but to specifically understand it, the environment of the union is taken into account as well. In particular, in reference to the main goal of the union, as stated in its rules, it is to '[…] improve its members' working and wage conditions as well as working on improving its members' societal position and civilization.' (Paperiliitto 2005a) This means that some of the factors that influence the Finnish paper industry are discussed in fairly minute detail as they shape the context for this main goal. The influence of technology on the Finnish paper industry, as well as European state aid law issues and other internal, external and legal issues that could not be included in the articles are discussed below.

The Finnish Paper Workers' Union is a very interesting case to study. As, e.g., Lilja and Tainio (1996) show, the Finnish industrial relations system is based on industrial unionism. The union represents a very strong union in a fast-changing environment. The paper union is strong because it has a high level of union density: it is wealthy, like its members. Lilja and Tainio (1996) call this the 'labor aristocracy'.At least until 2005, it has been able to maintain its institutional position, regardless of a sharp decline in employment in the paper sector between 1980 and 2008. Due to its connectedness to the paper mills, there is also a near perfect geographical matching between the labor union and the workplaces it represents (Lilja et al. 1992:148). Furthermore, the union has been very active and arguably successful in improving its members' wages and working conditions, and in cooperation with the employers through campaigns, the traditionally high level of work incidents has decreased rapidly in recent years

(METLA 2011b:261; Lilja and Tainio 1996:175-177). Also, in previous years, strikes by the Finnish Paper Workers' Union had the capability of virtually halting the whole paper industry in the country (Lilja et al. 1992:149). These elements will be returned to below. Currently, the global paper industry is a rapidly changing industry. Below some technical innovations will be discussed that have influenced change. During the period under scrutiny, the industry in Finland has seen both geographical changes (from the global North to South and from West to East) and changes in its capital accumulation. The first issue partly relates to changes in technology, partly to changes in the industry's export markets. The second issue relates to changes in Finland's financial regulation and its membership to the European Union, and as discussed below changes in the income tax possibly replaced a part of the domestic 'patient capital' with foreign 'impatient' capital. The listing of the major paper corporations on various stock exchanges (Tainio and Lilja 2003:62) also relate to this issue.

The union also has very strong rank-and-file representation. All the local branches of the union constitute separate voting districts for the General Assembly, which may send a representative for each 200 employees of the local branch. The interaction between local branches and union leadership, and how this affects union presence in the paper companies is a distinctive feature of the union's version of industrial unionism (Lilja and Tainio 1996:175-177). This also readily explains the resistance against further decentralization and the preference for sectoral collective agreements (see also below).

As the articles of this dissertation show, a complex case like the representativeness of a union requires a diverse range of methods. No part of the Paper Workers' Union's representativeness could have been solely researched using either quantitative or qualitative methods. For instance, the issue of union density, which is an important measure in a certain strand of industrial relations research, cannot be researched purely qualitatively. On the other hand, the notion of a certain level of union density tells very little in itself (see Vernon 2006 for a critique of the measure). In the case of the paper industry, it may even be argued that union density means even less than Vernon suggests, because *regardless* of the high level of union density in the industry, the union had to concede important achievements in 2005 (Jonker 2008; Jonker-Hoffrén 2011) and in 2008 it voluntarily, albeit without full support of *both* political factions in the union, re-negotiated a provision of the collective agreement that in previous years had benefited the union's members' wages (Jonker-Hoffrén n.d.). This is an example of how mixed methods can be used either to qualify quantitative analysis or to give actual substance to 'a number' (Teddlie and Tashakori 2009). In accordance with the pragmatic paradigm in methodology, the methods used in the articles of this dissertation are chosen depending on the specific research question

the article attempts to answer. The first article uses case study methodology to thoroughly examine and understand the issues of the 2005 industrial conflict. Thus, though this article is perhaps more descriptive than analytical, it laid the foundation for the other articles, by pointing out what the critical issues are for the labor union: shift-work and continuous shifts, outsourcing and the power of shop stewards to influence work processes, etc. The second article attempts to replicate quantitative methods of industrial relations research, based on studies by Checchi and Visser (2005), Böckerman and Uusitalo (2006), etc. The difference nonetheless is that the 'common' method of these studies is to look at aggregate national data, while Jonker (2009) looks at the *sectoral* level. Furthermore, though the analysis provides approximately the same results as the national-aggregate-based studies, the context of the union is taken into account as well. Nonetheless, the robustness of the results can be questioned, and it may be suitable to conclude that the methods for analyzing aggregate union density measures is unsuitable for the sectoral level. Jonker-Hoffrén (2011) uses close reading of labor union history, union actions and policy as well as newspaper and other sources to reconstruct the changing view of the union of its membership constituencies. An important role is played by various legal struggles, which identify the problem for the labor union. The application of Hyman's (1997a) framework of constituencies helps understanding the change from a unified family of paper workers (regardless of their actual work) toward a union that differentiates between its core membership, maintenance personnel and cleaning and security personnel. Jonker-Hoffrén (n.d.) looks at the position of shop stewards and their instruments. Through analysis of an electronic questionnaire and legal texts (and a bit of case study), this article lays bare the various discourses of the union's factions and shop stewards, and how internal union democracy works for or against partnership strategies to improve the competitiveness of the industry.

The other factors influencing representativeness mentioned below (technology, general legal changes, tax code changes, demography etc.) are attempts at trying to tease out the issues that many in the industry and in studies of the industry mention as important. Methodologically 'outside' the sphere of industrial relations and/or sociology is the analysis of European competition and state aid law. Although paper industry news and Finnish daily newspapers occasionally mention that the European Commission cleared a merger or that, in a certain location, state aid is being used to improve existing paper mills, it is rare that the rules regulating state aid are more than cursorily explained – let alone within the context of the structural changes of the paper industry in Finland and the potential impact of these rules on the Finnish Paper Workers' Union. As shown below, the nature of state aid and competition legislation (and the relevant jurisprudence on these) indicates that collective agreements

have a difficult position relating to this body of legislation and furthermore through jurisprudence it is clear that labor unions cannot be seen as an 'interested third party', though the issue this refers to may affect their membership.

The issue of technology is discussed here mostly through an overview of the literature on developments in papermaking; in particular, energy-, raw materials- and process-based issues. The competition from newer mills elsewhere is self-evident – these are usually much larger than Finnish domestic mills, use a different kind of pulp based on eucalyptus, and the machines are, according to the literature, also more flexible. From a methodological point of view, this section should be seen as a characterization of pressures from technological developments within the context of globalization. Of course, the Finnish paper companies also benefit from these, but for the domestic industry they represent a challenge.

Paper industry education and union demography are concerns for the near future. These are presented here because they may present a labor market constraint and as such are relevant for the labor union. Also, the internal union issues and the failure to join the TEAM industrial union are relevant to the near future and the possibilities the union has for change along with the industry. At present, it seems that the union is quite restrained in this sense, though the Social Democrat majority guarantees that the union could move forward.

3. Industrial relations and Representativeness

Labor unions are generally intended as some kind of representative body for the furtherance of the interests of its member (or of workers in general). This section aims to clarify what the representativeness of a labor union is. This concept arose from reading many diverse strands of industrial relations literature, but also from the legal requirements on French unions and gender-and-union literature, as well as the so-called 'diversity management' literature about e.g., Denmark. Of particular importance have been Hyman's work on union membership representation (1997a; 1997b), Levesque and Murray's (2002; 2010) work on union capacity and power and Müller-Jentsch's (1997; 1999) thorough theoretical work on industrial relations and its actors. However, this theoretical section explicitly attempts to avoid referring to 'union power' as 'power' in general is such a diffuse concept, which is difficult to measure as well. Instead, the concept of representativeness aims to bring back the

theoretical discussion of 'union power' to the essence of what a union does: 'representing its members.' The concept also sensitizes the analysis to path-dependency, various internal discourses, change, and the reputation of a union within the system of industrial relations.

To start though, it is useful to recall the definition of a labor union presented above. As defined in the European Industrial Relations Observatory's dictionary (EIRO 2010), a labor union is

> '…a legal entity consisting of employees or workers having a common interest, such as all the assembly workers for one employer, or all the workers in a particular industry. A union is formed for the purpose of collectively negotiating with an employer (or employers) over wages, working hours and other terms and conditions of employment. Unions also often use their organizational strength to advocate for social policies and legislation favorable to their members or to workers in general.'

Apart from the well-known definition by the Webbs (1898), the lesser-known definition by Goetz Brief is interesting, as it clearly distinguishes between the internal and external functions of the labor union (cited in Müller-Jentsch 1997:86). From these definitions, it can be seen that the core of a labor union is its representative function. In the quantitative literature on industrial relations, it is often stated that the union density measure is a good measure of union power, and at least it shows the representativeness of unions at the aggregate level (e.g., Western 1993 or Ebbinghaus and Visser 1998). This measure is influenced by factors like workplace access for unions, union-managed unemployment funds and centralization level of collective bargaining (Visser 2002). Union density literature tries to incorporate some of the institutional aspects, such as the level of bargaining; especially Checchi and Lucifora (2002) have quite successfully incorporated workplace representation rights, mandatory extension of collective agreements and other legal aspects of industrial relations in the statistical analysis. As Vernon (2006) has pointed out though, the measure of union density in fact indicates nothing more than a measure to indicate the 'constraint on the managerial prerogative in routinized joint regulation'. Labor union density then signifies the weight of the employee's representation in collective bargaining. Also, Kelly (1998:25) argues that union density is only a proxy variable for union power. Furthermore, union density analysis does for example not account for the fact that also unions with a low density figure (such as in France) have a sometimes even strong political role. Hyman (1997a; 1997b), Müller-Jentsch (1997), Lévesque and Murray (2002; 2010) and Frege and Kelly (2003) point towards the analysis of the internal aspects of the labor union, such as its constituency, organizational structure and strategies (see

Jonker-Hoffrén 2011 and n.d.).

John Kelly's work on union revitalization and mobilization theory is important in many ways, because apart from criticizing certain types of industrial relations research, he also draws attention to the merits of mobilization theory and a concept from macro-economics referred to as *Kondratief waves*. He links these to industrial relations through strike waves, as these occur generally near the crest or bottom of Kondratief-waves, whereby these indicate a struggle over rearrangement of the balance of labor and capital in industrial relations. The current case is interesting in the light of Kelly's theory, because he posits that the 1990s may be a period of transition in terms of Kondratieff waves (towards an upswing), and therefore one should be able to distinguish a (minor) strike wave in this period. The data on Finnish strikes on the other hand point to exactly the opposite – from the end of the 1980s onwards the level of strikes (and strike intensity) has declined greatly, especially for the Finnish paper industry. From Jonker-Hoffrén (2011; n.d.), it is nonetheless clear that in the paper industry, a great rebalancing of labor and capital is still going on. This is however happening nearly without strikes (notwithstanding the 2005 conflict). Kelly (1998:101-103) does, however, urge an analysis of changes in patterns of industrial relations. Strikes as a phenomenon will be analyzed as part of the legal representativeness but mostly as part of the reputation representativeness.

In contrast to the union density literature and Kelly's work stand the union revitalization literature. This is a body of scholarly work which to some extent attempts to find solutions to the observations of the union density literature that in general, the union density has declined in Western Europe since the 1980s. Revitalization studies frequently consider questions of a nature like 'how can the union become relevant again?' One central issue here is the influence of gender studies and immigration studies on this particular strand of literature: most unions are heavily white-male dominated. The proposed solution, then, is to incorporate diversity and promote gender democracy (e.g., Parker 2006; Kirton 1999). Furthermore, another way of making the union relevant again is social movement unionism or community unionism, which aims at integrating the union in the local community (e.g., Wills 2001). These attempts are frequently analyzed within the context of Anglo-Saxon countries, though an important example of a union's incorporation of other ethnic groups discusses Denmark (Wrench 2004; Greene et al 2005). All these diverse programs fit into what Hyman (1997a) calls 'the wider social context of the union'. Also a frequent theme of these studies is 'social partnership' – either locally or nationally or at the European level. This official 'Social Dialogue' is a research field of its own, especially within the context of the European Employment Strategy, but here it is significant to

mention in relation to legal embededness and the 'distance' to members of a union.

The literature on union density as well as the union revitalization literature provide valuable insights. However, they also have serious shortcomings that can be mediated by incorporating other theoretical viewpoints. As Kelly (1998) points out, mobilization theory and long wave theory provide a critical analytical framework of industrial relations. What he shows is that in analyzing labor unions within the context of industrial relations, both 'internal' and 'external' factors should be incorporated; revitalization theory and union density studies provide to some extent the backbone of this. When these two aspects of labor unions are combined, we can speak about a broader concept of representativeness. This concept is useful, since it can explain both membership trends and labor union 'power' , as well as evaluate labor union policy from various viewpoints, especially within the context of economic developments (Kelly 1998:10). Even though the data analyzed in this study spans only 28 years, and the relevant changes in the paper industry and national economy can only be discussed cursorily, it provides a very important background.

Two classics that should be noted are Mancur Olson's Logic of Collective Action (1971) and Walter Korpi's theory of power resources (1978; 1985; Korpi and Shalev 1979). The former tries to explain why there is collective action, given the free-rider problem and other issues. For the present project, the idea of selective incentives is highly relevant, because the union density literature and e.g., Kjellberg (2006) indicates that the institution of union-managed unemployment funds ('Ghent-system') is crucial for high union densities, and this system is a very good example of a selective incentive. Korpi's work has been very influential in describing the actions of actors in the Swedish labor market system as a kind of strategic trade between labor union federations and employers' federations, nursed by the aid of the state, as a way to analyze the development of the welfare state. Furthermore, he points to many aspects of the labor union movement that authors above and below also mention. One crucial issue which guides Korpi's (1978) work is the notion of social democracy in Sweden and the opposition to it by Communists; to analyze the development of Swedish 'welfare capitalism', he studies the Swedish metalworkers' union and its policies and internal issues. Although the Finnish welfare state is quite similar to the Swedish one, and Korpi's work apparently has been standard reading for labor unionists in Finland, it may be that outside Scandinavia this theoretical framework has less application. According to Lilja and Tainio (1996:177), the Finnish labor movement did not have a similar key position as in Sweden and Denmark, due to the 'class coalition of the business community and the farmers.' Some key aspects of the power resources theory are difficult to operationalize, such as the scope and

exchangeability of power resources (Korpi 1985:34-35), and in other works using this theory these issues are also not easily resolved (O'Connor and Olsen 1998). While Korpi (1978) is especially rich in empirical detail, the power resources theory is seen as less relevant for the present study as the focus is on the representative function of the union rather than the power of the union to achieve 'outside' goals (i.e., regarding the welfare state).

One important source of industrial relations literature is Wolfgang Streeck's work. It seems that many of the problems facing the Finnish paper industry in the present are similar to those Streeck studied in the car manufacturing industry in the 1980s (Streeck 1992). He focuses on the interaction between union activity and industrial/economic performance, and he states that he aims to develop 'an institutional theory of the supply side of advanced capitalist economies' (Streeck 1992:vii). In this work especially, the idea of positive union contributions is valuable, i.e., that union involvement in labor processes can produce both efficiency and commitment in production as well as stable labor relations and potentially low wage drift. According to Streeck, this result comes from certain shared interests between labor and capital. In Streeck (1988) the role of technology in industrial relations is discussed and e.g., the contribution by Greg Bamber in this work (1988:216) emphasizes that the discussion of unions and new technology should take into account the 'historical, economic, political and social context of industrial relations.' In a similar vein, Kari Lilja's work on the Finnish National Business System is not strictly industrial relations literature, but is quite related and has clarified many aspects of the Finnish economy, especially the paper industry (e.g., Lilja 2005 and 1997). These analyses combine institutional actor-based network theory and systematic empirical evidence on the 'typical firm' – which for Finland used to be a paper mill. The value of Lilja's work for the understanding of the paper industry and the role of its labor union is immense.

The union density literature and the somewhat related 'Variety of Capitalism' literature (Crouch 2003) often make mention of the importance of institutional arrangements and also try to quantify these. This is a hazardous task, as legal institutions are not easily comparable, apart from some general characteristics. One attempt at incorporating legal elements in industrial relations research is the German scholar Walther Müller-Jentsch. He (1997:18-21) discusses six elements of industrial relations, which are based on the German case. In the first place are industrial relations, an intermediate sphere of interest regulation. This concerns both the relations between management and personnel and relations between employers' organizations and labor unions. Also from these interactions treaties, norms and institutions are born. The second aspect of industrial relations is the content of these

relations. They are, at the same time, social, economic, political and cultural relations. Thus, when assessing labor union representativeness, these aspects should be taken into account, which is not necessarily easily done on a quantitative basis (cf. Kelly 1998:23; Vernon 2006; Waddington 2005:117-123). The third aspect of industrial relations is the formal system of labor relations, consisting of labor legislation. This aspect will be treated more extensively in the section on legal representativeness, but Müller-Jentsch explicitly refers to collective agreements, which are agreements *for* collectives and *of* collectives, though they are not necessarily made *by* collectives (Müller-Jentsch 1997:19). Related to this aspect is the fourth element, the 'level' or 'scope' of the collective agreements. These can be unilateral, bilateral or multilateral. These can be further specified by formal and informal collective agreements. Formal agreements are commonly paper agreements, while informal agreements may be unwritten norms concerning work. Furthermore agreements can be subdivided in substantial and procedural agreements. The former focuses on the content, e.g., working hours and wage increases, while the latter focuses for example on co-decision, conflict resolution and mediation. As already seen from the definition of industrial relations, the fifth element is the 'level' of the relations. Commonly one speaks of the micro- or company level, meso- or branch-level and macro-level. Finally, the sixth element is the conflict intensity and with it, conflict regulation. Congenially speaking, this element of industrial relations deals with strikes and labor conflict regulation. Thus, though Müller-Jentsch perhaps employs a fairly legalistic view of industrial relations as the background against which industrial relations 'happen', these particular aspects seem well-suited for the Finnish case, in which many aspects of industrial relations are regulated by agreement or law. Whatever theoretical framework is then superimposed on the basic setting is the researcher's choice, but in any case it has to be able to explain the actions of actors within that essential setting.

On the basis of the literature presented above, representativeness can then be described as the collective factors which determine the labor union's position in the system of industrial relations and broader society, which enable it to fulfill its functions. There are four dimensions of representativeness, which will be described below: external, internal, legal and reputation representativeness. Following Streeck (1992), Lilja (2005) and Bamber (1988) also technological aspects will be taken into account. Taken together, these four dimensions, analyzed over a given time-period, give an extensive view of the representative capabilities of the union. Changes in representativeness ultimately should reflect changes in labor union's organizational and strategic capabilities.

3.1 External representativeness

Within the context of industrial relations theory, there are too many diverse strands to discuss here in detail. The traditional starting point of IR theory, Dunlop's (1958) systems theory, focuses squarely on the norms and rules of the industrial relations system. Dunlop's core idea is that actors, and thus the industrial relations system, gravitate towards stability, implying that conflict is not a 'structural force'. This view has been extensively criticized for its inability to explain change within (the structure of) industrial relations. Indeed, Hyman's (1989) 'Political Economy of Industrial Relations', in which a Marxist view of class conflict dominates, can be seen as primarily a reaction on the shortcomings of Dunlop's theory. Hyman states that worker interests are part of a process in which the labor union plays an important part. Hyman's core idea is that the *actual* industrial relations, since they are part of a continuous conflict between labor and capital, cannot be formalized in rules. For the concept of external representativeness, this means that outside the formal logic of industrial relations (actors, negotiations, institutions), there are factors that influence this representativeness, such as strikes and political relations. But in Hyman (1997b), he mentions the levels, structures and processes of interest representation as important to the functioning of a labor union in industrial relations. To some extent, the literature discussing Varieties of Capitalism (VaC) – for example, Crouch (2003) and Crouch and Streeck (2000) – also discuss institutions and union density, but it ties the setup of industrial relations to the performance of the economy as a whole, i.e., the aim of this body of research is to find out about the most efficient organization of the (political) economy. In this sense, VaC-literature fits with external representativeness but since the aim of a union is most often local or sectorally oriented, it is perhaps less relevant. On the other hand, the VaC literature gives some explanation for the fact that Finland has done quite well economically 'despite' strong union influence (Crouch 2003:281).

When discussing the concept of external representativeness, it is useful to consider what Müller-Jentsch (1997:46) calls industrial democracy. This can be perceived as the participation of 'labor' in processes in which it 'normally' would not be involved. In these processes, employee representatives are thus allowed to contribute their point of view to the practice of business, whether at the company level or at the national level (what Hyman 1997b:316 calls the processes of interest representation). Heery and Salomon (2000:157) recall the types of unions Richard Hyman has distilled from the behaviour of unions. These 'union identities' are: the guild, the friendly society, company union, social partner and social movement. Hyman (2001) connects this typology to the 'eternal triangle' between market, society and class. For the understanding of the concept of industrial democracy, it is then instructive to map the changes from unions as anti-capitalist entities (Hyman 2001:3; Müller-Jentsch 1997:21; Müller-

Jentsch 1999) to 'company union' or 'social partner' and 'social movement' union (Hyman 2001:4; Heery and Salomon 2000:157; Müller-Jentsch 1997:10; Traxler 1999:72-75). These typologies rarely occur in 'pure' form; labor unions frequently have aspects of many typologies. External representativeness is the representativeness of the labor union towards society, market and class, as Hyman (2001:3) puts it. Following the elements of industrial relations described above, external representativeness is then determined by the involvement of the labor union at a certain level (company, sector or national/European), its social, economic, political and cultural relations and the formal and informal agreements and institutions. Lévesque and Murray (2002 and 2010) note that the external solidarity of the union, i.e., involvement with other actors is an important power resource. The elements of formal labor relations, collective agreements and conflict regulations are part of legal representativeness. Müller-Jentsch states 'Das [...] Trapez schliesst jenes Organisations- und Institutionengeflecht ein, das sich im 20. Jahrhundert zwischen Lohnarbeit und Kapital geschoben had und zur Entschärfung und Kanalisierung der Konflikte zwischen beiden Seiten wesentlich beitrug.' (Müller-Jentsch 1997:22-23). He refers to a figure sketching the organizational and institutional system of relations between labor and capital but in general one can say that a function of industrial relations is the defusion and channeling of conflicts between labor and capital, which should be kept in mind when analyzing changes in collective agreements or other sources of industrial relations regulations.

Summarizing, external representativeness can be expressed through the position of the labor union in the industrial relations system and the economy. This includes participation in deliberative bodies, the acknowledgement of the status of the union as a serious partner to industrial relations and interaction with the economy, all of which are path-dependent. This means that there is an institute of collective bargaining and collective agreements. Also, as in the Finnish and Swedish cases, the union management of unemployment funds belongs to the external representativeness.

3.2 Internal representativeness

Internal representativeness refers to the processes, norms and rules that produce the positions the labor union puts forward in interaction with other actors in the system of industrial relations. On a first level of analysis, we can distinguish different categories of labor unions, i.e., territorial unions, sectoral/inter-sectoral unions (*Industriegewerkschaft*), craft unions and political-confessional labor unions (Müller-Jentsch 1997:106; Fiorito and Jarley 2008). Although labor unions may exhibit elements of all four categories, the most common organizational principle is that labor unions are either organized by

(industrial) sector or craft, which is sometimes amended by a political or confessional dimension. Therefore, the main question concerning the organizational category of labor union is: what or whom does the labor union represent? Hyman (1997a) suggest a framework to answer this question, also including the wider scope of union goals (used in Jonker-Hoffrén 2011a). The two objects of this question (what and whom) may be dissimilar. From the point of the labor union itself, this is a relevant question, since the particular unit of representation may be in decline (for example, the total number of metalworkers, total number of Catholic workers, or the metal industry in general). Furthermore, Lévesque and Murray (2010:337) emphasize internal solidarity as an important power resource for the union, which includes both collective identity and internal democracy and is strongly related to the political-confessional dimension of labor unions.

Returning once more to Hyman's triangle of the 'geometry of industrial relations' (Hyman 2001:4), it can be remarked that within the division between sectoral, vocational, territorial and political-confessional unions, there exists a multitude of configurations related to class, society and market, also related to what Lévesque and Murray (2002) call *external solidarity*. Therefore, to study the internal representativeness of labor unions, it is necessary to be aware of the path-dependency and history of the labor union. In the Finnish case, this means that one has to be sensitive to the historical relation between Social Democrats and (former) Communists.

Müller-Jentsch (1997:119) also encourages scientists to investigate labor unions for what they are: associations with members. This relates strongly to the union density literature, but from another perspective. For each union it is important to analyze the developments in membership density, but equally important is the question: who are these members and who actually becomes a member of this particular union. Based on the idea of selective incentives, the Ghent system is an important factor here, as is professional identity (Lilja et al. 1992) The membership of a labor union may consist, according to Hyman (1997a), of an elite, core, periphery and excluded category. The 'elite' is the group of workers which has high skill levels accommodating a certain demand, which leads to quite secure job positions, while the 'core' consists of workers who must rely on organizing to further their interests. With the decline of 'traditional' industries, the weight of the 'core' has declined, and in this light labor unions must focus on previously less represented groups (the 'periphery' and 'excluded' categories), such as women, part-time workers and foreigners. The analysis of union documents, demography and union history helps map changes in the constituency of the union, and the emphasis in policy on certain groups (Jonker-Hoffrén 2011a). The literature on union revitalization also focuses on these

changes, seeing possibilities in organizational restructuring, political action, cooperation and international links (e.g., Frege and Kelly 2003; Baccaro et al. 2003; Heery et al. 2003). The analysis of internal democracy as a part of internal representativeness is also relevant here. Müller-Jentsch distinguishes two dimensions, the first being the formal organizational structure and the rights and duties as laid down in the founding documents of the labor union. The second dimension is the analysis of factual organizational processes and structures (Müller-Jentsch 1997:142). The first dimension is taken into account as a background; but for the present study, the second dimension is more interesting, as it refers to the diverse internal workings of the union. Müller-Jentsch (1997) furthermore notes that in the assessment of internal democracy of a labor union attention should be paid to 'voice' (see, also, Hirschman 1970). This may be the voice of labor union members against the labor union officials, through such phenomena as supporting 'dissident' candidates for union functions, dissent in decision-making procedures, refusal to contribute higher union dues, wildcat strikes, and finally the formation of splinter unions (internal solidarity as per Lévesque and Murray 2002). Dissent and protest within the union is good for internal democracy – if channeled – but it is in some ways detrimental to internal representativeness, since they disturb the image that the labor union is speaking with one voice on behalf of its members. Nevertheless, especially from the perspective of 'diversity management' (Wrench 2004; Green, Kirton and Wrench 2005), the extent of internal representation of union members through committees, the general assembly and other bodies is a vital part of internal representativeness.

Summarizing, internal representativeness focuses on aspects of labor unions that relate to the function of the union as an association with members, such as presented by Müller-Jentsch (1997:148-149). These include the formal organization of the union, rules of internal democracy and how members are represented at the union. The analysis of internal representativeness can be seen as applied organizational sociology.

3.3 Legal Representativeness

The legal dimension of representativeness is to some extent the most straightforward one, but at the same time it is the dimension that along with the external representativeness dimension shows the most intra-national variation. On the other hand, the European Union has attempted to create a level-playing field in some respects, and certain UN and ILO-treaties also provide a legal source of labor union representativeness.

Following Rogowski (1999) four dimensions of labor legislation can be distinguished that are important for labor union representativeness: the collective bargaining legislation, industrial conflict legislation, corporate law and co-decision law. Of these, corporate law is not discussed in a wider sense than the rights and duties shop stewards have in this respect, which coincides largely with co-decision law, also because Finnish law does not know work councils. The 'political birth' of important legislation will not be discussed below, because though interesting, it is a different field of science. Lobbying for certain pieces of legislation will be nonetheless mentioned if relevant. Only collective agreements will be discussed in more detail.

3.3.1 Collective bargaining legislation

In industrial relations, the legislation most relevant for labor unions is probably collective bargaining legislation, as this legislation determines the scope and validity of the contracts the labor unions conclude with the representatives of employers (Hyman 1997b:312-314). In particular, the *erga omnes* clause is decisive for the strength of legal representativeness, as it allows labor unions and other labor market partners to cover the whole sector represented by a certain collective bargaining process, even though the external representativeness of the labor union may be relatively low. Collective agreements may be comprehensive or focus on wage and working time issues only, or somewhere in-between. Within the context of economic sociology, collective bargaining legislation is a large part of the social formation of labor markets (Aspers 2011)

According to Fukuyama (1995:234-235), the specificity of job descriptions on labor contracts and collective agreements is an indicator of trust. The legal content serves as a replacement of trust (Fukuyama 1995:26). The duration of the collective agreement is, in a sense, indicative of legal representative as well as reputational representativeness, because it makes the industrial relations in a specific sector stable as far as (at least) wage developments go. Obviously the period that is covered by the collective agreement makes a difference as well; in a period with strong economic growth, the labor unions may try to make the duration of the agreement relatively short, in order to adapt to changes in the economy and reap its rewards. By contrast, in an economic downturn the labor union may try to extend the duration of the collective agreement as far as possible in order to safeguard, to some extent, the purchasing power of its members. Another example to mitigate changes in the economic climate is the inclusion of inflation forecasts in collective bargaining, whereby a union targets the *real* rather than

nominal wage increases. From the point of view of the union, a collective agreement may be also very important in relation to ideological concerns, e.g., the quest for equality among workers within a certain industry.

3.3.2 Industrial conflict legislation

In the first place, one can make a distinction between legal and illegal (these include 'wild-cat strikes'). The former are regulated, and if the appropriate procedures are followed, these are acceptable. Conditions frequently include a certain warning time and indication of locations where the strike will happen as well as the extent of the strike. Also, the duration of the strike should frequently be announced beforehand. When the required procedures are followed, the legal representativeness of using strikes as a pressure method is increased. However, wildcat strikes are a different matter. These are always illegal and not necessarily supported by the union itself, though the striking employees may be union members. These may represent a faction within a union that does not agree with the policies the labor union advocates. Wild-cat strikes harm the legal representativeness of the labor union, since they reject the formal rules of industrial action. Illegal strikes on the other hand are subject to *post ante* judicial review, and thus in the judicial process an object of struggle. In the section on reputational representativeness, strikes as an action will be dealt with in more detail.

Another distinction on the legal dimension of strikes is primary and secondary industrial action. The former is the 'regular strike', while the latter may be a sympathy strike by a labor union of another sector or country, or a strike aimed at certain policies not necessarily connected to collective bargaining (a 'political strike', see Clauwaert 2002 and Warneck 2007). Currently, at the European level no right to strike is included in the Treaty but is nevertheless included in article 28 of the Charter of Fundamental Rights of the European Union (signed and proclaimed in Nice 2000); while at the national level, strikes are frequently regulated by law with sympathy strikes occasionally being allowed. The extent of the right to industrial action (including formal and informal rights to primary and secondary industrial action) determines the strength of the legal representativeness of the labor union. In Finland, this aspect is relatively simple: through the peace clause included within the collective agreements, a strike is illegal for the duration of the agreement unless it constitutes a sympathy or political strike. The Finnish Labor Court is quite strict in judging strikes, emphasizing the duty of the labor union and/or the shop steward in properly observing the collective agreement, i.e., the union is also responsible for its share of maintaining industrial peace. The process of strikes is also highly formalized in Finland: the

intention to strike has to be formally brought to the attention of the National Conciliator, including location(s), duration and exceptions (e.g., personnel needed for the safety of the location). This process is frequently used during collective bargaining negotiations. Strikes that happen outside this formalized process – in particular, if they concern the provisions of the collective agreement – are very often judged to be illegal strikes.

A small, but important, detail is whether the right to strike represents an individual right or a collective right. This matters a great deal to the organization of strikes and their legality: if the right to strike is a collective right, then only representative actors can organize strikes (for which there may be varying procedures, such as strike ballots). However, if striking is an individual right, basically anyone can join a strike, such as in France (Clauwaert 2002).

3.3.3 Co-decision law

In many countries, the right to co-decision on part of the employees exists to some extent. Co-decision law usually determines the scope and rights of employee co-decision in companies, such as the right to information and rules of process. Co-decision can be involved through work councils, shop stewards or other representative bodies. For example, Germany has a 'dual-channel' system of worker representation (work councils and union representation), while the Netherlands and France have different kinds of work councils with both union and non-union representation. Finland, like Great Britain, has a system of shop stewards. The birth of co-decision procedures has varied widely in Europe, with Finland being relatively late in drawing this kind of legislation (the original law on co-decision in companies dates from 1978, revised in 2007). Because co-decision law is highly specific to the country under scrutiny, the specific Finnish case will be discussed in Chapter 6 below.

A relatively new institution of employee co-decision is the European Work Council (EWC). According to the Directive concerned, the goal is to achieve better worker representation in multi-national corporations. The literature on the EWC is very broad, but the interesting point is that the EWC is not necessarily designed as a vehicle for transnational labor union representation. Furthermore, the Directive on the EWC was constructed through the official Social Dialogue method at the EU level, where representatives of labor and capital have an institutionalized process of deliberation. This Social Dialogue in itself is also the subject of much research. The EWC and the Social Dialogue will not be discussed further here due to space restraints and relatively little relevance to the Finnish Paper

Workers' Union, though Stora Enso, M-Real and UPM-Kymmene all have an EWC.

Summarizing, legal representativeness of the union lies in the legal rights and instruments a union can employ or that benefit the union. These include collective bargaining legislation, co-decision law and industrial conflict legislation. Because of the democratic process, the valid legislation is obviously highly path-dependent and in a way codifies the balance between labor and capital as the result of a struggle over issues at a certain point (see also Fligstein 2001:34, 40). It must be emphasized that therefore the concern of legal representativeness is less the judicial analysis of relevant legal texts than the relevant legal texts as an *outcome* of processes with relevance for, in this case, labor unions (akin to the study of policy outcomes in political science. See, e.g., Deakin and Njoya 2008 for an application to industrial relations studies). Also, the next variety of representativeness is path-dependent, though in a different manner.

3.4 Reputational representativeness

The reputational representativeness of a union is difficult to quantify or qualify. In the extreme, this representativeness can come from the violence of union members, sabotage and the like. However, in a more normal setting it mostly relates to strike incidence, but also cooperation with other entities. The legal dimension of industrial conflict law was discussed above, but in this section it is important to consider the strike as an action of worker resistance. Statistics on industrial conflict usually mention three separate indicators of strikes: the absolute number of strikes, number of workers involved and total working days/hours lost. On the basis of these, the strike intensity measure can be constructed, which shows the average duration of a strike. This measure is used in section 5.4. below.

The importance of strike intensity (in relation to strike law and other institutional settings) can be seen in the example of France: it has the lowest union density of Europe and labor unions are not seen to have much 'power' – but still, through a strike, unions have the ability to halt large sections of the economy, especially those reliant on transport (Zimmern 2003). Thus, though they do not have 'power' in the sense of high membership figures or a strong institutional setting, but they have sufficient appeal to draw many people to strike.

The core thought behind this 'negative' union reputational representativeness is that unions have instruments to their disposition to create chaos or impose economic costs on society and (at least) the

employers. This is an obvious example of the potential use of power resources (Korpi and Shalev 1979:180-183).

A more positive aspect of reputational representativeness can be seen in community unionism, where unions cooperate with local organizations to achieve a common goal (e.g., Wills 2001 and Black 2005). This strand of thinking fits with Hyman's (1997a and 2001) and is related to the union revitalization literature (Frege and Kelly 2003) views on the position of the union in the 'geometry of unionism' in relation to the union's objectives. Community unionism aims to use union power to achieve certain common goods – usually locally – which by this logic also improves the standing of the union in the community and (hopefully) also lead to a stronger position *vis-à-vis* the employer.
Potentially, the standing of a union in public opinion is also of relevance for their reputational representativeness. This is an issue which must be expanded elsewhere.

Summarizing, reputational representativeness is a vague concept which can nonetheless be somewhat specified. Important are strikes as an action and cooperation with other organizations: both add to the reputation of the union – either positively or negatively.

Conclusion

The theoretical framework presented here consists of four elements of representativeness. External, internal, legal and reputational representativeness are derived from various strands of the industrial relations literature, but focus the organizational and strategic capabilities of the union on its function as a representative of its members. Also, the role of technology is important but does not commonly exert direct control over the union. On the other hand, if skills are seen as privy to technology, then the union may be seen as representing that specific aspect of technology – the supply of human knowledge as possessed by its members. As Figure 3.1 shows, there is a certain degree of overlap between elements; e.g., external representativeness as measured by union density depends both on internal representativeness (the members of the union and why they become members) and on legal representativeness (the legal framework that lends the union its position, e.g., the union-managed unemployment fund). Similarly, the reputational representativeness of a union depends on the legal representativeness (strike law), external representativeness (the union as a representative of all its members) and internal representativeness (how the contested issues are voiced from the internal union to external union). The overlap of the different dimension of representativeness is an obvious result of

the labor union being a social actor. As the overlaps indicate, there is interaction between the different dimensions, and no attempt is made on this abstract scale to specifically identify causal mechanisms – these depend on the issue in question. In the case of the Finnish Paper Workers' Union, in a few cases the interaction between dimensions can be made explicit, as will be shown below in Chapter 5.

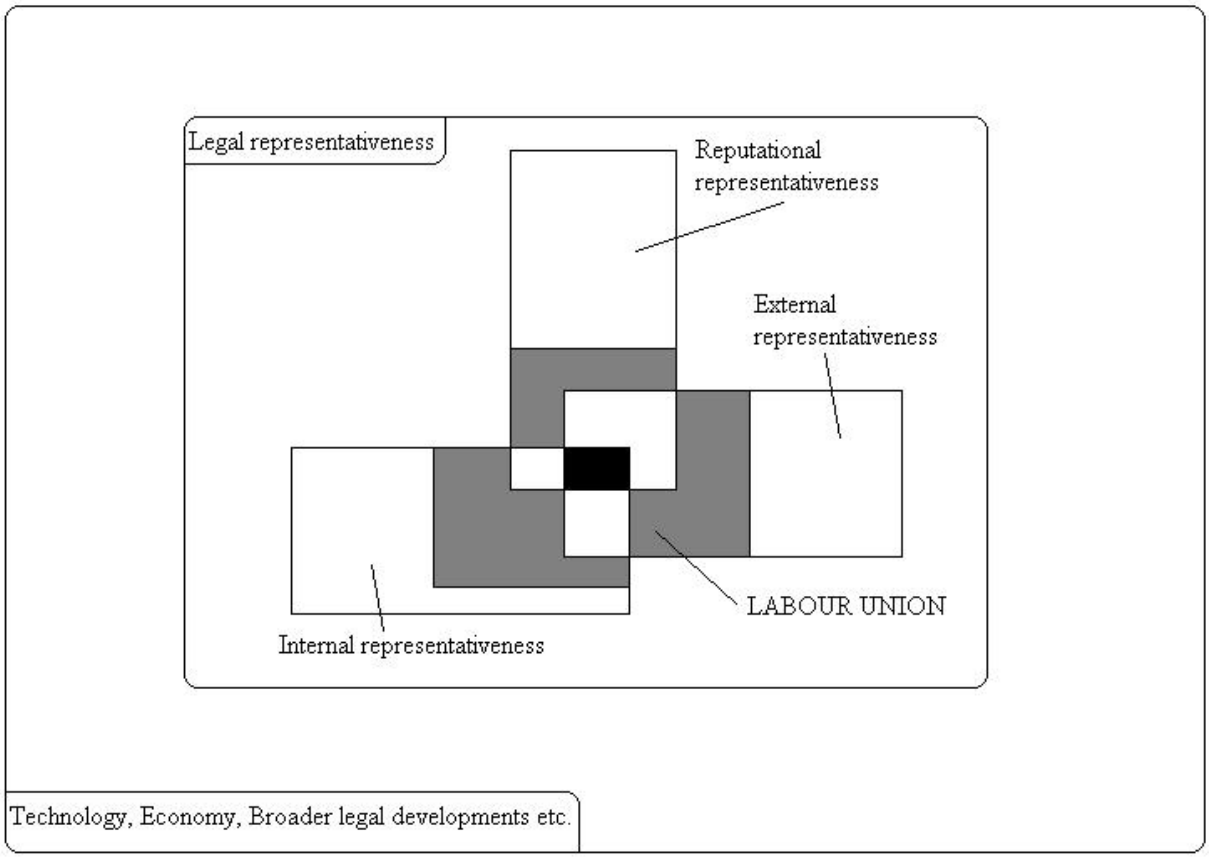

Figure 3.1. The dimensions of representativeness

4. Change in the Finnish paper industry

The Finnish paper industry has gone through many changes since the 1980s, especially recently. Lilja (2005) and Sengenberger (2002) give important background information on the general development of the Finnish economy and the 'typical Finnish firm.' To understand the position of the labor union, the change of the paper industry has to be shown briefly.

The present value added by the paper industry to the national economy is slightly less than 2 percent (in 2009, METLA 2010:380-384). In the 1980s and up to 2000, this share was somewhat higher, reachingo 5% in 1995. The sector as a whole accounts for almost 15% of (net) exports (in 2007), which has in

the past been much higher. In short, the Finnish paper industry has been a significant component in the Finnish domestic economy with a view to export activity. The 1980s can be seen as a period of domestic consolidation, while the period from the 1990s onwards can be seen as the global expansion phase. In the latter half of the 1990s, the two major Finnish paper industry firms were born through mergers: Stora Enso and UPM-Kymmene. Though this introduction to the dissertation cannot do justice to all the changes in specific companies, on a certain level of abstraction there are developments in the paper industry which are relevant for the labor union. In Chapter 6, some more specific issues are discussed – such as the role of technology, capital tax and European union legislation affecting the paper industry – but here the primary concern is with the employment, labor productivity and globalization of the industry. Also, the impact of changing markets is discussed here. The standpoint of union and employers on environmental questions, however interesting, are explicitly left out of this study, though some related issues are mentioned in the section on technological change below. They can be connected to further research with regard to the structural change towards the bio-economy (see also e.g., Collins 1998).

4.1 Employment in the Finnish paper industry and macro-economic background

Recently, the decrease in (blue-collar) employment in the Finnish paper industry seems to have been rapidly accelerating (METLA 2011a; METLA 2011b). Based on statistics from the Finnish Forest Research Institute (METLA 2010:252) the development is shown in figure 4.1:

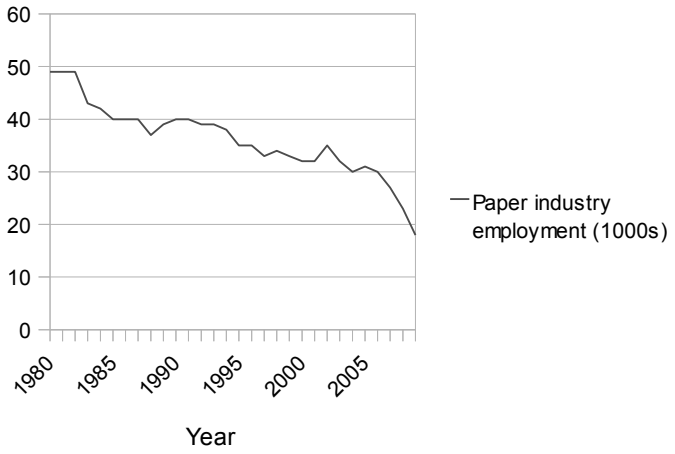

Figure 4.1. Employment in the Finnish paper industry, 1980-2009. Source: METLA (2010)

The core reason for the development since 2006 is, of course, the closing of a significant number of

paper and pulp mills, such as in Voikkaa, Kemijärvi, Summa, Kaskinen and Kajaani. A recent decision by UPM-Kymmene led to the closure of the Myllykoski mill by the end of 2011, which affects an even greater number of employees than in Voikkaa (Jonker-Hoffrén 2011b; Melin and Mamia 2010).

Though previously many redundancies have been channeled into the so-called unemployment pathway to retirement (colloquially 'eläkeputki' in Finnish; Työeläke.fi 2011), this has not been possible as of late due to changes in the law. The Voikkaa case in 2006 was the first time a paper mill was closed due to economic circumstances rather than bankruptcy (like the Lievestuore pulp mill in 1985 (Kujala 2006:398)). Therefore, it is not surprising that since 2006 the unemployment rate in the pulp and paper industry has sharply increased to roughly 9 percent, which approaches the level of 10 percent last seen in the industry during the Finnish recession of the 1990s. The employment of the Finnish paper industry has also seen changes in terms of male and female employment. Though, as in the 1980s, female employment in the pulp and paper sector is still roughly one-third of the employment concerned, the absolute number of female employees has fallen more rapidly initially because apparently the jobs female employees occupied disappeared with the automation of processes, while in administrative jobs they were retained (METLA 2011b:251). Furthermore, many of the cleaning jobs in the paper industry – which are also affected by outsourcing – are occupied by women (Jonker 2009; Jonker-Hoffrén 2011). In short, the Finnish paper industry is a very male-dominated industry.

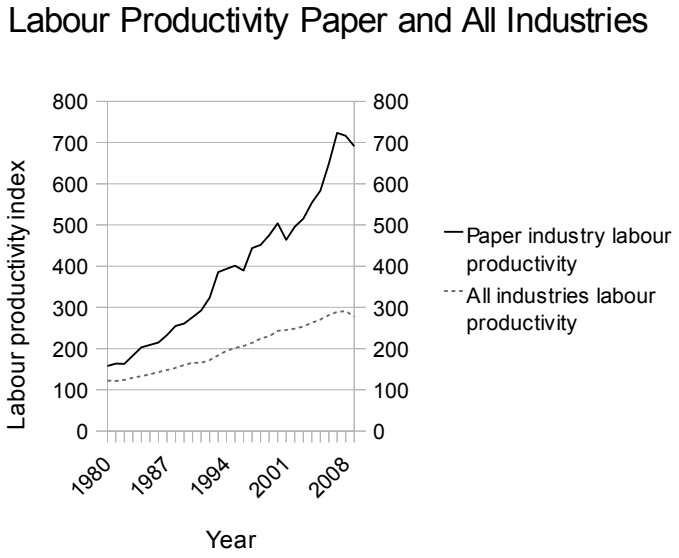

Figure 4.2 Labor productivity in the Finnish paper industry and other industries, 1980-2009. Source: (METLA 2010)

It is interesting to note that from the 1990s the days actually worked have halved by 2009 (METLA

2010:251). In a sense, this is compatible with the union's wishes to reduce working hours. But combined with the growth in labor productivity and the actual decline of employment in the sector, the scale of process innovation that has been achieved in the paper industry becomes visible. Figure 4.2 shows the developments for the paper industries and the category 'all industries' (METLA 2010:387). In the period 1980-2009, both production of pulp and paper have grown significantly, though since 2007 the production of both categories seems to be on the decline (METLA 2010:322). Labor productivity is measured as production divided by size of the labor force, this meaning that with a declining workforce the labor productivity would still grow if production is constant. Nevertheless, in the paper industry employment has declined, production has increased *and* days actual worked have decreased – which together probably explains the large difference in labor productivity between the paper industry and 'all industries.' On the other hand, as Edquist et al (2001:95) show for the Swedish pulp and paper industry, investments in process innovation usually lead to a decline of employment (unless the market is particularly good). This indicates that the high labor productivity of the Finnish paper workers also noted elsewhere (Working Group Report 2006) is potentially quite detrimental to employment in the sector – domestically at least. Employment is of course also related to (new) investments, which is one of the issues the Finnish paper union has been demanding for years. Unfortunately, nowadays most investments occur abroad. Jonker (2009) mistakenly states that the labor union is resisting new investments; this interpretation came from a less complete understanding of the issues that take place at the local level. The union is not against investments, but aims to mediate their potential negative impact to employment. This is one of the functions of former §11 of the collective agreements prior to 2008. In fact, in terms of labor productivity and wage increases, the members of the union have obviously benefited greatly from new investments. The questionnaire sent to senior shop stewards nearly unanimously presents the senior shop stewards' view that employers did not see §11 as a barrier to new investments. The employers nonetheless see this issue differently:

4.1.1 A short detour in macro-economic aspects of the Finnish economy

Before continuing with the issue of investments of the Finnish paper industry, it is useful to take a look at some common macro-economic indicators and understand the dynamics of the Finnish economy in relation to the paper industry. It should be kept in mind that prior to the euro, the Finnish export industries and their unions (in particular the forest industries) have time and again pushed for devaluation of the Finnish *markka* with respect to achieving temporary improvements in Finland's competitiveness (Pekkarinen and Vartiainen 1993). Here, the focus is on the so-called Phillips curve

and, for the euro period, also the movements of inflation and the interest rates.

Figures 4.3 and 4.5 show the Phillips curves for 'Finland: all sectors' and the Finnish paper industry. In macro-economics, the Phillips curve has been an issue of debate for a long time, so no attempt is made to discuss the potential trade-off between unemployment and inflation in the Finnish case (see Levačić and Rebmann 1982 for a thorough discussion of the Phillips-curve in macro-economics). The idea of the Phillips-curve is that there may be some kind of trade-off between unemployment and inflation, in which a higher level of inflation could lead to a permanently lower level of unemployment (Levacic and Rebmann 1982:342). The experiences of the 1970s have contradicted this position, and Milton Friedman (1968), for example, has noted that the change of *real* wages is more important than *money* wages; this change in real wages can typically be seen in collective agreements, where the *expectation* of inflation is taken into account in wage increases. As Krugman (2012) explains: '[The] inflation rate would fall in the face of high unemployment — and expected inflation would eventually fall too, so that when unemployment fell again inflation would remain lower than it was pre-recession (until the next boom).' This produces the 'clockwise spirals' that Krugman refers to, and which can be seen for the two first periods1980-1990 and 1991-2000.

The division into three periods as done here may look arbitrary but on closer scrutiny is not. As Honkapohja et al (2009:14) show, Finland went from the top of a boom via a smooth period to overheating in 1980-1990. The period 1991-2000 features the recession of the early 1990s and the restoration of growth (and EU membership), while 2001-2011 spans the period of continued growth for the Finnish economy and the onset of the current financial crisis. As can be seen in Figure 4.3, the early part of the 1980s is a gradual disinflation period for Finland (see also Honkapohja et al 2009:10). On the other hand, the period 1991-2000 can be characterized as an era of great unemployment increases, which bottom out only during the 2001-2011 period at around 8 percent.

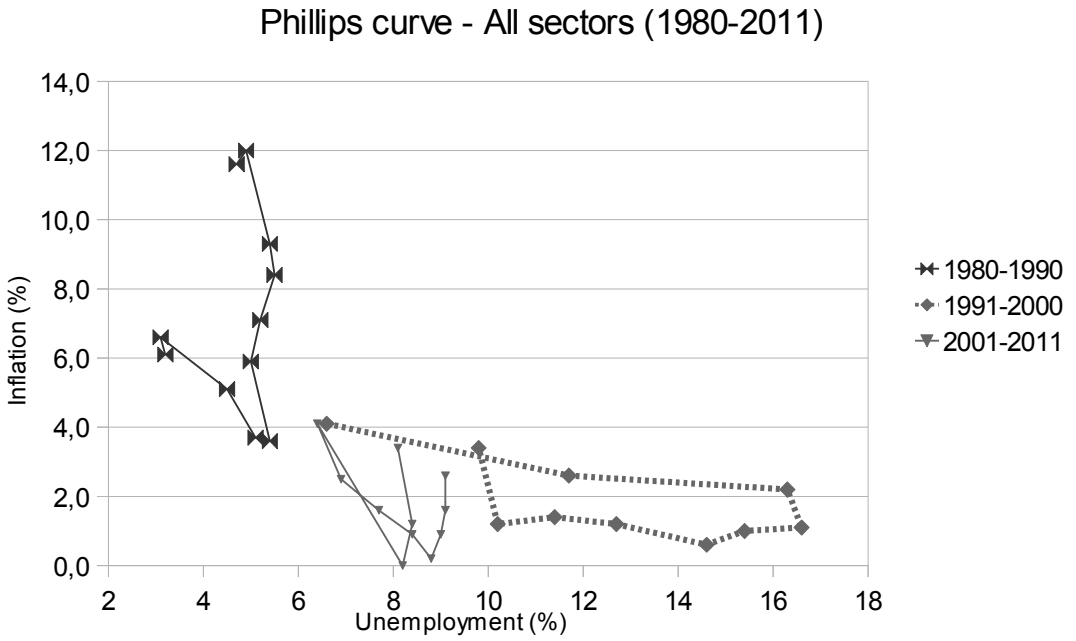

Figure 4.3. Phillips curve – all sectors, 1980-2011. Source: METLA (2011b) and Statistics Finland (2012)

Inflation in the latter periods is modest, and quite possibly also related to Finnish entry into the European Monetary Union and the strict inflation criteria that come with it. The period 2001-2011 does appear to be different than the two other periods, since it features neither great changes in inflation or in unemployment. From a public policy perspective, it should be at least worrying that unemployment in the current period seems to gravitate around 8%; even considering the extent of the Finnish welfare-state, this high level should be seen as unacceptable, even if only from a public finance perspective. Also, inflation is apparently on the rise; at least it is higher than the European Central Bank aims for. Figure 4.4 provides an overview of interest rate developments and inflation in Finland during the current euro period.

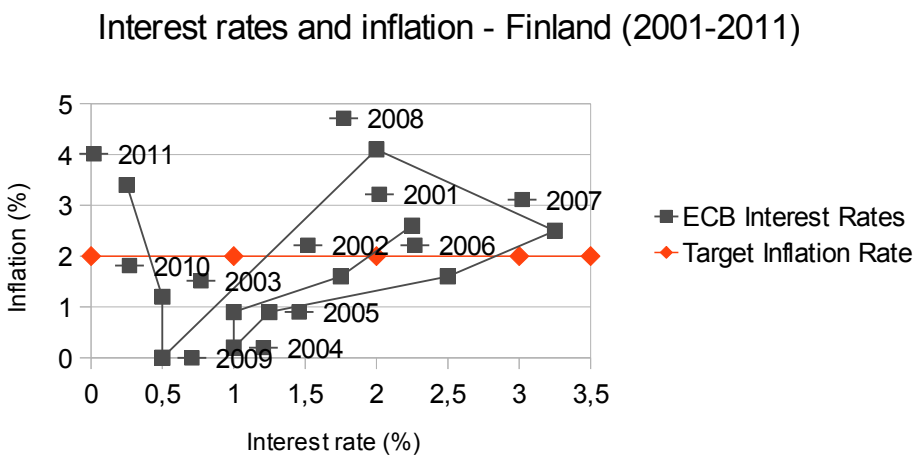

Figure 4.4. Interest rates and inflation – Finland, 2001-2011. Source: ECB (2012) and Statistics Finland (2012)

As can be seen, since the onset of the financial crisis in 2007, the interest rate as set by the ECB has plunged to very low levels, ostensibly to promote growth. However, this presents a potential problem for Finland, as the Finnish economy has continued to grow after the years 2008 and 2009, which were quite disastrous (Statistics Finland 2012). It is of course uncertain what course the Finnish (and world) economy will take, but in relation to the inflationary pressure to Finland after 2009, the low interest rate is potentially a problem. However, the ECB cannot raise rates in the view of the situation of some of the countries in Southern Europe, for which an interest rate hike would mean any potential for growth would be suppressed or even lead to deflation (so-called 'internal devaluation'; for an extensive discussion of this reasoning, see De Grauwe 2000:177-215). For the Finnish paper industry, nonetheless, the current interest rate could give impetus to new investments (were it not for weak demand for the industry's products).

When we look at Figure 4.5 for the paper industry, it can be seen that the first two periods have the 'expected' clockwise spiral, though in the paper industry there was a much more pronounced effect of increasing unemployment during the 'period of gradual disinflation.' The period 1991-2000 shows a similar pattern, and in the economic recession of the 1990s the unemployment rate predictably rose significantly, while inflation remained relatively low. The final period, 2001-2011, is perhaps more interesting: at least for the paper industry it shows a curious development. Even though this is the period that still shows record profits (1997-2004; see METLA 2011b:336), there is nonetheless a trend towards greater unemployment. This is not so difficult to understand when reviewing the closures of

paper mills all over Finland since 2006 and the weak profitability of the industry from 2005 until at least 2009. As inflation seems to be slightly on the rise, it is not so surprising to see that, like in 1992 and 1993, there is a trend to wage deflation because of moderate nominal wage increases. The difference between then and now, though Finland experienced a banking crisis not entirely unlike the one currently in the US and Europe, was that this time around prospects for growth through external demand seem rather subdued.

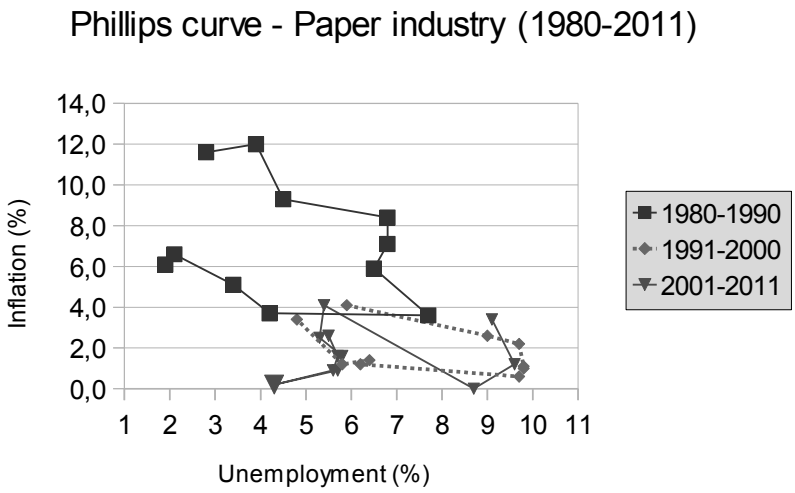

Figure 4.5. Phillips curve – Paper industry, 1980-2011. Source: METLA (2011b) and Statistics Finland (2012)

4.2 Investments

As mentioned already above, the Finnish paper industry has benefited to a large extent from the possibilities that globalization offers. This has several reasons. First of all, the deregulation of capital markets in Finland and elsewhere led to new investment possibilities outside Finland (Honkapohja et al 2009). Formerly, domestic investments were done with so-called 'patient capital', i.e., local banks and other actors that knew the returns on investment were not readily available (Lilja et al 2011:53; Lilja et al 1992:140). Although the equity ratio in the pulp and paper industry has been rising in recent times, which indicates that it is less leveraged than, e.g., in the 1980s, the total debt level of the industry's companies was rather high and did not significantly decline during the years of high profits 1997-2003 (METLA 2010:334-335). A main reason for this was that restrictions on foreign ownership of Finnish companies were abolished in 1993 (Lilja 2011). Besides the availability of capital for investments, a simple reason for the expansion abroad is the desire to seek new opportunities (Metsäteollisuus 2012; Carrere and Lohmann 1996; Pakkasvirta 2008). Tainio and Lilja (2003:63) note that regardless of the

strong position of the union in Finnish industrial relations, the expansion abroad should not be seen as 'regime shopping.' This is strongly related to innovation in paper-making technology, where Finnish companies such as METSO and Jaakko Pöyry have played a significant role. Tainio and Lilja (2003:63) show that internationalization has weakened the union in the Finnish industrial relations. Figure 4.6 below shows the development of domestic investments in the Finnish paper industry. It can be seen that until the end of the 1980s, there was still 'aggressive' domestic investment, but apart from 1996-1998 and 2001, the trend is downwards. The former period relates to the last full 'greenfield' investment in Finland, while 2001 saw a large investment in Stora Enso's pulp mill in Imatra. From the figure, it can be seen that the latter investment did have some effect on employment in the sector.

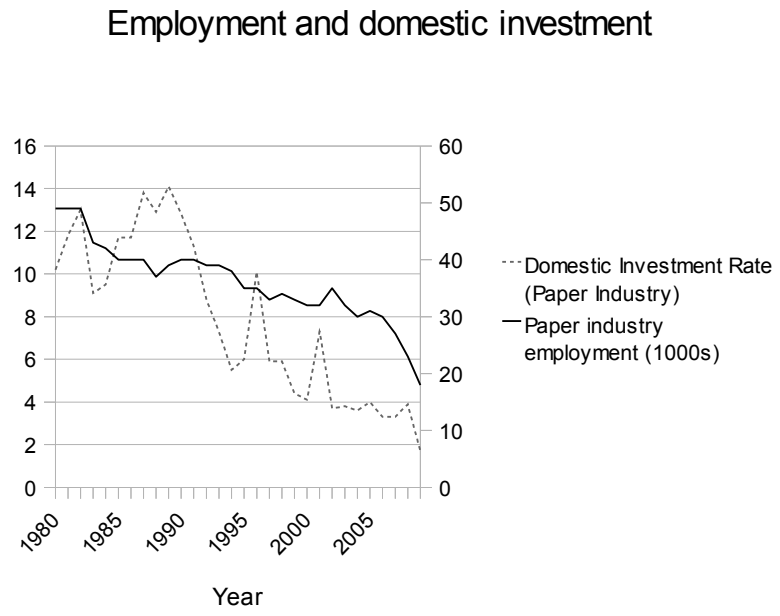

Figure 4.6. Employment and domestic investment in the Finnish paper industry, 1980-2009. Source: METLA (2010)

Though the domestic investment rate is mostly down, data from the World Input-Output Database (WIOD 2012) shows that the monetary value of Finnish machinery to the Finnish paper industry has grown significantly. Within the context of the foreign investments by Finnish paper companies and the relative decline of domestic investments, the only plausible explanation is that in accounting terms, this machinery has been delivered to Finnish companies in Finland, but their implementation most likely was abroad, also given the rough estimates of foreign investment by Stora Enso and UPM- Kymmene shown below.

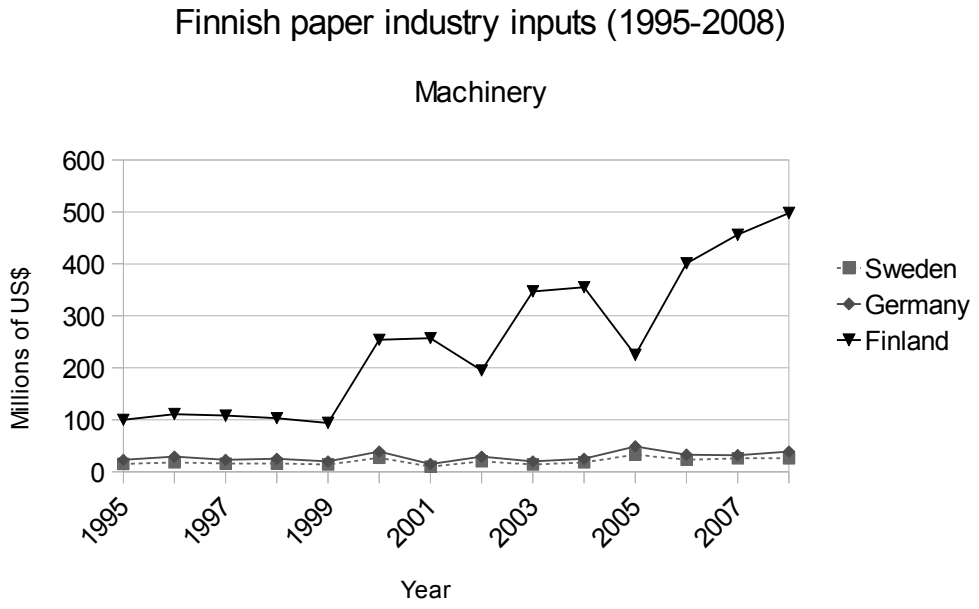

Figure 4.7. Finnish paper industry inputs – Machinery (1995-2008). Source: WIOD (2012)

Long-term aggregate data on the Finnish paper companies' foreign investments are not easily available, but for the period 1999-2009 it can be seen for Stora Enso and UPM-Kymmene that, on the basis of their annual reports for this period, foreign investments have been significant (Stora Enso 1999-2008; UPM-Kymmene 2000-2009). Kristensen (2011:4) also shows that foreign direct investment *from* Finland has drastically increased between 1990 and 2002. Figure 4.8 shows that, e.g., in 2003, the investments of Stora Enso abroad were significantly higher than the domestic investments at the *aggregate* level during that year, as mentioned by METLA (2010:332).

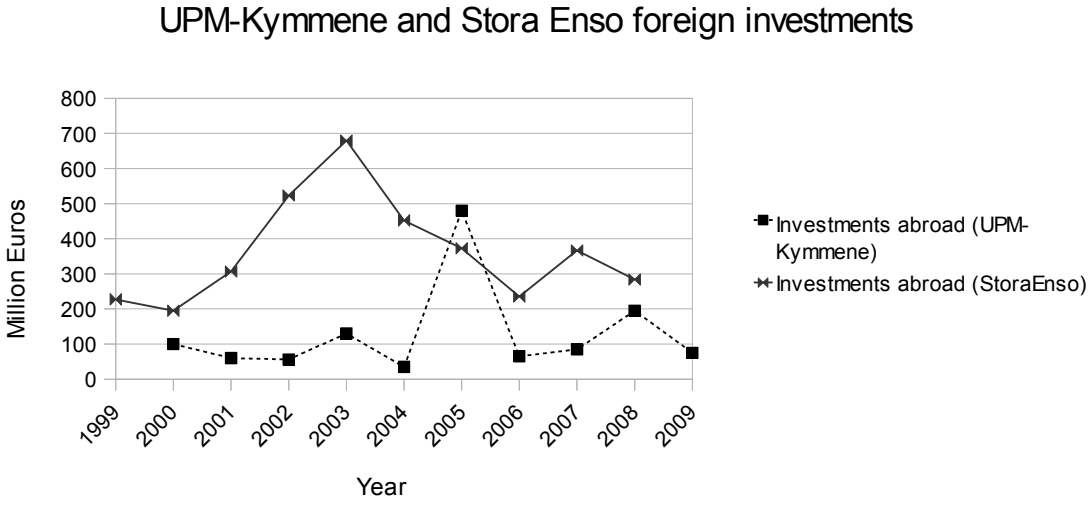

Figure 4.8 Foreign investments, UPM-Kymmene and Stora Enso, 1999-2009. Source: Stora Enso and UPM-Kymmene Annual Reports.

Figure 4.9 shows a more detailed picture of the nature of the company's foreign investments (Stora Enso 1999-2008) on the basis of Stora Enso's annual reports. The picture looks skewed because of the huge acquisition in 2000 – the take-over of Consolidated Papers – which was divested again in 2007. Apart from the acquisitions, it is clear that foreign investment has a priority over domestic investment, and throughout the period 1999-2008 the percentage of foreign investments of total investments has been at least 50%. The peak of foreign investments in 2005 most likely relates to the Veracel joint-venture pulp mill which Stora Enso started and financed together with Aracruz of Brazil.

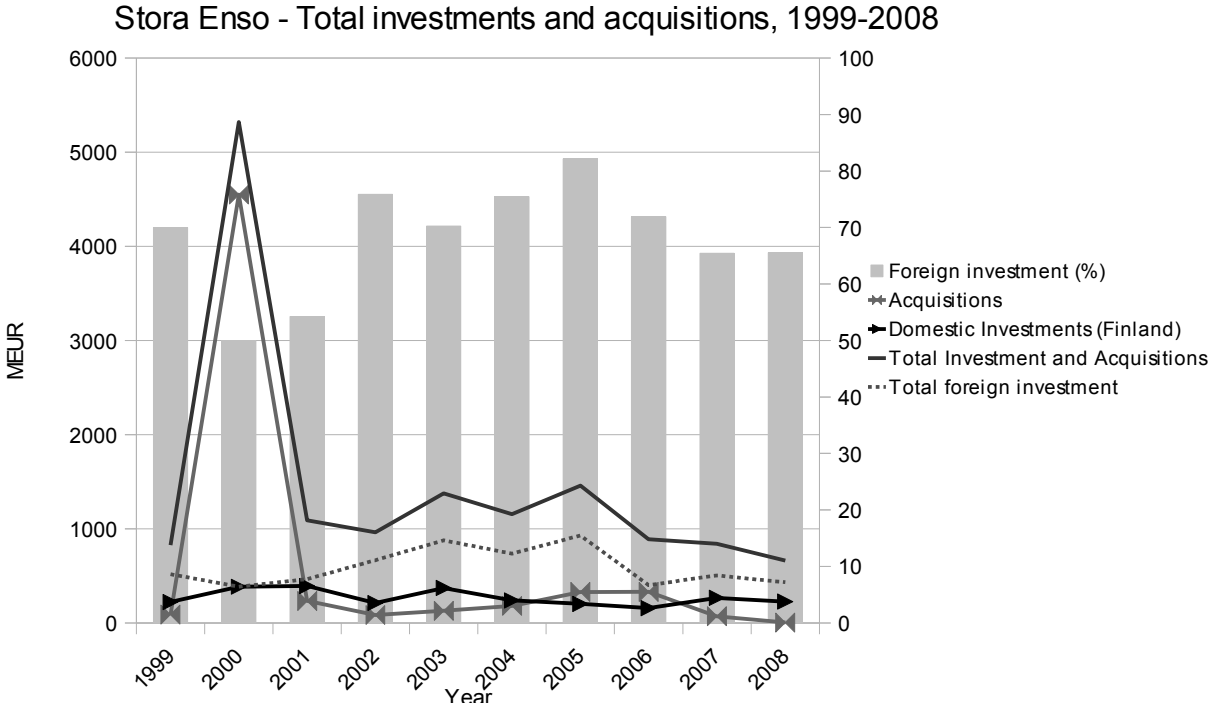

Figure 4.9. Stora Enso foreign and domestic investments and acquisitions, 1999-2008. Source: Stora Enso Annual Report 1999-2008.

4.3 Changing markets

The change in investments from domestic (Finnish-based) to foreign is not without reason. As the Consolidated Papers adventure shows, investments abroad have not always been successful, but as Pöyry (2008), Pellervo Economic Research (2010) and various editions of the Finnish Forest Research Instute's (METLA) forecasts indicate, investments happen where the market is growing or expected to grow. Alternatively, as is the case for big pulp mills like Veracel or the Fray Bentos mill in Uruguay, there are all kinds of competitive advantage to the location. These may relate to the growth potential of

eucalyptus or to special zones without taxation (Pakkasvirta 2008). Seppälä (2010) states that on a general level the paper industry is moving from North to South and from West to East. Pöyry (2008) confirms this with significant growth forecasts for Asia regarding the demand for paper. On the other hand, it is often acknowledged that especially in Europe – but also worldwide – a certain amount of overcapacity exists. The estimates for demand for paper in Western Europe are negative in this sense; overcapacity will most likely grow over the short term, especially if the economic situation in Europe worsens (METLA 2011a; Paperiliitto 2011a). An interesting observation is that probably in part the Finnish paper companies have increased intra-company competitive pressures through their own investments abroad, especially since the European Union area is seen as a profitable market for non-EU companies, with regard to the exchange rate. This can perhaps be seen in Figure 4.13 as well.

4.4 Cost structure

One aspect that is somewhat elusive but still relevant as it relates to competitiveness is the cost structure of the paper industry. METLA (2011a) admits that even at an aggregate level the cost structure is highly schematic and may vary a lot from company to company. Nevertheless, it is interesting to see that the wage costs of the workforce are relatively small compared to the costs of raw materials, energy and 'other' expenses. In Finland there is a certain amount of envy over the wages paid in the paper industry, compared to other sectors, but they represent roughly 11-13% of total costs (METLA 2011a:31). The index of real wage developments shown in Figure 4.10 does show a divergence after roughly 1995, but also for the manufacturing sector in general.

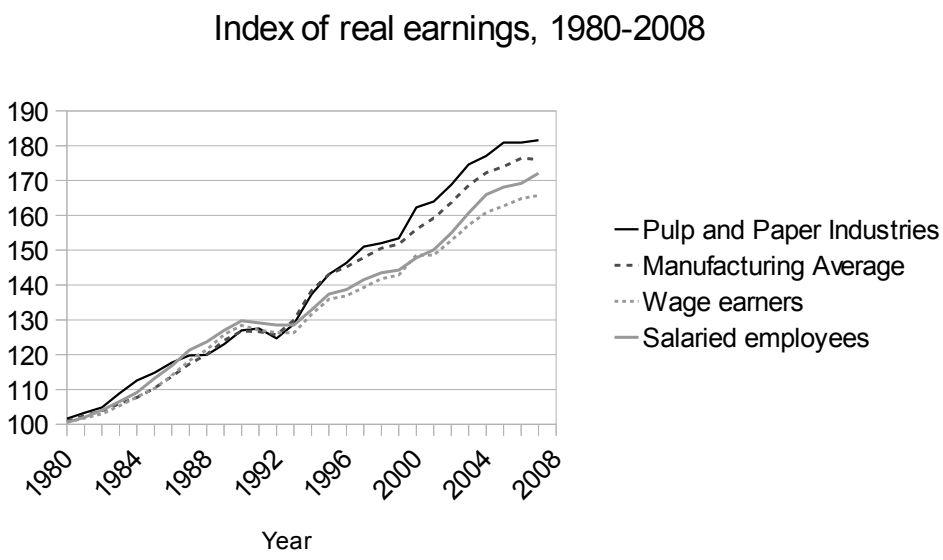

Figure 4.10. Real wage developments in the Finnish paper industries compared to other industries, 1980-2010. Source: METLA (2011b)

The divergence after 1998 between paper industry and manufacturing may be attributed to potential spill-over effects from globalization; after all, the profits in this period may have enabled the industry to be slightly more generous. Possibly the union has been successful in bargaining, pointing towards a more-than-linear increase in labor productivity (see Figure 4.2 above). The divergence of the index of salaried employees from that of wage earners is likely attributed to the rise of Nokia and related IT industry.

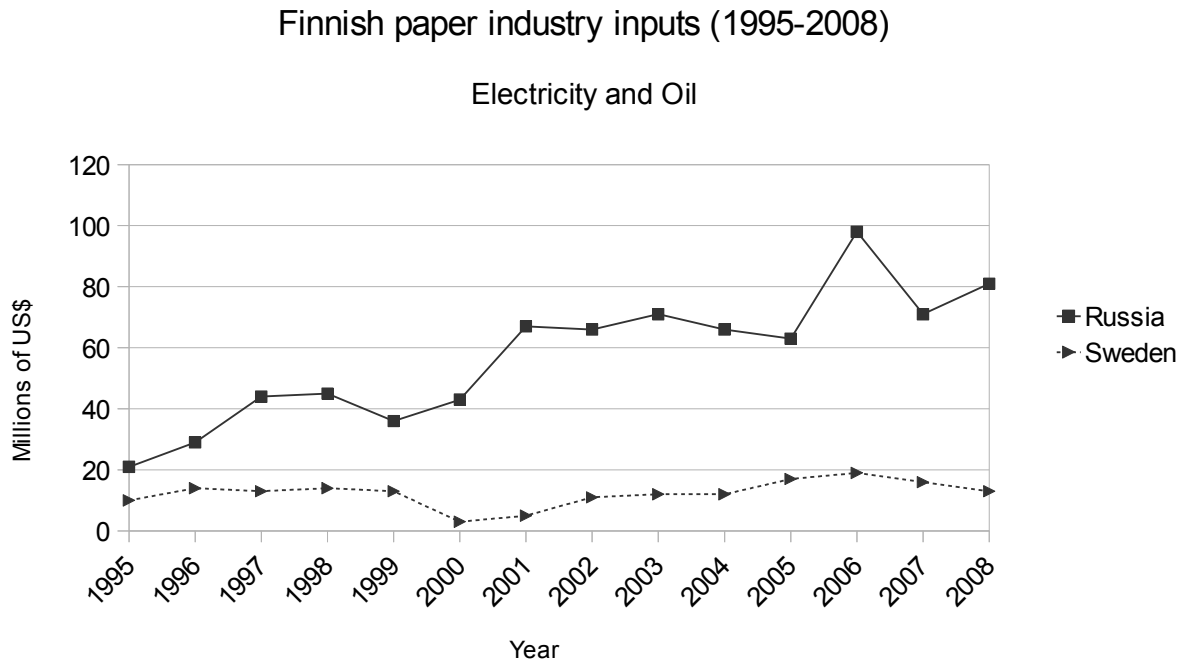

Figure 4.11. Finnish paper industry inputs – Electricity and oil (1995-2008). Source: WIOD (2012)

Regarding the energy costs for the Finnish paper industry, it can be said that the employers' federation together with the labor union (and other lobbiers) have achieved an important policy change, in that new permits for nuclear power plants have been issued. Both parties see the increase of nuclear energy as beneficial for the competitiveness of the Finnish paper industry and, through this, the labor union sees the lesser dependence on imported energy as a condition to preserving jobs (Paperiliitto 22.4.2010). The data from the World Input-Output Database (WIOD 2012), in Figure 4.11 shows that from 1995 the use of energy resources from Russia has increased rapidly, though this use (in dollar value) still only constitutes 10% of the domestic use of energy resources. Another question is whether more nuclear facilities will actually lead to a lower or at least stable energy price. For the paper

companies, there is nonetheless a benefit: the mill fuels that are currently used for the production of heat and energy for the mills' consumption can potentially be used to produce bio-energy for the general electricity grid, thereby opening up a new field of profit opportunities. METLA (2010:308) shows that currently 78% of mill fuels are wood fuels (i.e., black liquor and wood chips). The fact that UPM-Kymmene has a joint venture with Pohjolan Voima to produce exactly this kind of bio-energy at a paper and pulp mill of significant size indicates this may be a future direction for the paper industry (UPM 2011). Also, Stora Enso's Varkaus mill features a biofuel pilot project alongside paper production, though the mill has seen great changes in recent years with the liquidation of the newpaper-production line. (Lilja et al 2011:76).

METLA (2010) does not provide time-series data for transport costs other than roundwood, but it is clear that these have increased over the years. Though the share of costs of transport in total costs is roughly similar to that of labor (11-13%), it can be assumed that because of changes in markets, the geographical location of Finland becomes less of a comparative advantage if the markets for paper move east. Lilja et al (1992:145) shows that because of Finland's geographic position, unit costs had to be lower to be able to compete. This happened through constructing integrated mills that would result in economies of scale and scope. Currently, though, even larger integrated mills are being built in countries like China (e.g. Stora Enso 2012).

Regarding the most important raw material for making paper, wood, it can be said on the basis of METLA (2010:270-271) that, especially since around 1990, the use of imported wood has steadily increased – in particular by the chemical pulp industry. Also, the World Input-Output Database (2012) confirms this development: in particular, imports from Russia have been on the rise, as can be seen in Figure 4.12.

According to METLA (2011a:29) the development of prices of (domestic) wood for pulp production has been quite subdued, which compensates for the insecurity concerning imported wood prices. Related to the growing importance of imported wood, there is an on-going conflict with Russia about forest product customs (Jutila et al. 2010). Figure 4.13 shows the monetary value of imported pulp. Finland is not included, because it is obvious that the Finnish paper industry still uses mostly domestic pulp. The largest trading partners were selected in the World Input-Output Database and it is shown here that while Sweden provides the largest monetary value of pulp to the paper industry, Germany has also been a fairly substantial source of this raw material. However, most significant is the recent rise of

Brazil as a major foreign provider of pulp to the Finnish paper industry. This obviously makes sense, given the investments by the Finnish and other paper industry companies in Brazil.

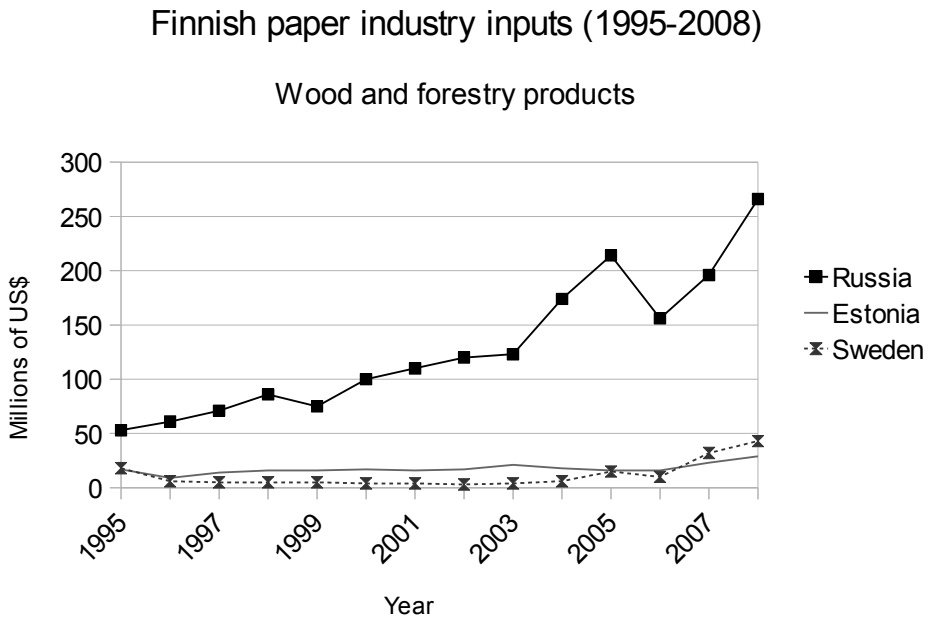

Figure 4.12. Finnish paper industry inputs – Wood and Forestry Products (1995-2008). Source: WIOD (2012)

Below (in section 6) the importance of developments in chemical processes for the paper industry is discussed, but here it is instructive to show the monetary value of the import of chemicals for the paper industry. Chemicals as such constitute about 6% of total costs in the papermaking process (METLA 2011a:30). Although the large majority of chemicals are produced domestically, imports from Germany, the Netherlands, Belgium and, increasingly, Russia are significant, as Figure 4.14 shows.

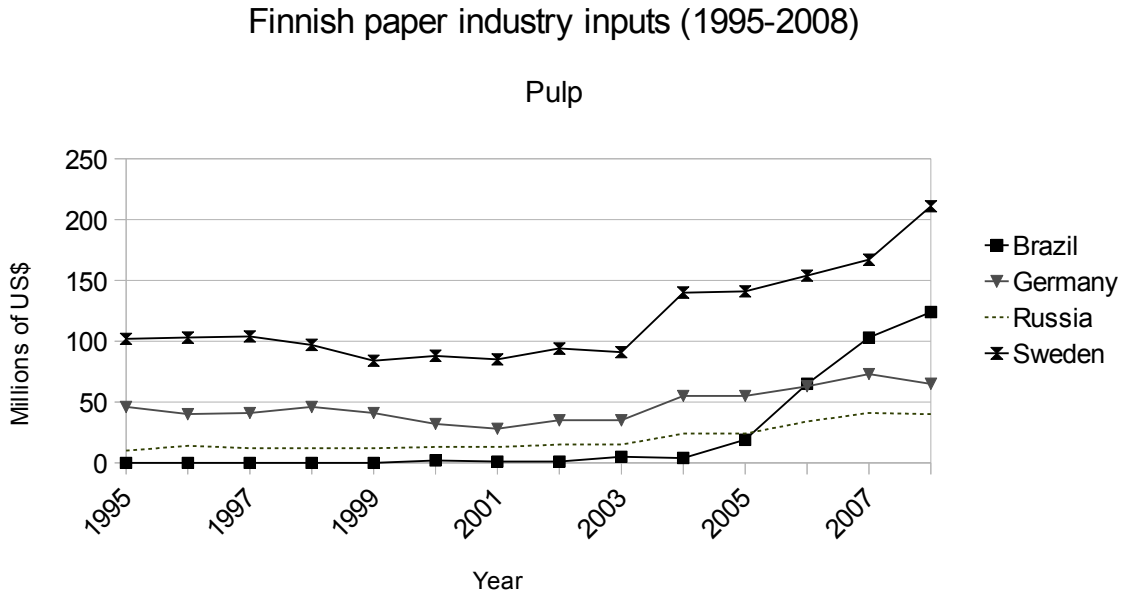

Figure 4.13. Finnish paper industry inputs – Pulp (1995-2008). Source: WIOD (2012)

To conclude, this short overview of the most important developments in the Finnish paper industry provides the background for understanding the position of the Finnish Paper Workers' Union. All things considered, it may be argued that of the total costs of the paper industry, only labor costs are to some extent under short-term direct control of the employers, which occurs through collective agreements and local bargaining. The labor union for its part only has its lobbying power and the instrument of collective bargaining: the expansion abroad of the industry and the related decline of employment in Finland present a formidable challenge for the union. For many aspects of the domestic paper industry, the fate of employers and employees are entwined, as increasingly local mills are in a sense competing with other production units of the same company elsewhere in the world. In this context, it is not surprising that nearly all the senior shop stewards that answered the questionnaire used for Jonker-Hoffrén (n.d.) indicate that in their opinion the biggest threat to the Finnish paper industry is the transfer of Finnish work and Finnish jobs abroad. As a mirror image, the second greatest perceived threat is the weakness of redundancy protection in Finland, according to most of the senior shop stewards.

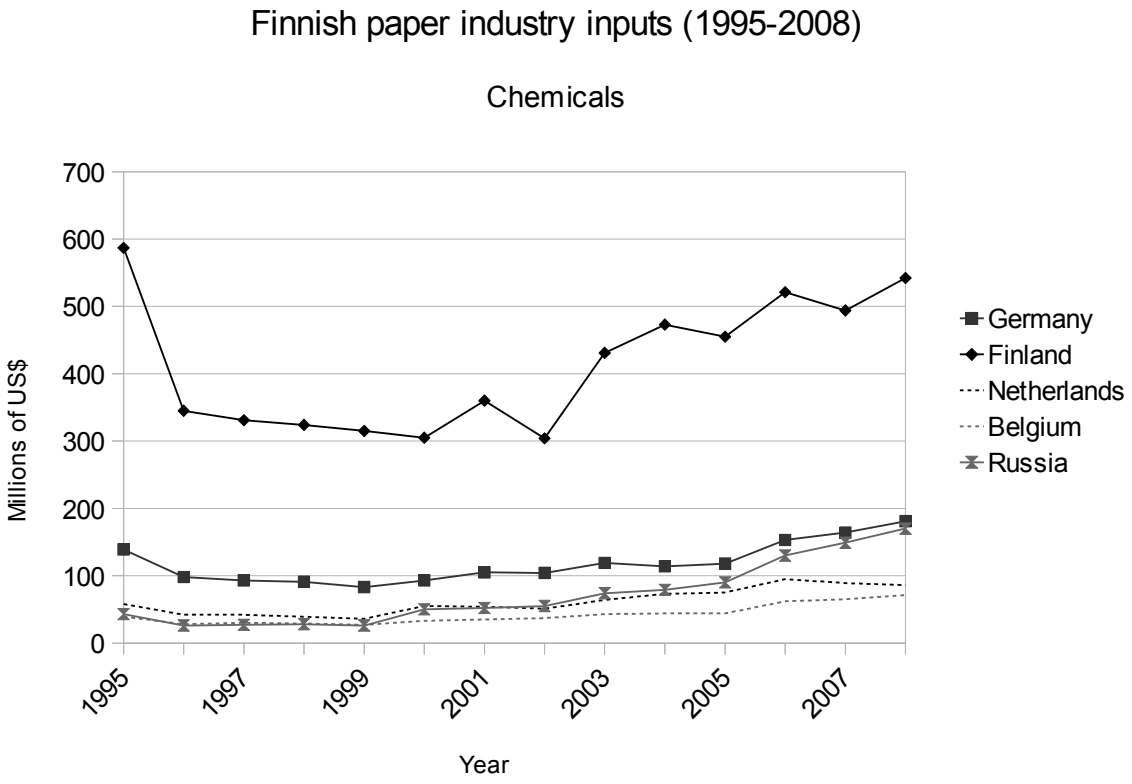

Figure 4.14. Finnish paper industry inputs – Chemicals (1995-2008). Source: WIOD (2012)

5. Representativeness in context

5.1 External representativeness

The changes in external representativeness can be documented when considering the developments in membership density and employment in the paper industry shown above. Furthermore, the union presence in the comprehensive incomes agreements is also an important indicator. Figure 5.1 below shows sectoral union density for the pulp and paper industry as based on membership data from Kujala (2006) and the union's annual reports from 2005 to 2008. It is important to note, though, that the union itself maintains that it has a sectoral union density of 98%. This can be explained, also according to Lilja and Tainio (1996:177), through the presence of members of (predominantly) the Metalworkers' Union and Electrical Workers' Union, which are also represented by the Paper Workers' Union, which means that in practice, the employers face only the Paper Workers' Union locally.

Figure 5.1. Net union density in the Finnish paper industry, 1980-2008 (own calculations based on Kujala 2006; Paperiliitto Annual reports)

Figure 5.1 shows that union density has remained quite stable until 2005 (see also Jonker 2009). Of course, there is a fairly simple explanation for this: as the geographical locations of paper communities do not change, and currently only employment in the industry trends downwards which sometimes results of closing local union branches; for the units that continue functioning the union density most likely does not change. The geographical inflexibility of the paper industry as a physical place of employment makes the interpretation of union density levels different than e.g., in the service sector. The figure shows that after 2005 the net sectoral union density *rises* sharply to 100%. This is most likely due to an incongruence between union membership data reported in the annual reports and the employment of the sector reported by METLA (2010), as well as a simple reflection of the change in the denominator of the union density measure. The pre-2007 data can be seen as probably reliable, but the latest data must be taken with a grain of salt. Though employment is on the decline in the paper industry, in reference to Vernon (2006) it can be asked: 98% of what? Most likely an ever declining group of paper industry employees. Given the changes in legal representativeness discussed below, it may be argued that also the union's external representativeness is declining, though the institutional setting of the union has not changed per se. What is relevant on the other hand, is that on part of the TEAM merger, the union (and most significantly, also the Metalworkers' Union) have missed a chance (see the section on internal representativeness below for the union's arguments against TEAM). The union leadership has explained in discussions and publicly that the union would not benefit, because of

its 'special position' (see below) and the way the union is organized (i.e., the importance of local branches and the input of rank-and-file members).

The argument *for* TEAM, on the other hand, lies in the role of industrial unionism as described by Streeck (1992:176-180), i.e the integration of also suppliers, maintenance and 'post-sales' companies to the scope of the union, in tandem with a strong tradition of co-decision. Jonker-Hoffrén (2011) shows that regarding outsourcing, maintenance is in a somewhat ambiguous position, but considering the production process of paper and pulp (sketched below) it is clear that Finnish industrial unionism is different from that which was practiced in Germany in the 1980s. The advantage of TEAM, regardless of the union's arguments, would be an approximation of value-chain unionism for the present (i.e., that at least there would be closer cooperation between the Paper Workers' Union and the Chemical Workers' Union, seeing that the latter's industry is a major supplier to the paper industry). Furthermore, considering the potential future direction of the domestic *forest* industry, it would be advantageous to the union to be in a position where it would cover bio-economy production units that are related to paper industry processes, but located elsewhere. Under current (informal) rules, the Paper Workers' Union would be a representative at these facilities only when there is already an existing local branch. If biofuel production units are set up elsewhere separate from pulp and paper mills, the union does not have an a priori position in those facilities; it is more likely that TEAM, through the Chemical Workers' Union, would 'claim' those facilities making the future representativeness of the union much weaker. The SDP-allied union leadership, in an unstructured interview, did however consider as a future possibility a true value-chain union, which includes everything from forestry workers to transport. Given the position of the Left Alliance on cooperation (see below) it is nonetheless unlikely that great changes will happen soon. On the other hand, the questionnaire which was mainly used for the final article shows that the respondents nearly unanimously think the decision not to join TEAM does not hamper the union's ability to represent employees of the 'new' forest industry. Most respondents stress the internal democratic process by which this decision was taken and state that cooperation in whatever form can still take place in the future.

Within the context of the structural changes in the domestic paper industry, it may be argued that the decision not to join TEAM, though motivated by the valid results of internal democracy, is a potential strategic mistake of the union. It is very early to draw strong conclusions, because the change towards bio-economy is only slowly materializing domestically and the employment effects of this industry may be small. But in the light of declining employment, new technological developments and declining

domestic investments, the union must at some point diversify its vision of itself, if it is to remain relevant and wants to continue to play a constructive and productive role. In this regard, the senior shop stewards that responded to the questionnaire mention clearly that the three biggest threats to the Finnish paper industry are 1) the transfer of Finnish work and Finnish jobs abroad, 2) the weakness of Finnish employment protection and 3) EU-level environmental regulation, such as the Sulphur Directive. Also the issue of energy taxation is seen to be a threat to the industry. At least the third threat can also be an opportunity, in the sense of creative destruction (Schumpeter 1970) and in this sense joining TEAM could be a positive move for the future of the Finnish forest industries.

Another institutional factor is also relevant – the participation in comprehensive incomes agreements (see figure 5.2 below). The union not always participated in these, but recently it has looked like the institution of the comprehensive incomes agreement was on the decline. The Confederation of Finnish Employers has also increased its call for more decentralized bargaining (Elinkeinoelämän Keskusliitto 2011a, also mentioned in Jonker-Hoffrén n.d). This trend (that was maybe reversed in late 2011) perhaps helped to justify the Paper Workers' Union's position regarding this Finnish institution, in a kind of unintended convergence between this union's and the general employers' view on the optimal bargaining level. This may have slightly increased the external representativeness of the union, as the collective bargaining structure may have changed in its favour.

One change regarding the union-managed unemployment benefit system (Ghent-system) is worth mentioning: since 1991 there is an independent unemployment fund. Currently, this fund has over 300.000 members, which makes it the largest in Finland (YTK 2011). In a sense, this success is remarkable, because it has always been possible to join only the unemployment fund of a labor union, without becoming a member of the union as well. But, especially for sectors like transport, shipbuilding and the pulp and paper industry, with strong professional identities, peer pressure likely made this legal possibility a practical impossibility. Though not easy to verify, it is likely that the independent unemployment fund does not pose a challenge to the Paper Workers' Union. It is nonetheless a potential weakening of the union's external representativeness, because there is now an alternative unemployment fund. Kjellberg (2006) shows that even small changes in the Ghent-system rules may have large consequences for a union's organization rate.

Summarizing, especially recently, due to the decision not to join TEAM, it can be said that the union's external representativeness has declined, in particular considering the likely direction for the domestic

forest industries. The recent lack of comprehensive incomes policies may have been positive for the union on the other hand. Though considered a quite dramatic institutional change, the independent unemployment fund cannot yet be seen as a threat to the union's representativeness.

5.2 Internal changes and internal representativeness

As this dissertation is no history of the Paper Workers' Union, less attention is paid to specific persons in the union. Antti Kujala's history of the union until 2006 is an excellent source for this. The union has had three chairmen during the period under scrutiny: Antero Mäki, Jarmo Lähteenmäki and Jouko Ahonen. According to Kujala, all three were strong personalities and he claims that the conflict of 2005 was a way of testing the new chairman Ahonen, as he became chairman just after a centralized incomes agreement had been signed (e.g., Kujala 551-567). This is of course plausible, but it is more likely that the employers' federation truly wanted to force the union to accept continuous shifts and a 'new' policy on outsourcing, given the recently worsened conditions for the paper industry – mainly through the exchange rate of the euro.

Jonker (2009) shows the development of sectoral union density and internal factions. The former was discussed above. It is in many ways remarkable that the Left Alliance faction has such a persistent role, given political changes. But following Müller-Jentsch (1997), recent events seem to show that the union is unable to speak with one 'voice' which has obvious consequences for the union as a representative actor. Regardless of the formal division of power between SDP and Left Alliance, it seems that the union is not entirely able to channel dissent in a way that is positive for internal democracy (see also below and Jonker-Hoffrén n.d.). One issue where internal democracy resulted in a decision which potentially weakens the union's external representativeness is the TEAM-merger.

In 2007, it was decided that within SAK, six labor unions would merge to form the labor union of the technological sectors (*teknologian alojen liitto*). Originally this union would consist of the Chemical Workers' Union, Metalworkers' Union, Wood and Allied Workers Union, Railway Union, Electrical Workers' Union, Paper Workers' Union and Communication Workers' Union. Currently, in its functioning form, only the Chemical Workers' and Communication Workers' Union are left; the other unions dropped out of the project, through votes in their respective General Assemblies. When the Metalworkers' Union voted against the project, the TEAM-union became a 'dead man walking', as the aforementioned union would have been the largest single contributor of members (the Paper Workers'

Union decided already in 2007 not to join). The 'external solidarity' of non-joining unions thus may not extend very far (Lévesque and Murray 2002). Within the context of this dissertation, the position of the Paper Workers' Union is more interesting, since it strongly reflects the special position the union occupies in the Finnish industrial relations field. The questionnaire for Jonker-Hoffrén (n.d.) shows that both locally and at the union level there is strong agreement about the special position of the union, though constructive cooperation is by no means out of the question.

The core argument for the Paper Workers' Union not to join TEAM was that the union is not ready to give up its independence, in particular because it claims the situation of the paper industry is so different from other industries that sector-based solutions are better. This argument has been used when-ever the union did not want to join the centralized collective bargaining, and this 'ace' was played also in the merger talks. Still, as far as wage developments go, figure 4.6 above shows that the real wage increase for different sectors may actually be virtually the same (until 1995, c.f. Jonker 2009), at least in percentages. Therefore, the 'special circumstances' of the paper industry must be specified further, as they apparently do not simply refer to the 'bread-and-butter' of collective bargaining. Before elaborating on those issues, the Paper Workers' Union has (according to union officials) also a practical reason for resistance to mergers. The organizing principle of the union is a near-perfect industrial unionism, in which branches of the union are located there where the work is, i.e., at paper and pulp mills. The practice has been to set-up or close a branch where-ever a paper or pulp mill starts up or closes down. This tight integration between union, work community and enterprises is a very important factor in the representativeness of the union. TEAM would have to set up branches everywhere from scratch to achieve a similar coverage; as of now, the branches of TEAM consist of the local branches of the partners to the merger; thus not quite fulfilling the model of industrial unionism as practiced by the Paper Workers' Union. On the other hand, Jonker-Hoffrén (2011) shows through the issue of outsourcing that the union implicitly recognizes different constituencies, which far from aids the union's internal representativeness. For example, a case study shows that cleaners are very disappointed with the union (Niemelä and Kalliola 2008). In fact, it may be said that the union is transforming from an *industrial* union into a *craft* union.

The 'special position' of the union relates to both the industry it represents and how it is organized in this industry. As shown above, the paper union is a capital intensive industry which, since 2005, allows continuous shifts in various shift-models. This is one of the reasons why the industry's union sees itself as special, because the industry – in particular as an *export* industry – has various issues that are relevant

to its function at a given time from most other industries. The shift-system, related working time issues and the role of technology are one aspect, but the organization of the wage system pre-2008 is another which deviates quite substantially from other industries (Jonker-Hoffrén n.d.). From the point of view of union organization it is relevant to note that the union's representatives of the General Assembly are from all the different local branches, as the union is organized in the way that every local branch represents a 'voting district' (Lilja and Tainio 1996:176). The composition of the General Assembly is then by definition completely different than that of e.g., the Metal Workers' Union, which has only a handful of voting districts. The rule in the Paper Workers' Union is that each branch can send one representative for every 200 employees. These are usually the shop stewards, and with declining employment many local branches can send only one representative. Lilja and Tainio (1996:177) point to this feature in relation to the associational strategy of the union, i.e., that paper employees are organized separately from wood workers and forestry workers. This difference in union organization is also one of the reasons for the union occasionally not joining the centralized collective agreements, as this makes the union almost by definition more attuned to branch level issues than national issues. Through the sharp decline in employment and shutting down of a substantial number of paper mills since 2006, the internal democracy of the union is slowly changing. Though it may be nominally the case that the power balance between the Social Democrat faction (SDP) and Left Wing Alliance faction (LWA) in the union is currently roughly 70%-30%, the reduction of actual representatives per local branch may have an influence on how issues are voted on. The questionnaire nonetheless shows a fairly significant number of non-aligned respondents, which may indicate that some senior shop stewards feel *neither* political faction presents a credible alternative. Furthermore, the presence of a few True Finn respondents suggests that this political platform is taking root also within labor unions. After all, apart from its anti-immigrant rhetoric, the True Finns occupy the left with regard to many social issues, and the threats indicated by senior shop stewards (EU environmental regulation and loss of domestic employment) fit politically with the program of the True Finns.

Perhaps more significantly for the basic theme of this dissertation is the rift this change in §11 caused internally. As shown in Jonker (2009), the power balance between the Left Alliance and Social Democrats in the General Assembly is roughly 30%-70%, which means that even by some qualified majority voting rules, the Social Democrats can quite easily pass policies that are totally unsupported by the Left Alliance. This is what happened in 2008, as the latter voted against the proposed changes to §11 in protest over a refusal to consider a membership vote. This is instructive of the different ideologies of the factions: the SDP is willing to accept compromises and the constructive role of the

employer, while the Left Alliance would want to have full control over issues that concern the employees. This is also clear from the questionnaire, as the final manuscript shows: the Alliance respondents (mostly) blame the SDP faction for cooperating with the employer, while the SDP respondents blame, to some extent, the employers or other 'external' issues. Thus, currently the collective agreements represent the view the SDP faction and the employers hold, and this can be seen as a defeat for the Left Alliance internally, but also as a failure of the union's internal democracy – especially since respondents of the latter faction frequently mention that the SDP faction can in practice dictate policy. The difference between factions as well as different views between local and union levels are related to the 'competence trap' of the union.

5.2.1 The competence trap of the Finnish Paper Workers' Union

Within the context of a strategy of increasing labor productivity and multi-skilling, the Finnish Paper Workers' Union may currently find itself in a 'competence trap'. This means that existing or otherwise dominant procedures that lead to favourable results will become entrenched, as they are profiting from experience within the organization (Levitt and March 1988). In the literature on organizations and organizational learning, this phenomenon is documented for both the use of new technologies and new processes of work (e.g., Cooper and Schendel 1976; Zucker 1987). The idea of a competence trap is also relevant to industrial relations research, as unions are organizations with a strong institutional memory and only emerging capacities of organizational learning (Huzzard, Gregory and Scott 2004; Huzzard 2000). One of the few authors that explicitly mention the competence trap of unions is Kari Lilja (1998:182-184).

Lilja states that the main problem concerning the competence trap is that 'there are no mechanisms at the industry collective bargaining level to intervene in the actual world of work and skill development in a proactive way (Lilja 1998:183).' This relates to the development of the role of labor unions which have 'conquered' new areas of working life, such as the collective bargaining model, work safety regulations or the Ghent system of union-managed unemployment funds. Internally, this has led to an expansion of departments within the union, in order to keep up with the new areas in which the union is active, and, inherently also these departments will aim for improvements in the situation of their specialization. The problem, according to Lilja (1998), is that all these issues are specialities within the union, and do not relate much to the development of new forms of work or skill development.

This should be seen within the wider context of globalization of the Finnish paper industry. As mentioned before, since the newest paper machine in Finland dates from 1998, it is clear that advances in labor productivity have mostly come from process innovation, which obviously can also include minor investments in the production process next to major investments. In fact, it may be stated that the union in cooperation with the employers is almost 'too good' at process innovation. This can be seen as a strategy in response to the threat of new technology – what Cooper and Schendel (1976:67) refer to as 'expand[ing] work on the improvement of the existing technology.' As Levitt and March (1988) say, this kind of strategy exists for both technologies and processes. The problem then is that the same work is done so well that it is difficult to switch to new forms of work without paying a price in productivity. In paper mills abroad, newer technology does not necessarily demand very high efficiency of labor processes (yet), because processes already use less labor input and are otherwise more efficient, so similar levels of (labor) productivity are achieved more through improved technology than improved labor input. Furthermore, the broader issue is, of course, the re-invention of the forest industry, as the traditional paper industry is moving to the (Global) South and East.

In the collective agreements since 2008, the possibility exists to take into use a new system of wage determination, which emphasizes work experience, multi-skilling and the competence demands of the task. The more skills an employee has gathered, the better his wage. Within the context of the older collective agreements, this is a stronger incentive to develop skills. but it is still a passive way of promoting skills and productivity (as it is enshrined in the joint-regulation format of the collective agreement). Collective agreements do not mention anything about new organizations of work, except that this is now (post-2008) the prerogative of the employer – as the final article-manuscript of this dissertation shows – this on its own a huge change. The HYVIS report of 2010 mentions positive experiments with shorter shifts in a paper mill owned by Stora Enso (Työterveyslaitos 2010:73). These kinds of developments represent, in a sense, the fine-tuning of what the Paper Workers' Union sees as its contribution to increasing labor productivity (wage formation, reducing absence due to illness).

The report of the Working Group of the Future of the Paper Industry (2006) shows that as high intensity investments started to shift abroad, labor productivity also started to slow down its increase. The report explicitly connects the basic technology of papermaking to the way work is organized, and that this organization of work is essentially the same for the global industry. So, in lieu of new investments, labor productivity will sooner or later reach its peak, and especially taking into account the significantly high average age of workers in the paper industry (and the paper machines in use!), the

labor productivity may even decline in the near future.

To return to the competence trap of the union: the union's activity is designed in accordance with how things have worked in the paper industry for many years. This system is not designed for structural change, because there is not an *a priori* reason why employers in an emerging sector (say: bio-fuels or bio-energy) would accept current paper industry benefits and working conditions as stipulated by the collective agreements. This is different, obviously, for those new facilities that are built in conjunction to existing pulp and paper mills. The system the union operates in is based on joint regulation and (thus) compromise, and though this has worked for a long time in terms of increasing members' benefits and securing important areas of working life to union participation, it is not a given that it will continue to work – especially due to competition with more modern paper mills elsewhere in the world. The areas of industrial relations that the union is good in do not improve the Finnish paper industry's competitive position in relation to the global industry. Recent policy victories like the issuing of new nuclear power plant permissions may help the industry in the long run, but they do not improve workers' skills or the nature of work in the paper industry. As one senior shop steward wrote in the space for free comments in the questionnaire for the final manuscript of this dissertation: 'The Finnish Paper Workers' Union must change and must keep up with developments.' Another said: 'The union should update itself with the present-day situation. Politics do not have as big a role nowadays as in the 1960s-1980s.' A third states: '[The union] should make sure we continue to have a paper industry in the future because otherwise things will go badly [because Finland's welfare depends on the export industry.]' These (and others, mentioned in Jonker-Hoffrén (n.d) statements may indicate that at the local level, there exists a certain frustration with the current course of the union at the national level; this can be seen as a consequence of the competence trap: some voices within the union therefore indicate the union has to change its focus.

Summarizing, the internal representativeness of the union has recently (since 2005) suffered. Most important is the change of provision §11 of the collective agreements, but around that issue and later the disagreement between SDP and the Left Alliance and, in particular, the failure of internal democracy to properly channel dissent are more worrying signs seen from the union's internal and external function of representation. Also the implicit division into more or less important membership constituencies is detrimental to the union's representativeness and undermines its claims of industrial unionism.

5.3 Legal representativeness: Collective agreements

Though there have been quite a few collective agreements in the paper industry since 1980, arguably those of 2005 and 2008 are among the most important for the labor union. The centralized income agreements of the recession years in the 1990s were also important, in the sense that they introduced a more equally shared payment of membership dues – formerly, this was the duty of the employers. In this sense, it indeed was a huge psychological shift, but it applied to all union dues, not just the Paper Workers' Union's dues. Also, changes in (and confirmation of) the so-called Redundancy protection agreement are relevant in the light of the industry's recent history. The collective agreements of 2005 and 2008, on the other hand, mark significant changes for the union. The former essentially makes concessions towards the use of the outsourcing of certain types of work (albeit under strict conditions, see Jonker-Hoffrén 2011), while the latter radically changed the nature of local co-decision rules. Though no actual change has taken place, the Confederation of Finnish Employers wants changes to the existing industrial conflict legislation, to reflect a changed economic environment.

With respect to legal representativeness, the most significant changes took place in 2005 and 2008 in the collective agreements of those years, as these directly affected the position of the union and instruments of the union – at least affected the internal discourses on these instruments in the latter case. Especially after the Competition Authority cleared the provisions of the collective agreement of 2005 on the restrictiveness on competition, this collective agreement solved for the present the conflict on outsourcing (Kilpailuvirasto 2010; Jonker-Hoffrén 2011). The solution is that cleaning and security personnel can be outsourced, but this should be locally agreed, and those employees will be covered either by the collective agreement of their own professional sector or, in lieu of that, by the paper industry's collective agreement. Furthermore, the agreement to restrict outsourcing of maintenance personnel remains valid and contains principles and goals of development towards this particular class of personnel. As Jonker-Hoffrén (2011) shows through the framework of Hyman (1997a), the distinction between different constituencies leads to a weakening of both the union's internal representativeness and a kind of break with strict industrial unionism, as the union (and the employers' federation) have started to differentiate by profession, at least in the sense on professions other than 'pure' paper and pulp mill employees.

The collective agreement of 2008 presents a much more fundamental change in the position of the union, especially at the local level. Jonker-Hoffrén (n.d.) shows that the change of provision §11 of the collective agreements regarding negotiations over local wages in relation to significant changes of work

and/or investments deepened the ever present divide between Social Democrats and ex-Communists (regardless of what Jonker 2009 mentions). The changes in provision §11 mean that the interpretation of this provision according to the Left Alliance as 'co-decision by shop stewards and employer over the effects of investments on employment' (i.e., work allocation etc.) is replaced by formulations that derive from Labor Court decisions concerning this provision. The important issue here is that the interpretation such as that advanced by the Left Alliance faction of the union has probably never had a real legal basis, as Saloheimo (2004) shows. The negotiations solely concern wages, not the organization of work in itself. This change has led to deepening internal discontent, even four years later.
In a nut-shell, the provision §11 combined with the high organization rate expresses what Vernon (2006) calls 'a restriction of managerial prerogatives.' The provision is a kind of 'lock' – the employer can change the content or organization of work but this has to be accompanied by changes in wages. The difference between the old and the new versions of the provision is mainly the frequency of negotiations; the union cannot hold up application of changes in lieu of on-going negotiations anymore, thus to some extent this managerial prerogative has been restored. Because of the changes of the collective agreement of 2008, which *de facto* was only ratified by the Social Democrats in the union, the union has *voluntarily* given up an instrument which in the past has benefited union members greatly, but perhaps not anymore (given the changes in the industry and the Labor Court decisions on the provision). The benefits came through negotiations over the effects on work and wage because of local investments, which were still common in the late 1980s and early 1990s until the onset of expansion abroad (see above). Jonker-Hoffrén (n.d.) thus aims to explain changes in legal and internal representativeness through the pressure of competitiveness improvements and partnership, but also pays attention to the internal representativeness of the union through the internal conflict on provision §11.

Considering that recent events have seen a great increase in co-decision procedures over lay-offs and redundancies in the Finnish paper industry, it is almost ironic that, according to Lilja and Tainio (1996:175), the original law of 1978 was shaped to 'reflect the basic features of the system of workers' participation in the pulp and paper industry', under pressure from combined lobbying by union and employers' federation. They mention that this way, the strong shop steward presence was preserved and that the negotiation mechanism that should be used in 'essential changes' imitated the mechanism put in the paper industry's collective agreement. On top of that, the union and the employers' federation agreed upon a redundancy protection agreement in 2003 which replaces a similar section in the Law on Collective Agreements, specifically considering economic or productivity reasons for making employees

redundant. This is a very important agreement within the context of the structural change the Finnish paper industry is still experiencing, and relevant in relation to the union's representative capabilities. Koistinen and Sengenberger (2002) point to the labor flexibility that is present in Finnish law as an important factor in the economic development of the Finnish economy in the 1990s; paradoxically, regardless of the extensive co-decision legislation and strong union presence, it is relatively easy to fire workers. This is reflected by the perceived threats to the paper industry as mentioned in the questionnaire: a very large majority of the senior shop stewards regards the weak employment protection as a threat. And because the labor union has committed to the redundancy protection agreement, it has tied its hands when it comes to the representation of younger or less experienced workers due to the provisions of the rationalisation order in §16 of this agreement – the order of making employees redundant (*työvoiman vähentämisjärjestys*) is dependent on the importance of an employee for the company and the length of their employment relationship, as well as some other factors. The content of this agreement has significance also for the internal representativeness of the union, through the position of the shop steward, who in the end often co-decides with the employer who will be made redundant. Obviously, shop stewards try to minimize the extent of redundancy and take into account the social circumstances of the union's members.

In terms of industrial conflict legislation, the Confederation of Finnish Employers (Elinkeinoelämän keskusliitto 2011b) has, in recent years, repeatedly called for a restriction in the right to strike. Their main argument is that the world has changed and the Finnish economy needs a better regulation of industrial conflict, also because in their opinion the key position of small groups in causing (illegal) strikes hurts the economy disproportionally. Their main wish is that sympathy and other supportive strikes are also subject to prior notification. From the point of the legal representativeness of the union this would be a (further) decline, because a notification period of 14 days – like 'normal' strikes – would enable the employer to transfer production to other facilities, e.g., abroad, thereby rendering those strikes ineffective. Shop stewards have told that this same demand is the reason why many shop stewards and union officials see strikes as ineffective and not worth pursuing. In a way, these demands of the employers are a reflection of the old paternalistic tradition of Finnish enterprise leadership, which may also lay behind the desire to remove §11 (Lilja and Tainio 2005:33).

Summarizing, it can be said that over the last 28 years (1980-2008) the legal representativeness has decreased, but only since the fortunes of the industries turned – that is, the distinction between domestic paper industry and foreign-based paper industry over time turned into a competitive challenge

for the domestic paper industry, thanks to declining domestic investments and technological advantages that were applied in investments abroad. Of course, though not strictly part of the legal representativeness of the union, the entry of Finland in the EU and the adoption of the euro have been huge legal changes for the country; for example, lobbying the Finnish central bank for a devaluation of Finland's currency is no longer possible due to the common currency, the euro.

5.4 Reputational representativeness

The aspect of reputational representativeness is difficult to quantify or qualify, as mentioned above. Strike incidence and strike intensity are two measures that somewhat capture this aspect; publicly a union shows its might through strikes, as one instrument in the repertoire of contention (Tarrow 1998:30). Related to strikes are political protests, in which the Finnish Paper Workers' Union has contributed several times, most notably during the years of the recession during the 1990s. Figure 5.2 shows a clear connection by the incidence of strikes and sectoral agreements: in years that there were sectoral agreements, strike levels in the industry rose, and to a lesser extent when the union was outside the centralized incomes policies. The year 1997 seems to mark incongruency, but in that year there was a strike over the outsourcing of 54 employees which nearly escalated into a national strike (Helsingin Sanomat 1997).

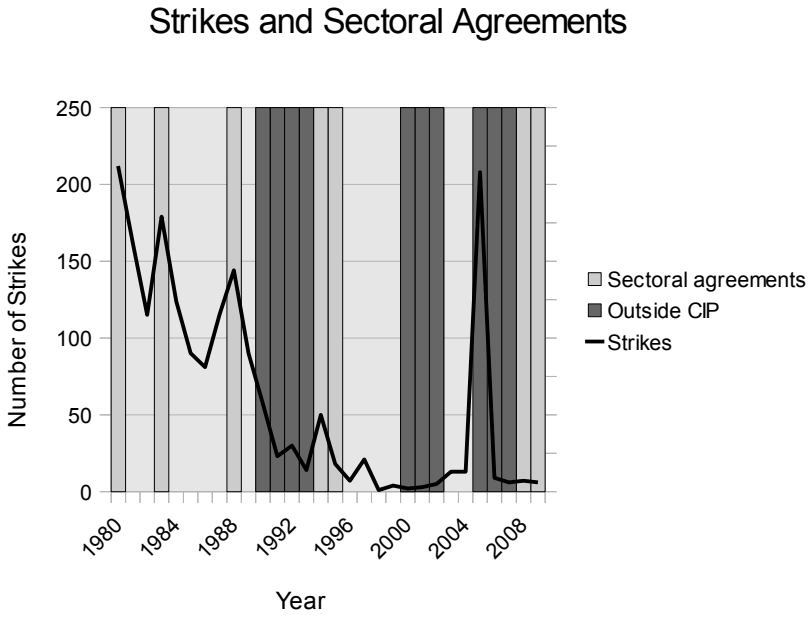

Figure 5.2. Strikes in the Finnish paper industry and sectoral agreements, 1980-2009 (source: METLA 2010)

Figure 5.3 shows the strike *intensity* in the paper industry between 1980 and 2009. It can be seen that on

average strike intensity is less than 2 days, with the notable exceptions of 2000 and 2005. Statements by union officials and shop stewards alike show that in the union there is a conviction to some extent that strikes are not effective anymore. This can be seen in the decline of strikes in an absolute sense above, but to a lesser extent in the strike intensity shown below. As Lilja et al. (1992:149) also mention, the industry is not very notable for industry-wide strikes, and the figure below indeed indicates that most strikes were short ones. The years 2000 and 2005 were an obvious deviation from the trend (see Jonker 2008 and Tainio and Lilja 2003:63) .

In terms of reputational representativeness, it is – based on these statistics – slightly odd that the industry has a reputation for being very strike-prone, because percentually strikes in the pulp and paper industry very seldom exceed the level of 15 percent of total strikes (METLA 2010:257).

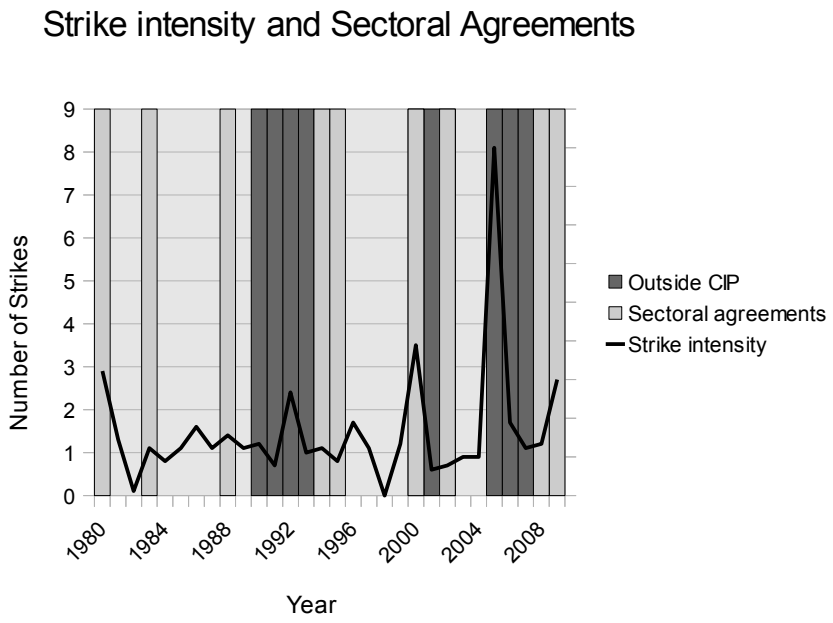

Figure 5.3. Strike intensity in the Finnish paper industry and sectoral agreements, 1980-2009 (Source: own calculations based on METLA 2010)

Also, the presence of the union in public media may be of relevance; a search of the main Finnish daily *Helsingin Sanomat's* archives for the string 'Paperiliitto' results in thousands of articles since 1990. Jonker (2008) shows that during the conflict in 2005 the resistance of the union to the drafts co-written with the National Conciliator resulted in considerable public irritation regarding union behavior, even including criticism by the union's federation SAK. In 2009, former union chairman Jouko Ahonen calls publicly – that is, through a statement of the union's website – for abandoning internal squabbling and focusing on more important issues as well as the more effective use of resources (Paperiliito 8.9.2009).

The issue, shortly discussed in Jonker-Hoffrén (n.d.), concerns a change of the rules of the union and voting methods used, in particular with regard to the issue of cooperation with other unions or organizations, which the Left Alliance faction resists (at least with regard to the independence of the union). The fact that this faction challenged the union in court over this issue is certainly detrimental to the reputation of the union as a more or less unified actor (this can be also shown as a decrease in internal solidarity, see Lévesque and Murray 2010).

Summarizing, it is difficult to draw solid conclusions about the reputational representativeness of the union. On the one hand, the level of strikes has declined drastically, which relates to both the declining effectiveness of strikes as a pressure method and the general calming of Finnish industrial relations, despite not always participating in the comprehensive incomes policies. On the other hand, there seems to be an increase in the public display of internal dissent, which in the framework of Müller-Jentsch (1997) can be seen as detrimental to internal representativeness, because also the existence of a separate Left Alliance Paper Workers' Union website may indicate dissenting voices are not properly channelled (see Jonker-Hoffrén n.d.).

6. Other factors influencing representativeness

This section presents important factors influencing union representativeness that were not possible to include in any of the articles. Mostly because these factors haven't been tied to specific cases or their nature is such that they do not lend themselves to inclusion in scientific articles. However, the factors presented here have been present in thinking about issues; this is perhaps most evident in Jonker-Hoffrén (2011) and (n.d.). However, the most important reason for these factors being presented here is that they are part of the environment of the Finnish paper industry, and in this way affect both union and employer. In this sense, they belong to external representativeness, but since the union does not *directly* have influence on these factors, they are discussed separately here. Note that no attempt is made to qualify the relative weight of these factors; it is reasonable to suppose that technological factors have the biggest impact and that regarding the European paper market the EU regulations have the most impact. Each factor has its own importance nonetheless for the strategic capability of the union. The issue of technology is also an important value in itself, as technological development and consultancy are part of the strategic forest cluster (Hernesniemi et al. 1995:98-125). The legal issues presented here may be considered part of legal representativeness, but more in an enabling sense, not

of the union.

6.1 Domestic legal issues

Traditionally, analysis of legal rules is not the domain of sociology. However, as Fligstein (2001:34) argues, laws and other institutional structures form the governance structures that 'define relations of competition and cooperation and define how firms should be organized.' Thus, when dealing with an actor that participates in the market, like the Finnish Paper Workers' Union through collective agreements and presence at the shop floor of the paper industry, one should look into these governance structures with sufficient detail. Furthermore, Fligstein (2001:40) argues that 'domains' are the result of the interplay of 'workers, capitalists, politicians and state bureaucrats.' This means that any given market, with its governance structures, is in a way the final result of how regulations have developed in the continuous power struggle between aformentioned actors (see also Korpi 1978). Thus, though the paper industry is ostensibly a globalized industry, it should not be forgotten that the Finnish part of that industry and its market are shaped by local (and to some extent European) regulation. As Jonker-Hoffrén (2011) shows for the issue of outsourcing, the Finnish and European rules were at odds at some point, which marked a shift in the application of the rules on outsourcing (especially as part of the collective agreements.) The issue of collective agreements in shaping representativeness is discussed above, because they are a direct result of union activity.
Instead, this section focuses on general industrial relations agreements in Finland, the change in the capital tax law, the relation between centralized incomes agreements and strikes, and finally the relevance of European state aid and competition law for the Finnish paper industry and the labor union.

One law which has been central to increasing co-decision power for employees is the Co-decision Law of 2007 (originally from 1978). This law provides the representatives of the employees of an enterprise with certain rights of information – in particular the economic situation of the firm, wages paid to employees and the use of outsourced personnel in the firm. It also covers a wide range of topics open for negotiation: among others, schooling, certain secondary working conditions and (changes) in (local) regulation. Within the context of the paper industry, its relevance lies in its provisions on 'significant changes in the content of work' as well as the procedures to be followed in case the employer wants to lay off or fire employees. The main idea of this law is to allow employees or their representatives more input in processes of change. There is, nonetheless, an exception to the obligation to conduct co-

determination negotiations: if there are 'extremely pressing reasons' related to the production or economic situation of the firm, co-determination can be by-passed. It is not possible in this dissertation to judge the merits of this law with respect to employee representation or labor union activity, but the questionnaire sent to the senior shop stewards of the Finnish Paper Workers' Union shows that a majority of respondents think that employment protection in Finland is too weak. Furthermore, in open answers, a large number of senior shop stewards mention that this Co-decision Law functions largely as a formal path to redundancies – by which is meant that in the details, the local labor representatives may influence the outcomes, but within a broader scope the end result is what the employer aims to achieve.

During the first half of the 2000s, a number of agreements between the employers' federation and the Paper Workers' Union was renewed, presumably reflecting changing conditions of the paper industry and the perceived need to establish clear ground rules. They are included in the paper industry's collective agreement. The treaties considered here are the 'Arbitration agreement' (Välimiesmenettelypöytäkirja, 2002), the 'On-the-Job-learning agreement' (Työssäoppimista koskeva sopimus paperiteollisuudessa, 2000) and the 'Redundancy protection agreement' (irtisanomissuojasopimus paperiteollisuudessa, 2003), which was introduced above. These three agreements are interesting because of content and timing. Between 2000 and 2003, as the total profits of the Finnish paper industry reached a record high. After this date, because of the influence of the exchange rate between dollar and euro, decline in demand and the existence of overcapacity, the operating margin and total profits dropped sharply. These agreements are from the period of record profits, and one expects this to show. In this respect, e.g., the agreement of 2000 should reflect a willingness of the employers to invest in schooling of its workforce, though perhaps after 2003 there have been less funds available for this cause. Nonetheless, also this treaty is still valid as of 2010.

6.1.1 On-the-Job-learning Agreement

This agreement, which was signed in April 2000, is intended to lay down common rules for facilitating apprenticeships in the paper industry. There are two cooperation dimensions present in this agreement: the first is between labor union and employer in order to 'try to accomplish the sufficient birth of apprenticeships' (author's translation) and, on the other hand, cooperation between companies and local vocational schools to guarantee a sufficient level of supervision and schooling.

Interesting in the light of the sharp decline of employment in the paper industry is the provision that the offering of apprenticeships shall not lead to redundancies of any kind, nor shall redundancies or other obligations concerning employment be an obstacle to the formation of apprenticeships. According to the Report on Schooling and Training in the Paper Industry, there should be an increase in apprenticeships – not only to cope with a future shortage of qualified personnel but also to deal with the rather poor image the industry has (Opetusministeriö 2008:49. From METLA (2010:261), it is clear that specialized education in pulp and paper is declining, even given the short time-span presented there.. This perhaps indirectly shows a reduced need for apprenticeships, but according to the aforementioned report, there are still not enough places, regardless of the good intentions of this agreement. In a very immediate sense, this agreement shows the concern of the labor union about employment – but in particular *existing* employment. In 2000, this agreement caused a small crisis, when Stora Enso announced that this agreement would not be integrally transferred to the collective agreement, whereupon the labor union threatened a strike (Helsingin Sanomat 2000) More recently, a news item shows that at least UPM Kymmene takes this method of learning seriously and sees it as a way to create a new, qualified work force (Yle 2011)

6.1.2 Arbitration Agreement

This agreement is based on the law on arbitration (laki välimiesmenettelystä 23.10.1992/967) and contains the issues that should be agreed by the partners that want to use this arbitration instrument. This means that the agreement stipulated for what issues the arbitration method can be used – it explicitly states that in the case of difference of opinion over the interpretation of the collective agreement, the arbitration method may be used instead of appealing to the Labor Court. Excluded from arbitration are wage questions and changes in wages related to competence and availability classifications. Also explicitly excluded are all issues that somehow relate to industrial action (as these may constitute a breach of the peace clause and are thus the jurisdiction of the Labor Court.

The arbitration agreement shows the rules that should be followed in order to get an issue into arbitration. It is difficult to assess the volume of issues that are settled by arbitration, because the decisions are generally published for internal use only, though they are not secret (in the paper industry at least). Nevertheless, it can be inferred that, bearing in mind the peace clause and the restrictions to the use of arbitration, it may function as a 'gate-keeper' to prevent industrial action and/or litigation. See Risto Ovaska (2007) for a thorough legal perspective on the arbitration law and its process.

6.1.3 Centralized incomes agreements

The Finnish Paper Workers' Union has a mixed relationship with the traditional Finnish centralized incomes policy. On the one hand, it has on occasion been the 'pioneer' or 'opener' of the negotiation rounds, in effect thereby setting the bar for the centralized incomes policy and sectoral agreements in terms of wage increases. On the other hand, it also has independently concluded sectoral agreements outside the centralized incomes policy (though the end results may not have been very different). For the union, the rationale for joining or not joining the centralized incomes policy has apparently been inspired by the situation in the paper industry. It can indeed be said that because of the export-oriented nature of the industry, the framework of a centralized incomes policy can sometimes be too restrictive, depending on the market situation. Moreover, the capital-intensity of the industry makes issues of taxation complicated, and the strict shift system, which is dictated by technology, also leaves its mark on specific demands of working time reduction.

Even so, as Jonker (2009) and to a lesser extent Jonker (2008) show in the case of the gender balance in the industry, the real wage increases of the paper industry are virtually the same as those in other industries. While there are occasionally issues that are significantly different for the paper industry as opposed to other industries, it may be that both employers and labor union simply prefer concluding sectoral agreements, in their own way. In the light of public perception related to reputational representativeness, there is the risk that, especially for the union, 'tailored' collective agreements fuel the view of 'overpaid paper-workers.' Figure 4.6 shows the real wage increases in the Finnish paper industry, based on METLA (2010:256). In addition, the periods of sectoral agreements and centralized incomes policies (CIP) are highlighted; also shown are the periods when the Paper Workers' Union is not participating in the centralized incomes policy. As is clear from the figure, a clear answer to the question as to whether sectoral agreements or centralized incomes agreements are better in achieving the highest real wage increases for the union's members is unavailable. A lot depends on the intention of the centralized incomes policy and the stance towards effects of inflation. One central idea of the centralized incomes policies is the moderation effect; sectoral agreements may have the effect of inducing inflationary pressure through 'excessive' wage demands (Boeri et al 2001:98-104). In settings with sectoral agreements, a mismatch between expected inflation and negotiated wages is possible, resulting in a lower real wage than intended. A potential indication is the period 1988-1991, in which a sectoral agreement was followed by a 1-year CIP, and the crisis years without a CIP. In these years,

inflation increased rapidly as a result of the overheating of the economy (Honkapohja et al. 2009), and the wage change for other employees remained more stable than for the paper industry – which may be attributed to a wrong estimation of inflation. Boeri et al (2001) note, however, that the interaction between monetary policy, unemployment, collective bargaining and inflation is far from easy to understand, and there does not exist much empirical evidence to support different views.

6.1.4 Capital tax

In 1993, the Finnish capital tax radically changed. The main reason for this was the incongruency between Finnish capital tax law and international tax law, which affected both the country's tax base and the neutrality of taxation. During the same year, restrictions on foreign ownership of Finnish companies were also abolished (Lilja and Tainio 1996) A major pressure to change the law came from the previous liberalization of capital and financial markets in Finland and elsewhere during the 1980s (HE 200/1992). Furthermore, it was seen that the old capital tax law was somewhat misused to dodge income taxes – people with high incomes would be able to invest capital in firms to attain lower taxation rates. The new capital tax law introduced taxation for private persons of both earned income and capital income, thus removing an incentive for private persons to invest e.g., in the forest industry. According to an unstructured interview with representatives in the Paper Workers' Union, conducted in 2009, the reform of the capital tax law was one of the main sources of the decline in domestic investments (the newest complete paper machine dates from 1998; see Seppälä 2010). Though there is probably some impact from this amendment of the law on investment, it is probably fairly marginal. Furthermore, domestic investment in the pulp and paper industries did not suddenly decline since 1993; the decline had already started in the late 1980s. Just after the economic recession in the early 1990s, domestic investment peaked, as well as around 2001 (see Figure 4.3). As said, the Finnish paper industry has been characterized by having 'patient capital', meaning that banks and/or other investors know that the return on investment will materialize in the not-so-near future. The criticism of the union towards the capital tax law change may be in fact political: for Finnish companies since the late 1980s in connection with capital market liberalisation, capital increasingly came from abroad, and some of the companies are listed on the stock markets, signalling an end to the 'patient capital'-era (Lilja and Tainio 1996; Honkapohja and Koskela 1999). This change in capital provision also influenced the companies' investment strategies: now they were accountable to shareholders, who demand profitability and a good return on investments.

The Finnish paper companies have experienced the hard way how globalization works – both ways. Carrere and Lohmann (1996:33-41) and Pakkasvirta (2008:29-35) show the dynamics of globalization for the forest industries, in particular the changing of markets and the concentration of the industry in the hands of a few players. During the few years the value of the euro was advantageous to European companies for take-overs, they started 'overseas adventures'. Not all of these were successful: the Fray Bentos pulp mill, conceived by Metsä-Botnia, had to be nearly completely sold to UPM-Kymmene (already a stakeholder) after Metsä-Botnia got in trouble. This project was also subject to international tension and alleged human rights violations (Pakkasvirta 2008). The Madison Paper Company on the other hand, taken over by Myllykoski Oy in 2000 (when the dollar was cheap), seems to still be doing fairly well, thanks to a long-term contract with the New York Times – but with the merger of Myllykoski and UPM-Kymmene in 2011 and the subsequent closure of the Myllykoski mill in Finland, this unit now belongs to UPM. The expansion abroad has led to judicial action against StoraEnso and UPM-Kymmene on charges of civic antitrust violations in the United States of America (Dead Tree Edition 2009; 2010). Other examples include the closure of the ultimately unprofitable Miramachi of UPM-Kymmene and the sale below acquisition price of StoraEnso's North American parts to NewPaper – this time the dollar was highly unfavourable for such a sale. At least in the case of Miramichi, the Paper Workers' Union has organized a sympathy strike.

6.2 International legal changes: European competition law

The concentration of forest product production in the hands of a few firms is nearly an oligopoly. Pöyry (2008) shows on the basis of a critical measure that the European paper industry does not yet possess the qualities of oligopoly. According to Halevi (1995), industries that have a highly oligopolistic nature (without being an oligopoly) may still have influence on international competition. Three of the five largest European companies active are Finnish, and of the ten largest paper companies of the world, two are Finnish. Since much of the industry has concentrated its production on bulk paper, and mergers have been common, European competition law and more specifically state aid law is relevant. Though these rules are sufficiently complicated to warrant research on their own, it is necessary to bring out some aspects of this body of law, as they have direct bearing on the Finnish paper industry, both internally through provisions in collective agreements (Jonker-Hoffrén 2011) and externally through the use of certain forms of state aid for investments in regions elegible for regional policy financing. Here, competition law will be discussed as follows: first, issues of (labor) market distortion; second, mergers; and third, state aid provisions.

Jonker (2002) analyzed the then-valid rules on state aid regulation in relation to the Finnish paper industry and, in particular, the case of a green-field investment near Stendal in former East-Germany. Since then, much has changed, not in the least because of the entry of the CEE countries into the EU. The accession of these countries has affected large changes in the European regional policies, and in effect roughly one in four regions of the enlarged EU has a GDP under 75% of the average of the EU-27 (EU regional policy site). Currently, the European Commission has a fairly comprehensive on-line reference of funds available and eligible regions. However, it is still difficult to provide a succinct and yet complete picture, which would help explain investment decisions of paper and pulp companies. Still, it can be assumed that the large amount of funds available, especially for regions with a much lower GDP than the EU-27 average, must influence investment decisions, since – depending on the region – as much as 30% state aid intensity can be obtained under Article 87(3)(a) of the EC Treaty. From the register of state aid, it can be seen that diverse countries in cooperation with local firms actively use state aid to promote investment of expensive new paper machines or pulp and paper mills (see the EU's State Aid Register 2012). Also, the Finnish-Swedish company Stora Enso has greatly benefited from the state aid rules (for example, in the Stora Enso Langerbrugge case C73/2003). Because of the scope of this topic, only a brief reflection on the different issues respective to state aid is presented – in particular with regard to employment and investments. The cases mentioned are listed in the list of cases above.

6.2.1 (Labor) Market distortions

Reasoned from economic theory, any kind of investment subsidy must by default have some kind of distortionary effect on the market, as it will artificially lower the price of investment by a certain factor. This is the reason why the European Commission, in assessing notifications of state aid, places so much emphasis on the compatibility with the Common Market and the reasons for eligibility (Nikolaides 2008). The case of Stora Enso Langerbrugge N.V. is instructive in this respect (Case C73/2003). Only a certain part of the investment aid is found to be compatible with the Common Market.

However, with regard to the labor market, state aid is less easily assessed, since Article 87(3)(c) of the Treaty is concerned with the development of certain economic activities (Nicolaides et all 2008:48) and these are related to EU regional policy insofar as they are designated to be disadvantaged relative to the

EU average region. This implies the 'balancing act' that the Commission has to perform in assessing state aid. On the one hand, it has to assess the possible distortions of the Common Market through state aid, and on the other hand it has to assess the potential positive effects for regional development as a result of the state aid. The present document is not the right place for an extensive analysis of this issue, but especially in the paper industry in Europe, with existing overcapacity (and therefore a certain amount of unprofitable mills around Europe), the implementation of state aid on the basis of Article 87(3)(c) may have positive regional effects – but may endanger employment elsewhere, where existing facilities are aging. As METLA (2009) states, all over Europe capacity has been reduced, in effect foreclosing the oldest and most unprofitable paper mills. Still, elsewhere in Europe, with state aid, new paper and pulp mills are built. While this probably improves the competitiveness of the industry as a whole, and improves production processes, this development nonetheless also signifies a transfer of paper-related employment from North to South. This is observable within Europe, but is most acutely seen in investments in Asia and South-America (e.g., Carrere and Lohmann 1996; Pakkasvirta 2008; Helsingin Sanomat 2010). Since also investments outside Europe by Finnish companies can be provided with loans and guarantees by the Finnish state through Finnvera (e.g., in the case of the Fray Bentos pulp mill, see Finnvera 2007), the resulting loss of domestic employment is perhaps partially attributable to other forces than the market forces. Recent developments in the Finnish paper industry show that, on the whole, paper industry companies are investing in new capital, but that this is to the detriment of domestic Finnish investments.

Perhaps as a consolidating movement in a difficult product market, the period under scrutiny has seen a lot of mergers in the pulp and paper industry. Although for Finland the EU regulations on mergers and acquisitions came into force with its entry into the EU in 1995, it is useful to look at some aspects of these rules, as they, too, affect competition. The development of huge multi-national paper companies through mergers also displays within-corporation shifts from the global North to South.

6.2.2 Mergers and acquisitions

Within the context of the Finnish pulp and paper industry, mergers and acquisitions have been a common feature. The three largest corporations, UPM-Kymmene, Stora Enso and M-Real, are results of consolidations and mergers (included in the Competition Directorate-General's database); UPM-Kymmene and Stora Enso existed previously as corporations which were already merged companies from previously independent companies. Some particularities of these corporations are that M-Real is a

publicly listed company owned for 51% by the Metsäliitto cooperative, and Stora Enso is a bi-national (Swedish and Finnish) company which is partially owned by the Finnish state.

According to the database of decisions in the field of competition policy of the EU, decisions about mergers have been very relevant for the Finnish paper industry (State Aid Register 2012, search tool). Out of the 92 cases since 1990 mentioned in this database, 19 involve a Finnish paper company. From this database, it is also seen that over a period of nearly 20 years, the European paper industry has consolidated itself to a large extent. A short overview of a recent case involving a Finnish company highlights some of the issues relevant in the European pulp and paper sector. The case is the acquisition of the M-Real Kirkniemi mill by South African Sappi (*Sappi/M-Real)*.

In this case some typical aspects are at stake: market share after merger, capacity share, availability of alternative suppliers and the Community dimension. Regarding the market share after the merger, the various qualities of paper are assessed (wood-free coated and uncoated paper, coated mechanical paper). The decision on the case provides a very useful overview of the approximate market shares for the aforementioned paper qualities, from which it can be seen that only a very limited number of companies are active in the European paper market. Stora Enso and UPM-Kymmene are among the larger competitors. Also in terms of capacity share, the acquisition can be seen as consolidation, which is explicitly mentioned in the decision; the existence of overcapacity is acknowledged by Sappi and M-Real as well as industry reports, which also document an expected decline of the European paper market, including the role of exporter to emerging markets in Asia. In the assessment of the availability of alternative suppliers, which proceeds through interviews with interested third parties, it becomes clear that regardless of consolidation and limited possibility to price changes, there is still fierce competition in the market – especially with producers in the emerging market exporting to Europe as well. The Community dimension is a somewhat technical aspect, which is based on the turnover of the companies in question and whether or not they achieve it in one and the same Member State. For Sappi and M-Real, this is not the case, since they operate in many Member States as well as outside the EEA (European Economic Area), nor is it (most likely) for any of the large paper companies.

The most recent case for the Finnish paper industry is the acquisition of Myllykoski by UPM-Kymmene (*UPM-Kymmene/Myllykoski)*. This included not only Myllykoski's Finnish holdings but also its German alliance partners, RheinPapier and the USA-based Madison paper unit. Though there were consequences for these units abroad, the main news concerned UPM's decision to close the Finnish

Myllykoski plant by the end of 2011. This acquisition was approved by the European Commission on the grounds that the increased production capacity of UPM after the merger would not negatively affect competition, because competitors would have enough spare capacity to counteract price increases. Interestingly, but not surprising – given Myllykoski's long-term economic problems – UPM decided to close the facility. Before this, the Paper Workers' Union greeted the merger with some enthusiasm because it signaled the end of uncertainty (Paperiliitto 2011b). The episode between this decision and the final closure is captured in the documentary film *Viimeinen Rulla* ['The Last Roll'] (2012). From a legal perspective, this case is somewhat suspicious, because in the European context there is a near-oligopoly of paper producers, in the same sense that Halevi (1995) refers to the German manufacturing industry. Apparently UPM is not yet ready to raise prices, but cutting capacity almost amounts to the same: UPM effectively has removed a competitor of the European market. In terms of market share there may not have been an objection to this merger, but using the merger as a way of quickly reducing capacity in order to prevent the reduction of capacity in UPM's pre-Myllykoski holdings is an interesting way for the company to work its way to more competitive levels of production. Through the merger with Myllykoski, it gains access to extra capacity that it *can* reduce, without losing the 'buffer' of its existing overcapacity. Thus, within the context of the whole paper market in Europe, the reduction of capacity is to the benefit of UPM, because it removes excess capacity from the market without touching its own pre-Myllykoski capacity, which may be of a technically more advanced level than Myllykoski's (after the attempts to reduce excess capacity in Finland) – making this capacity, even considering market conditions, more valuable for UPM. The closure of Myllykoski is less to the benefit of UPM's competitors, however, since these do not have the 'luxury' of eliminating excess capacity without affecting their buffers, though in the wider sense the removal of excess capacity should improve the whole industry's position as well. Furthermore, the *elimination* of Myllykoski's mills by definition leads to a larger market share of UPM in the European market, though this similarly affects the shares of its competitors. It may be that UPM's logic to close Myllykoski's mill is different from that theorized here, but the key point is that in its decision to grant permission for the acquisition, the European Commission did *not* consider the potential competition effect of buying a firm off the market. Especially in a market which has some characteristics of oligopoly, it should have considered this possibility.

In this superficial overview of merger aspects in EU regulations, the most significant issue for the present study is the drive towards consolidation in itself, and how this affects the market. As the decision on *Sappi/M-real* notes: 'The transaction is seen as part of a consolidation of the European

market which is inevitable and that will lead to the reduction of capacities.' And: '[…] in a context of low profitability, paper manufacturers' strategy is to close less competitive capacities in order to shift volumes to more competitive mills in more attractive markets.' The issue of consolidation is also already seen from *Repola/Kymmene*, the decision that led to the formation of UPM-Kymmene. So within the context of the Finnish Paper Workers' Union, merger regulations are relevant, as consolidation and concentration have the potential of putting less competitive units at risk, and thus parts of its membership. This is perhaps illustrated well by the result of the acquisition of the M-real Kangas mill by Sappi Ltd: some time after the acquisition was approved, Sappi Ltd closed the paper mill in Kangas (e.g., Yle Alueet 2010). Exactly the same happened with Myllykoski.

6.2.3 European state aid policy

Nicolaides et al (2008) provide as yet the most comprehensive study of state aid policy in the European Community. It is apparent that many aspects of this policy have changed since I wrote about European State Aid regulations (Jonker 2002). In that document, most criticism was directed at the intransparency of procedures, especially for third-party interested actors. The procedural regulation (Council Regulation No 659/1999) and its implementation (Commission Regulation (EC) No 794/2004) and amendment (Commission Regulation (EC) No 1125/2009) provide great detail on the rights and procedures for third parties and the principal parties to state aid procedures. As an example, relevant to the position of labor unions, the most comprehensive case is *3F v. Commission*, a Danish labor union against a decision bu the European Commission not to object a certain fiscal measure relating to seafarers. Through this case, it becomes clear that labor unions can be only very seldom (if ever) a concerned party to decisions. The main arguments of this decision are derived from previous case law; and to show the relevance of state aid regulations to the Finnish paper industry and its labor union, the main arguments are shown here as derived from the seminal cases used in this particular case. Also, the Finnish Competition Authority (2010) refers to many of the same cases. *Albany* considers the limits of markets by undertakings that aim to provide a common good, and specifically states that collective agreements are not subject to competition law. The *Plaumann* case presents a legal test for individual concern to Commission decisions, which contains the position that a claimant must somehow be differentiated from all other persons that are possibly affected by a decision. Furthermore, the test of individual concern usually failed, because claimants practice a commercial activity that can in theory be practiced by anyone. Craig and de Búrqa (2008:511-520) criticize this court decision, because it is conceptually and pragmatically problematic, as well as perhaps excessively restrictive. Regarding

competition policy and state aid policy, the ECJ is seen as slightly more liberal, though labor unions still cannot be seen as concerned, as the Danish case above shows. *Aktiengemeinschaft Recht und Eigentum* shows what the limits of procedural rights are with regard to State aid decisions and their contention; for associations, the relevance is in the right to appeal to safeguarding procedural rights under art. 88(2) EC. *British Aggregates* refines the position of concerned parties in relation to State aid decisions; challenging such decisions is admissible when the concern is safeguarding procedural standing rather than the content of the decision, while it is also admissible that associations can challenge decisions on behalf of their members – even if the members would have been able to challenge the decision individually.

Within the context of the theoretical framework exhibited above, the regulation of European state aid and its restrictions is a prime example of how legal representativeness can change. Starting from the *Plaumann* case, the ECJ has interpreted in a fairly consistent but restrictive sense the concept of individual concern, or the possibility for interested third parties to challenge decisions to another person (Craig and de Búrqa 2008). With regard to the regulation of state aid and competition rules, the ECJ is perhaps less restrictive in determining individual concern, because in this sphere enterprises can be directly concerned under certain circumstances (*Metro GmbH* and *COFAZ*). The possibility to lodge comments is now formalized under Art 88(2) EC. Nonetheless, cases such as *Albany* and *Drijvende Bokken* have shown that because of the nature of labor unions, which do not produce goods, they are very seldom if ever able to justify that they would be a legal person directly concerned with (e.g.,) state aid decisions. Collective agreements are not seen to be goods and are at any rate not subject to competition law (*Becu*; *Albany*); this was also a concern in the case of the outsourcing conflict in Finland.

Summarizing, for a labor union such as the Finnish Paper Workers' Union, the legal possibilities to protest against state aid decisions are small; it is unlikely that the union on legal grounds can be considered a concerned third party. It may sound slightly absurd that the union would be a concerned party to e.g., decisions based on European state aid: after all, there is market competition. But state aid (in whatever form) inherently distorts competition, and when considering single multi-national companies, the effects of state aid would have impact for other parts of the company. An example is the *Celbi and Soporcel* case (N900/2006): both are active in the pulp and paper sector and aid was related to modernization and expansion investment at two locations in Portugal. The interesting aspect here is

that the Celbi pulp-mill was previously owned by Stora Enso (and strategically divested in favour of the Veracel pulp mill in Brazil, even though it was well-performing; Stora Enso 2006). Thus, though Stora Enso had other plans, it was a production unit that could have gotten state aid and, through those new investments, increased competitive pressures on Finnish mills. This in itself is part and parcel of a market economy, but the core problem is distortion of competition over investments through the various regional policy schemes. In a sense, the Myllykoski case is even more relevant, because it was an authorized acquisition within the same Member State that had direct consequences for the employees of Myllykoski. It remains to be seen whether European law will achieve some kind of incorporation of interests of employees regarding state aid and merger decisions, especially when considering the effects on competition of the regional policy schemes and other state aid policies.

6.3 The role of technology for the Finnish paper industry

Since the paper industry is a very capital intensive sector, it is relevant to take note of changes in technology and the role of technology in general. To a large extent, the decline of employment in the Finnish paper industry can be explained by changes in technology and increasing automation of processes (Nissan 1990). The effects of automation can be seen also in white-collar jobs, as for instance quality control nowadays can be done through machines and laboratory personnel is less needed. This section briefly discusses the technical aspects of paper production as well as the consequences of technological change in relation to the national resources of Finland. The decline of domestic investment mentioned above implies that the holdings of the Finnish paper companies abroad are almost by definition using newer technology, which thus affects in-company competition. As this has a direct impact in profitability comparisons within the company (and potential closure consequences), they should be taken into account in this research, though no claim for completeness can be made.

In the production of paper, the raw materials are essential. It is in particular in the processing of these raw materials that technology has made great advances. This section gives a short overview of the developments in the production of pulp, paper and the use of bio-based fuels to increase energy efficiency.

6.3.1 Pulp

Pulp is the basic ingredient for making paper, but there are several ways to produce it. The various

production processes are: mechanical, thermomechanical, chemithermomechanical, chemical and recycling (Holik 2006). Of these, in particular chemical pulping has a bad reputation due to the effluent of the process, which has an offensive odor. The mechanical and recycling processes use considerable amount of water, relatively speaking, and all of these processes use a lot of heat. This is, nonetheless, an area of continuous improvement, as research is conducted towards the lesser use of water and chemicals, and operating the processes at lower temperatures (Nissan 1990).

One of the biggest innovations from an environmental viewpoint is the reduction of chlorine as a bleaching agent (in relation to dioxins). Depending on the process and base material, other bleaching materials are used which are less polluting. In the chemical 'kraft process', a waste product called black liquor is produced, and this is generally used as fuel for different mill processes. Improvements in the energy efficiency of black liquor through gasification (e.g., Dahlquist and Jones 2005) provide an opportunity for the paper industry to become carbon-neutral and producers of carbon-neutral energy (Messner and Srebotnik 1994).

The most radical change in the production of pulp is that with current pulping machines, also so-called inferior wood can be used for paper production. This offers a huge advantage for the production of certain paper grades in the favour of fast-growing trees such as eucalyptus. Though rather outside the scope of this dissertation, the key issue seems to be the attainment of softwood pulp characteristics with hardwood, since softwood pulp leads to stronger papers (due to chemical and physical properties). Hardwood pulps, on the other hand, are used for fine paper rather than strong paper, but mixed pulps are also common. Apart from the advantage of growth rate, using the proper process yields better quality pulp with eucalypus, depending on the species (Shackford 2003; Cotterill and MacRae 1997). A technical issue for the Finnish paper industry therefore seems to be, on the one hand, the choice/competition between birch and eucalyptus and, on the other, between pine/spruce and eucalyptus. Given growth rates and pulp prices, the comparative advantage of the Finnish forest areal would seem to have diminished. As Nissan (1990), King et al (1998) and Swistra et al (1998) show, chemicals are thus extremely important in improving the quality of paper and even determine the optimal operating speed of paper machines.

Da Silva Magaton et al (2009) analyze the diverse qualities of some eucalyptus species, and recognizes the growing importance of this tree as well as certain important fibre qualities. Finnish hardwood, such as pine, is still very suitable for various paper grades, but in recent years both high stumpage prices and

relatively difficult procurement have made domestic timber a disadvantage to the Finnish industry (METLA 2009a:28-29). In this regard, the investments abroad by the Finnish paper companies are well-understood, and though the forest reserve in Finland remains an essential asset, the distance to certain markets (Central Europe and Asia) makes the advantages of eucalyptus-pulp considerable in the market for mass-produced paper.

Da Silva Magaton et al (2009:33) also compares production cost of pulp suitable for printing and writing paper, and though total production costs are highest in Canada, wood costs are highest in Finland and lowest in Indonesia and Brazil. The Finnish Research Institute for Forest Industries (METLA) shows that there is a clear upward trend in the real stumpage price index (by felling season) (METLA 2009b:160). Moreover, Da Silva Magaton et al (2009) indicate that especially through technical innovation, the importance of eucalyptus will grow even more in the future, next to the quick growth of the species. Saikia et al. (1997) show that there are good prospects for other non-tree plants that have a fast rate of growth for the production of pulp and paper. Interest for application of other species is mainly based on two issues: (potential) shortage of conventional pulp woods and ecological effects of eucalyptus plantations (e.g., Vallan 2002, Turnbull 1999)

6.3.2 Paper

The production of paper from pulp is a complex chemical-mechanical process, which has spawned its own research field 'paper physics', justifying the industry as 'high-tech' (Nissan 1990; Lilja et al. 2005:17). It can be divided into four basic sections: forming, pressing, drying and finishing. In the forming section, the raw paper is made from the pulp. Here, the cohesion of wood fibres will be developed. This is a section where water is used abundantly, though newer water-less technologies exist. The pressing section transforms the proto-paper into paper of a certain quality. Using different techniques, this section can greatly affect the speed of the paper machine. The drying section drains the paper of excess moisture, which also improves paper quality, while the finishing section puts certain coatings on the paper depending on the intended use (de Beer et al1998) In the area of coatings, major innovations have occurred in reaction to demand and a desire to differentiate production (Nissan 1990).

The automation of the paper cutting in the end of the production process presents a great innovation in terms of quality (precision and uniformity). This automation has, on the other hand, led to a huge

loss of employment – previously cutting was done by expert employees. Improvements in all parts of the Fourdrinier machine, from the study of the internal workings (sheet transfer) to drainage issues led to shortening of the paper machine, thereby reducing investment costs. Since the 1950s, so-called on-line monitoring and measuring of the paper machine has increased, which also reduced loss of production through less 'below standard'-paper (Nissan 1990, Holik 2006, Haunreiter 1997). The improvement of technology has been greatly assisted by the existence of specialized consulting companies (Carrere et al 1996, Laestadius 1998).

As the speed of paper machines increased over time from 270 feet per minute to some 6,000 feet per minute currently, monitoring as well as technical innovations have been necessary to enable greater production speed. Relevant here are both so-called binders to 'glue' the wood fibres together and the mechanical aspects of the paper machine itself and its interaction with the paper (Nissan 1990, Haunreiter 1997). Monitoring, to a large extent the ensuring of uniform quality to the specifications of the client, nowadays happens on-line for the largest part, and increases in laboratory technology have also sped up this process. Kammer et al (2005) show that advanced loop-monitoring systems, enabling analysis of large amounts of data from various parts of the paper producing process, can help increase uniform quality and reduce 'rejected paper'.

6.3.3 Energy consumption as a technological issue

Within the context of environmental issues and other challenges to the (Finnish) paper industry, it is useful to consider shortly the energy consumption of the sector, in particular because finding solutions to the energy needs have been a relevant issue for the Paper Workers' Union, which experienced internal dissent over this issue by the Left Alliance members of the General Assembly. New nuclear power stations have long been a shared wish of both the union's majority and the employers' federation, and in 2010 the Finnish parliament accepted the request for building permits of two new nuclear power plants (Paperiliitto 2010). As the costs of energy are quite significant for the industry, and to a large extent beyond the control of the paper companies, both union and employers' federation have advocated more nuclear energy to reduce dependence on foreign oil and gas and to stabilize energy prices (METLA 2009a:32-34; METLA Tilasto 2009b:289). From the Statistical Yearbook of the Forest Industries, it is clear that electricity consumption has doubled between 1980 and 2008, though the industry produces about 40% of its electricity needs itself. Due to the nature of the industry, it consumes nearly 60% of electricity totally used in manufacturing (METLA 2009b:288). Apart from

electricity consumption, the paper industry also consumes significant volumes of mill fuels (for the production of heat and use in processes). The percentage of wood-based fuels in this category has increased from 62% in 1992 to 75% in 2008 (METLA 2009b:289).

Fouche and Banerjee (2004) show the energy consumption of various parts of the paper production process, and de Beer et al (1998) show the specific energy consumption of the paper production sections, including forming, pressing and drying. They conclude that especially in the drying section energy-efficiency gains can be made by investment in new dryer techniques, of which some have also benefits beyond energy-efficiency – such as increased paper quality. The global technical association for the pulp and paper industry, TAPPI, features a journal in which many techniques are discussed to achieve the same paper quality with less energy, or with bio-energy, such as the pulping by-product, black liquor. In the Finnish forest industry, the use of black liquor has steadily increased (METLA 2009b:289).

6.3.4 Technology and comparative advantage

From this very short overview of technological change in the pulp and paper industry, it becomes clear that the Finnish paper industry faces great challenges. Obviously, Finland has a huge reserve of potential timber, of high quality. However, as indicated above, technological change alters the meaning of these reserves and technology itself, as for example also shown in Ofori-Amoah (1995), which is also readily acknowledged by the report on Development of Schooling in the Finnish Forest Sector (Opetusministeriö 2008:19) which states that 'Finnish timber and production technology in itself do not have a special position nor special benefits' and 'Finnish-built paper machines and pulping processes work as efficiently in Finland as in Brazil or China.' If eucalyptus can be applied to most paper producing activities, then the comparative advantage that Finland once had through its forests will be lost, since trees like pine and spruce are much slower growing species. Furthermore, aging paper machines in Finland may not be able to benefit from the advantages of cheaper eucalyptus pulp (leaving out the issues of transport costs and distance to markets – generally, further refinement of wood products has always been situated close to the customer (Opetusministeriö 2008:19.)

On the other hand, Finnish corporations have invested heavily in operations abroad, both in pulp and paper mills, the most famous example being the Fray Bentos pulp mill in Uruquay (Pakkasvirta 2008). Also, investment abroad shows that Finnish corporations are expanding into growth markets, such as

China and Indonesia. Van Dijk and Szirmai (2006) show for the Indonesian case that both through availability of raw materials and a supportive industrial policy, Asian countries can quickly catch up with Finland and Sweden in terms of production and technology, and Ghosal (2009) points to global overcapacity and other restrictions of competitiveness increases, such as the fact that innovation is essentially embedded in the paper machine, and given the economic life-span of paper machines (and the high capital intensity of the industry), the frequency of technical innovation through investments is low (*ibid.* p. 38.) A major aspect of Finland's comparative advantage in the pulp and paper industry is the highly skilled workforce. This achievement can be equally attributed to the labor union and the factory owners as well as to the generally high standard of the Finnish education system. Nonetheless, it appears that the paper industry may have recruitment problems in the near term. This problematic is shortly discussed in the next section.

In short, the issues facing the Finnish paper industry derive from the effects of globalization: capital is global and labor is local, and in this light it is of the utmost importance to incorporate changes in the environment of the labor union, as these dictate the meaning of the labor union's representativeness.

6.4 Education and labor union demography

One of the critical issues for the future of the Finnish paper industry is the education of young potential workers. This is only somewhat clear from the statistics in the statistical yearbook of forestry (METLA 2009b:245) since those cover only a short time-span. The report on schooling (Opetusministeriö 2008:49) charts the needs of the sector and shows that there will be a significant rise in vacancies due to older workers retiring, but the attraction of the sector and the schooling of the industry is weak. The estimated need for recruitment in the whole sector (including forestry) is about 2500-3500 people per year, but as the statistics show, already from 2002 there was a shortage in newly graduated people (Opetusministeriö 2008:43, METLA2009b:244-245). Especially in the next decade many will retire, which makes the issue of education relatively urgent (given the average age of paper workers, see SAK 2010).

From conversations with (Left Alliance) shop stewards, it *appears* that the 'schooling crisis' is much more severe than hinted at in the statistics. The paper industry education at vocational schools in the Kymenlaakso region, where there is a lot of paper industry, are being closed, despite ambitious plans by local paper mills to integrate schooling and worker re-education. The reason cited for this closure is the

apparent unpopularity of the paper industry as a potential employer, which is connected to the dire straits of the industry as well as the existence of shift systems in which calm monitoring of processes may be followed by hectic, heavy physical work to correct the work process. Still, the aging of the present employees of the paper industry causes a major shortage of qualified personnel in the near future. This future issue comes on top of the difficulties in enabling training for the current workforce, as it is so stretched that it is not always possible to find temporary replacements for those that attend training, regardless of the provisions of the collective agreements. Nearly two-thirds of the respondents to the questionnaire feel they do not have enough opportunities to attend to training and education next to having a job. Also nearly all respondents (except 2) think that often or sometimes the work-force (crew, team etc.) is clearly too small for the tasks at hand.

However, though the specific paper industry education is being shut down, this does not mean this type of education disappears. It merely has been integrated with other process-industry vocational schooling, in which context it is a specialization. In relation to the technology of the paper industry, as well as the recent collective agreements-based emphasis on multi-skilling, this educational reorganization makes perfect sense. Nonetheless, this modernization is still fairly recent and it is too early to say if the looming shortage of personnel in the paper industry due to retirements is enough of an incentive for young people to choose to specialize in the paper industry's process technology. As union officials on- and off-the-record state, the industry has a poor reputation, given the recent wave of factory closings, lay-offs and other factors of uncertainty.

Regarding union demography, hinted at above, Kujala (2006) shows clearly the development of the union's membership in terms of retired and non-retired members. Currently, around 50% of the union's members are retired and – depending on the source – with an average working member age of 45 to 48 (Kujala 2006:618; Työterveyslaitos 2010; SAK 2010) many members are near retirement. The large share of pensioned members does not influence the union's policies though, because pensioned members do not have a right to vote in the union (Paperiliitto 2005b).

Summarizing, there are many factors that affect the position of the union indirectly. Domestically, the role of changing technology likely plays a role in the competitive position of the Finnish paper industry in relation to paper industry abroad, also given the decline in domestic investments. Furthermore, the effects of European competition and state aid law in skewing investment decisions are only inferred here, but given the position of Finland of a relatively very wealthy country, this body of interconnected

policies and legal decisions has an influence that is too little acknowledged. Domestically, especially the agreement complementing the rules on redundancy, can be seen to restrict the union's choice set regarding the representation of members; this particular agreement may bias the union to focus on the older generation of employees instead of focusing on a future in the paper industry for the younger employees. This can be qualified by reiterating that SAK (2010) showed that it is very hard to re-employ older paper workers, so though this particular agreement qualitatively shifts the focus to the less 'important' and less experienced, in a sense it also strengthens the obligation of the union to care for its older members.

Conclusions

Nominally, the Finnish Paper Workers' Union is still a very strong union, judging from its high organization rate, geographical organization in conjunction to where the work-places are, its financial capabilities, its position as an esteemed member of SAK and not least because of its achievements regarding its members' wages and working times. Lévesque and Murray (2010) would emphasize the network embeddedness and the infrastructural resources of the union in this regard as important power resources, also for the future.

However, against the background of the changes in the paper industry and its position in the world economy, this picture must be nuanced. Technology has led to the rapid increase of labor productivity, but arguably this has also led to a decline of employment (cf. Edquist et al 2001). Furthermore, employment may have declined, also due to the foreign expansion of the Finnish paper industry, which was enabled by liberalization of foreign and domestic capital markets and the development of technology to use previously 'inferior' materials. The foreign expansion has also increased inter-company competition, which has become an increasingly hard struggle for the domestic paper industry in relation to the state of technology and in particular the effects of the common currency, the euro, which has closed the path to periodic devaluations which both union and employers lobbied for in the past (Lilja et al. 2005:25). In this context, it is not surprising that senior shop stewards see European environmental regulation, the transfer of work and jobs abroad and the transfer of ownership of Finnish companies to foreign ownership as threats to the paper industry.

The period from 2003 to the present, i.e., starting from the moment of dollar- and euro-achieved currency exchange parity, can be seen as the great turning point – not only for the Finnish paper

industry but for its labor union in particular. As competitive pressures built on the industry, resulting in ever greater losses until 2010, the union was suddenly forced to accommodate, regardless of very high labor productivity. As it is known from (New Keynesian) macro-economic theory that wages are (very) sticky downwards, the union had to put something else on the table in lieu of a real wage decrease. In the industrial conflict of 2005, the core issues were outsourcing and the use of continuous shifts, which, as the employers argued, would improve competitiveness of the sector. After a protracted conflict, the union gave in to demands. Similarly, for reasons of competitiveness and productivity increases, the collective agreement was rewritten completely for 2008, which among other things changed and clarified the provision regulating changes in wages due to significant re-organization of work or implementation of new investments, as well as an overhauled design of the wage system of the paper industry (Metsäteollisuus 2007). As mentioned in Jonker-Hoffrén (n.d.) the 'old' system is highly complicated, and the revised system emphasizes individual experience and skills – preferably in several professional competences. This change to a new wage system erodes the previous principle of 'community-wide' wage increases in favor of individual performance. In a sense, however, it also makes the wage system more transparent. The change in §11 has been a major step in the development of collective agreements for the industry in its aims and uses. Nevertheless, as shown through the questionnaire data, this change has come at a price for the union, since this change has apparently led to a growing divide between union activists (senior shop stewards) and the union leadership, let alone the divide between SDP and Left Alliance at both levels, which is again a decrease of the power resource of 'internal solidarity' (Lévesque and Murray 2010; Müller-Jentsch 1997). Both in terms of 'processes' and 'levels' (Hyman 1997b), the Paper Workers' Union has lost a certain capability to represent the interests of its members. Furthermore, from the relatively large group of non-ligned respondents and the two True Finn respondents (in combination with the tenure of respondents) it is fairly clear that a political shift within the union is under way. The implications of this shift are unclear – it seems that most non-aligned respondents were formerly close to the Left Alliance, so perhaps changes simply indicate a rejection of both SDP and Left Alliance union strategies.

A comparison between the crucial collective agreements of 2005 and 2008 shows that the union, despite its strike fund and organizational capabilities otherwise, succumbed to pressure in 2005. The pressure resulted from both lock-out and other labor market actors. The internal ratification of agreement of 2008 may be seen as a strategic mistake – due to the internal disunion that still exists; at least many respondents to the questionnaire see it as a mistake (regardless of the legal circumstances). In terms of representativeness, the legal representativeness was changed somewhat (through decisions

by the Labor Court on provision §11), but first and foremost the union's internal representativeness declined, because the union's internal democracy failed to defuse the conflict between SDP and Left Alliance regarding a radical change which had special relevance for the Left Alliance. The union's external representativeness on the other hand, regarding the employers, may have increased through a clear commitment to improving competitiveness.

In 2007, the Finnish Paper Workers' Union's General Assembly decided that it would not join the TEAM-merger, though it emphasized the importance of cooperation. The decision not to join TEAM can be argued to be a second strategic mistake, considering the structural change going on in the paper industry towards bio-industry as a core part of the *forest* industry. The internal conflict in 2009 about a change of rules concerning cooperation, which was strongly opposed by the Left Alliance, can be seen as a weakening of internal representativeness resulting from a weakening of the external representativeness (in deciding not to join TEAM). The conflict of 2009 only served to further exacerbate the internal division between the two main faction of the union, and it is no surprise that the union-level politics is seen by many questionnaire respondents as harmful – though they mostly blame the other faction for this.

The issues above have also had an impact on the union's reputational representativeness; the declining level of strikes is positive in this regard, but the image that has replaced it of a bitterly divided labor union can hardly be seen as a positive development – not to mention the chaos that resulted from public statements of former chairman Jouko Ahonen regarding compensation to the managers from pension funds in Finland in 2010. Also, the compromise on outsourcing reached in 2005 may have a less visible effect on reputational representativeness: cleaners that have been outsourced after the union negotiated over this issue felt betrayed by the union (Niemelä and Kalliola 2008).

In answering the main research question, then, it can be said that changes in representativeness can very well explain changes in the union's organizational and strategic capabilities. As explained above, all elements of representativeness have changed drastically since 1980, though the main changes are actually very recent. The union's organization rate has kept quite constant, but it is a constant percentage of an ever smaller workforce and the percentage of pensioned paper workers in total membership that has already crossed the 50% mark. The failure to join TEAM may severely hamper the capabilities of the union in the near future, in the new bio-technology sector, but this is somewhat speculative. Legal changes through the collective agreements of 2005 and 2008 have eroded core

achievements of the union considering working-time (continuous shifts), outsourcing and (perceived) workplace democracy. As these changes have affected the relations internally in the union and with certain constituencies of the union, the reputational representativeness of the union has also suffered. However, none of these changes would have occurred without the changes in the economic environment of the Finnish paper industry, including technological developments and foreign expansion.

The union is still able to negotiate good wage increases for its members – in 2004 the average yearly income of male paper workers was around 40.000 euros and for women around 33.000 euros, whereas in the services sector these values are around 23.000 and 18.000 respectively (Kujala 2006:626). But with an increasing focus on the 'core' paper and pulp personnel, the union risks catering for an ever smaller group of 'sun-set industry employees' – that is, unless the union starts focusing on the future of the forest industry and the union's possibilities there. There does seem to be an implicit move towards craft unionism. A near-term concern is securing the input of new employees in place of those that will retire soon; the union may fulfill its duties of supervision until the Finnish paper industry in its current form has disappeared and replaced by a bio-tech forest industry; the paper industry in a way replaced the tar industry. Based on the average technological and economic life-span of paper machines, this may be around 2030.

Epilogue

Looking back on the period during which I wrote the parts of this dissertation, I cannot but wonder about how peculiar the (Finnish) paper industry is. At the same time it is basic industry and high tech – paper is an everyday item – but I was surprised by the extent of technological innovations involved in producing paper, given that the process has not essentially changed since the first Fourdrinier-process paper machine. Furthermore, reading statistics about paper production is something else than actually walking next to a paper machine from beginning to end. Also, the smell of the pulp boiler is one I am not likely to easily forget. Last but not least, it is refreshing that many of the people I contacted for this dissertation have been very open about what are sometimes highly complicated issues.

It is also interesting how bound to time a research can be. I started work on this subject in the beginning of 2007, and this dissertation probably would have been interesting if the original period of study (1980-2005) had been maintained. However, it appears that the years 2005 and 2008 have been very decisive for the Finnish Paper Workers' Union. Had I finished this dissertation before 2005, the outcome would have been very different. It can thus be said that there is an element of luck as to how interesting or 'dramatic' this dissertation has become. On the other hand, the theoretic framework devised on the basis of existing literature has proven to be very useful, even as the subject of this research changed more rapidly than one could envision.

In this epilogue I wish to point out some interesting observations that may be material for further research. First of all, the Finnish Paper Workers' Union has two strong factions (SDP and Left Alliance) that are ideologically connected with the 'working class'. But when considering a large part of the job of paper workers – which is monitoring production processes, as long as those go well – it does not seem that they are doing working class work. The work of paper mill employees is somewhere between blue-collar and white-collar work, as it is mostly monitoring of processes, for which high skill levels are needed also in terms of 'events'. Even so, in terms of professional identity they would never call themselves anything other than 'working class'. But as Lilja et al. (1992:148) already stated, their position (both in terms of wages and (at the local level) politically) makes them more like a labor aristocracy.

The paper industry and the organization of work are also a class apart, because there are probably not

many industrial sectors left where the technology and the production process determine work to such an extent as in the paper industry. As long as the processes run smoothly, it may even be a boring job, but when there's something to be corrected, it is physically highly demanding and potentially dangerous, given the machines in question. For this reason, I have at no point in this dissertation attempted to classify the paper industry's 'blue-collar' work as Fordist, post-Fordist, or whatever.

Already mentioned above was the aspect of environment and the labor union, and that this is not part of the dissertation. It would be highly interesting, since the paper industry of old has a bad reputation in that sense – the Finnish Green Movement got its start as a reaction to excessive pollution. Furthermore, the Paper Workers' Union received an environmental award at some point, though in more recent times the obvious focus has been mostly on employment. Also, the paper industry nowadays uses closed processes in Finland, i.e., all waste material is processed internally. However, the interesting question relates to the Finnish paper industry's foreign holdings: are the standards regarding environmental safety as tight as in Finland? Furthermore, considering the growth of the industry in particular in Asia, it would be very beneficial to study the effects of eucalyptus-monoculture and the certification of forests, especially in terms of Finland's own tight environmental regulation. One potential but contentious way of studying these developments would be through the prism of neo-colonialism. This would be justified due to the role of the Finnish state both in co-ownership of Stora Enso and the Finnish Export Credit Agency, Finnvera. Furthermore, as Pakkasvirta (2008) and Mika Koskinen's film *Red Forest Hotel* (2011) show that Finnish forest corporations do have some less than transparent dealings with foreign governments, especially relating to land ownership – though these companies are in these cases not directly a partner to land deals.

Thus there are still many issues left that are interesting to study with regard to the paper industry. On a domestic level, the structural change remains a key research interest. Both the relation between traditional paper industry and bio-industry on the one hand and the labor union's relation towards these are relevant issues: not only for the industry or its labor union – but also for the general system of industrial relations in Finland.

References

Aspers, P. (2011) *Markets*, Cambridge: Polity Press.

Baccaro, L., K. Hamann and L. Turner (2003) The politics of labour movement revitalization: the need for a revitalized perspective, *European Journal of Industrial Relations*, Vol. 9, No. 1, pp. 119-133.

Bamber, G. (1998) Technological Change and Unions, in: Hyman, R. and W. Streeck (eds.) *New Technology and Industrial Relations,* Oxford: Basil Blackwell Ltd, pp.204-219.

Beer, J. de, E. Worrell and K. Blok (1998) Long-term Energy-Efficient Improvements in the Paper and Board Industry, *Energy* Vol. 23, No. 1, pp. 21-42.

Black, S. J. (2005) Community Unionism: A Strategy for Organizing in the New Economy, *New Labor Forum,* Vol. 14, No. 3. pp. 24-32.

Boeri, T., A. Brugiavini and L. Calmfors (2001) *The Role of Unions in the Twenty-First Century – A Study for the Fondazione Rodolfo Debenedetti,* Oxford: Oxford University Press.

Booth, A. L. and M. Chatterji (1993) Reputation, Membership and Wages in an Open Shop Trade Union, *Oxford Economic Papers,* Vol. 45, No. 1, pp. 23-41.

Böckerman, P. and Uusitalo, R. (2006) Erosion of the Ghent system and Union Membership decline: Lessons from Finland. *British Journal of Industrial Relations*, 44(2):283-303.

Carrere, R, L. Lohmann and L. Lohmann (1996) *Pulping the South: industrial tree plantations and the world paper industry.* London: Zed Books.

Checchi, D. and C. Lucifora (2002) Unions and Labour Market Institutions in Europe, *Economic Policy*, Vol. 35, pp. 363-401.

Checchi, D. and J. Visser (2005) Pattern Persistence in European Trade Union Density – A longitudinal analysis 1950-1996, *European Sociological Review,* Vol. 21, No. 1, pp. 1-21.

Clauwaert, S. (2002) International/transnational primary and secondary collective action – An overview of international, European and national legislation, DWP, Brussels: ETUI.

Collins, L. (1998) Environmentalism and Restructuring of the Global Pulp and Paper Industry, *Tijdschrift voor Economische en Sociale Geografie,* Vol. 89, No. 4, pp. 401-415.

Cooper, A. C. and D. Schendel (1976) Strategic Responses to Technological Threats, *Business Horizons,* Vol. 19, No. 1, pp. 61-63.

Craig, P. and G. de Búrca (2008) *EU Law – Text, Cases and Materials (fourth edition),* Oxford: Oxford University Press.

Crouch, C. (2003) *Industrial Relations and European State Traditions,* Oxford: Oxford University Press [reprint].

Crouch, C. and W. Streeck (eds) (2000) *Political Economy of Modern Capitalism – Mapping Convergence and Diversity,* London: Sage Publications.

Dahlquist, E. And A. Jones (2005) Presentation of a dry black liquor gasification process with direct

causticization. *Tappi Journal,* Vol. 4, No. 5, pp. 15-19.

Dead Tree Edition (2009) The Infamous UPM-Stora Meeting. Available at: http://deadtreeedition.blogspot.com/2009/03/infamous-upm-stora-meeting.html

Dead Tree Edition (2010) Farewell to the 'Commie' Conquistadors: Tables Turned on Finnish Papermakers. Available at: http://deadtreeedition.blogspot.com/2010/01/farewell-to-commie-conquistadors-tables.html

Deakin, S. and W. Njoya (2008) The Legal Framework of Employment Relations, in: Blyton, P., N. Bacon, J. Fiorito and E. Heery (eds.) *The Sage Handbook to Industrial Relations*, London: Sage Publications, pp. 284-304.

Dijk, M. van and A. Szirmai (2006) Industrial Policy and Technology Diffusion: Evidence from Paper Making Machinery in Indonesia, *World Development,* Vol. 34, No. 12, pp. 2137-2152.

Dunlop, J.T. (1958) *Industrial Relations Systems*. New York: Holt, Rinehart and Winston.

Ebbinghaus, B. and J. Visser (1998) When Institutions Matter: Union Growth and Decline in Western Europe, 1950-1995, *European Sociological Review,* Vol. 15, pp. 135-158.

Edquist, C., L. Hommen and M. McKelvey (2001) *Innovation and Employment – Process versus Product Innovation,* Cheltenham: Edgar Elgar Publishing.

EIRO (2011) *European Industrial Relations Dictionary: Trade Unions.* Available at: http://www.eurofound.europa.eu/areas/industrialrelations/dictionary/definitions/tradeunions.htm

Elinkeinoelämän keskusliitto (2011a) Paikallinen sopiminen ['Local Bargaining']. Available at: http://www.ek.fi/ek/fi/tyomarkkinat_ym/tyomarkkinat/paikallinen_sopiminen/index.php

Elinkeinoelämän keskusliitto (2011b) Työrauha ja työtaistelut ['Industrial Peace and Conflicts']. Available at: http://www.ek.fi/ek/fi/tyomarkkinat_ym/tyomarkkinat/tyorauha_tyotaistelut/index2.php

EMCC (2006) European Restructuring Monitor: Myllykoski Paper. Available at: http://www.eurofound.europa.eu/emcc/erm/static/factsheet_7595.htm?template=searchfactsheets&kSel=1

Finnvera (2007) Finnvera guarantees an export credit for Botnia's pulp mill project in Uruguay. Available at: http://www.finnvera.fi/eng/Finnvera3/News/%28newsid%29/368

Fiorito, J. and P. Jarley (2008) Trade Union Morphology, in: Blyton, P., N. Bacon, J. Fiorito and E. Heery (eds.) *The Sage Handbook to Industrial Relations*, London: Sage Publications, pp. 189-208.

Fligstein, N. (2001) *The Architecture of Markets: An Economic Sociology of Twenty-First-Century Capitalist Societies*, Princeton: Princeton University Press.

Fouche, E. And S. Banerjee (2004) Improving energy efficiency in the forest products industry, *Tappi Journal November 2004,* pp. 24-26.

Frege, C. M. and J. Kelly (eds.) (2003) *Varieties of Unionism – Strategies for Union Revitalization in a Globalizing Economy,* Oxford: Oxford University Press.

Fukuyama, F. (1995) *Trust: The Social Virtues and the Creation of Prosperity,* New York: Free Press.

Ghosal, V. (2009) Business Strategy and Firm Reorganization under Changing Market Conditions, *CESifo Working Paper No. 2673*.

Grauwe, P. de (2000) *Economics of Monetary Union (fourth edition).* Oxford: Oxford University Press.

Greene, A-M, G. Kirton and J. Wrench (2005) Trade Union Perspectives on Diversity Management: A Comparison of the UK and Denmark, *European Journal of Industrial Relations,* Vol. 11, No. 2, pp. 179-196.

Halevi, J. (1995) The EMS and the Bundesbank in Europe. Available at: http://varoufakis.files.wordpress.com/2012/04/halevi1995.pdf

Haunreiter, K. J. (1997) 200th Anniversary of the Paper Machine, *TAPPI Journal,* Vol.80, No. 12, pp. 64-71.

HE 200/1992 (1992) Hallituksen esitys Eduskunnalle tuloverolaiksi sekä laiksi eräiden yleishyödyllisten yhteisöjen veronhuojennuksista annetun lain 1 ja 6 §:n muuttamisesta ['The Government's proposal to the Parliament of an incomes tax law as well as amending into law certain tax concessions of public service companies'] . Available at: http://www.finlex.fi/fi/esitykset/he/1992/19920200

Heery, E. and J. Salomon (2000) *The Insecure Workforce,* London: Routledge.

Heery, E., J. Kelly and J. Waddington (2003) Union revitalization in Britain, *European Journal of Industrial Relations*, Vol. 9, No. 1, pp. 79-97.

Helsingin Sanomat (1997) Paperilakon välttäminen ei ratkaissut pääriitaa – Huoltomiehille räätälöitiin yrityskohtainen sopimus – Tulkinnat ratkotaan valtakunnansovittelijan johdolla ['Avoiding a strike in the paper industry has not solved the main disagreement – A company-specific agreement was tailored for maintenance workers'] (Helsingin Sanomat 16.9.1997)

Helsingin Sanomat (2000) Stora Enson ammattiosastot uhkaavat tehtaita kahden päivän seisokilla ['Stora Enso's union branches threaten the mills with a two-day strike'] (Helsingin Sanomat 26.2.2000)

Hernesniemi, H, M. Lammi and P. Ylä-Anttila (1995) *Kansallinen kilpailukyky ja teollinen tulevaisuus ['National Competiteveness and Industrial Future'],* Helsinki: Taloustieto Oy.

Hirschman, A. O. (1970) *Exit, Voice, and Loyalty: Responses to Decline in Firms, Organizations, and States.* Cambridge, MA: Harvard University Press.

Holik, H. (ed.) (2006) *Handbook of Paper and Board,* Weinheim: Wiley-VCH.

Honkapohja, S. and E. A. Koskela (1999) The Economic Crisis of the 1990s in Finland, *Economic Policy,* Vol. 29, pp.401-436.

Honkapohja, S, E. A. Koskela, W. Leibfritz and R. Uusitalo (2009) *Economic Prosperity Recaptured – The*

Finnish Path from Crisis to Rapid Growth, London, MIT.

Huzzard, T. (2000) *Labouring to learn,* Umeå: Boréa Bokförlag.

Huzzard, T., D. Gregory and R. Scott (2004) *Strategic Unionism and Partnership: Boxing or Dancing?,* Hampshire: Palgrave Macmillan.

Hyman, R. (1989) *The Political Economy of Industrial Relations: Theory and Practice in a COld Climate,* London: Macmillan Press.

Hyman, R. (1997a) Trade unions and interest representation in the context of globalisation, *Transfer*, Vol 3, No. 3, pp. 515-533.

Hyman, R. (1997b) The Future of Employee Respresentation, *British Journal of Industrial Relations,* 35, 3, 309-336.

Hyman, R. (2001) *Understanding European Trade Unionism – Between Market, Class and Society,* London: Sage Publishing.

Hyman, R. and W. Streeck (eds.) (1988) *New Technology and Industrial Relations,* Oxford: Basil Blackwell Ltd.

Jonker, P.J. (2002) The European State Aid policy – Legal and Economic Form. Helsinki, Metsäteollisuus Ry (Internship report, available upon request)

Jonker, P. J. (2008) Gender Aspects of Labour Union Representativeness - The Case of the Finnish

Paper Industry Conflict of 2005, *Theory in Action* Vol. 1, No. 1, pp 48-70.

Jonker, P. J. (2009) The Finnish Paper Workers' Union: Becoming a Paper Tiger? Collective Bargaining, Wage Developments and Union Density between 1980 and 2005, *Theory in Action,* Vol. 2, No. 1, pp. 185-210.

Jonker-Hoffrén, P.J. (2011a) Whose Constituency? Representativeness of the Finnish Paper Workers' Union, innovation strategies and outsourcing in the Finnish paper industry between 1980 and 2008, *Industrial Relations Journal,* Vol. 42, No. 4, pp. 375-391.

Jonker-Hoffrén, P. J. (2011b) Hyväksyisikö Komissio edelleen Myllykosken kaupan? ['Would the European Commission still approve the Myllykoski deal?'], *Helsingin Sanomat* (2.9.2011)

Jonker-Hoffrén, P. J. (n.d.) Discourses on Partnership and Competitiveness: Concession bargaining, internal democracy and senior shop stewards in the Finnish paper industry (Revised and Resubmitted June 2012 to Industrial Relations Journal)

Jutila, L., S. Karvinen, T. Leinonen and E. Välkky (2010) Venäjän tullipolitiikan vaikutuksista Suomen ja Venäjän väliseen metsäsektorin kauppaan ['The influence of Russian customs policy on the trade between the Finnish and Russian forest sectors'], *METLAn työraportteja 155.* Available at: www.metla.fi/julkaisut/workingpapers/2010/mwp155.pdf

Kammer, L. C., B. J. Allison and A. A. Roche (2005) Performance Monitoring and Advanced Process Control in the Pulp and Paper Industry, *TAPPI Journal Online Exclusive*, Vol. 4, No1, pp. 33-44.

Kelly, J. (1998) *Rethinking Industrial Relations – Mobilization, Collectivism and Long Waves,* New York: Routledge.

Kilpailuvirasto (2010) Paperiliitto ry:n ja Metsäteollisuus ry:n väliseen työehtosopimukseen sisältyvät epäillyt kilpailunrajoitukset ['The collective agreement between the Finnish Paper Workers' Union and the Finnish Forest Industries Federation include the suspected restrictions on competition']. Available at: http://www.kilpailuvirasto.fi/cgi-bin/suomi.cgi?luku=ratkaisut/muut-ratkaisut&sivu=ratk/r-2004-61-0621

King, V. M., G. M. Dykstra and D. Glover (1998) Chemistry holds key to maintaining speed in today's paper machines, *TAPPI Journal July 1998,* pp. 58-61.

Kirton, G. (1999) Sustaining and Developing Women's Trade Union Activism: A Gendered Project?, *Gender, Work and Organization,* Vol. 6, No. 4. pp. 213-223.

Kjellberg, A.(2006) The Swedish Unemployment Insurance – Will the Ghent System Survive, *Transfer,* Vol. 12, No. 1. pp. 87-98.

Koistinen, P. and W. Sengenberger (eds) (2002) *Labour Flexibility – A Factor of the Economic and Social Performance of Finland in the 1990s,* Vammala: Tampere University Press.

Korpi, W. (1978) *The working class in welfare capitalism – work, unions and politics in Sweden.* London: Routledge and Kegan Paul.

Korpi, W. (1985) Power resources approach vs. action and conflict: on causal and intentional

explanations in the study of power, *Sociological Theory,* 3(2):31-45.

Korpi, W. and Shalev, M. (1979) Strikes, industrial relations and class conflict in capitalist societies, *British Journal of Sociology,* 30(2):164-185.

Kristensen, P. H. (2011) The Co-evolution of Experimentalist Business Systems and Enabling Welfare States: Nordic Countries in Transition, in: Kristensen, P. H. and K. Lilja (eds) *Nordic Capitalism and Globalization: New Forms of Economic Organization and Welfare Institutions.* Oxford: Oxford University Press, pp. 1-46.

Kujala, A. (2006) *Paperiliiton historia 1906-2005: Paperiteollisuuden työmarkkinasuhteet ja suomalainen yhteiskunta ['The history of the Finnish Paper Workers' Union 1906-2005: Industrial relations of the paper industry and Finnish society']*. Vammala: Vammalan Kirjapaino Oy.

Laestadius, S. (1998) The Relevance of Science and Technology Indicators: the Case of Pulp and Paper, *Research Policy,* Vol. 27, pp. 385-395.

Levačić, R. and A. Rebmann (1982) *Macro-economics: An Introduction to Keynesian-Neoclassical Controversies.* London: Macmillan Press Ltd.

Lévesque, C. and G. Murray (2002) Local versus Global: Activating Local Union Power in the Global Economy, *Labor Studies Journal,* 27, 3, 39-65.

Lévesque, C. And G. Murray (2010) Understanding Union Power: Resources and Capabilities For Renewing Union Capacity, *Transfer,* 16, 3, 333-350.

Levitt, B. and J. G. March (1988) Organizational Learning, *Annual Review of Sociology,* Vol. 14, pp. 319-340.

Lilja, K. (1997) Bargaining for the Future: The Changing Habitus of the Shop Steward System in the Pulp and Paper Mills of Finland, in: R. Whitley and P. .H. Kristensen (eds) *Governance at Work – the Social Regulation of Economic Relations,* Oxford: Oxford University Press, pp. 123-136.

Lilja, K. (1998) Finland: Continuity and Modest Moves Towards Company-level Corporatism, in: Ferner, A. and R. Hyman (eds) *Changing Industrial Relations in Europe,* Oxford: Blackwell Publishers Ltd, pp.171-189.

Lilja, K. (ed) (2005) *The National Business System in Finland: Structure, Actors and Change,* Helsinki: HeSE Print.

Lilja, K., J. Laurila and R. Lovio (2011) Finland: Innovating the Global Positioning of Flagship Companies and Foreign-Owned Subsidiaries, in: Kristensen, P. H. and K. Lilja (eds.) *Nordic Capitalism and Globalization: New Forms of Economic Organization and Welfare Institutions.* Oxford: Oxford University Press, pp. 47-85.

Lilja, K., K. Räsänen and R. Tainio (1992) A Dominant Business Recipe: the Forest Sector in Finland, in: R. Whitley (ed) European Business Systems. Firms and Markets in their National Context. London: Sage. pp. 135-154.

Lilja, K. and R. Tainio (1996) The Nature of the Typical Firm in Finland, in: R. Whitley and P. H.

Kristensen (eds.), *The Changing European Firm*. London: Routledge, pp. 159-191.

Melin, H. and T. Mamia (ed.) (2010) *Tapaus Voikkaa – Teollisuusytheisö murroksessa ['The Case Voikkaa – An industrial community at a rupture'],* Pori: Karhukopio Oy.

Messner, K. and E. Srebotnik (1994) Biopulping: An overview of developments in an environmentally safe paper-making technology, *FEMS Microbiology Reviews,* Vol. 13, pp. 351-365.

METLA (2009a) *Metsäsektorin Suhdannekatsaus 2009-2010 [The review of the Forest Sector's Economic Situation, 2009-2010'],* Vammala: Vammalan Kirjapaino Oy.

METLA (2009b) *Metsätilastollinen Vuosikirja 2009 ['The Finnish Statistical Yearbook of Forestry 2009'],* Sastamala: Vammalan Kirjapaino Oy.

METLA (2010) *Metsätilastollinen Vuosikirja 2010 ['The Finnish Statistical Yearbook of Forestry 2010'],* Sastamala: Vammalan Kirjapaino Oy.

METLA (2011a) *Metsäsektorin Suhdannekatsaus 2011-2012 [The review of the Forest Sector's Economic Situation, 2011-2012'],* Vammala: Vammalan Kirjapaino Oy.

METLA (2011b) *Metsätilastollinen Vuosikirja 2011 ['The Finnish Statistical Yearbook of Forestry 2010'],* Sastamala: Vammalan Kirjapaino Oy.

Metsäteollisuus (2007) Paperiliitto keskeytti työehtosopimusneuvottelut – Kilpailukykyä tukevan työehtosopimuksen uudistaminen lykkääntyy edelleen ['The Finnish Paper Workers' Union breaks off

collective bargaining – Renewing a collective agreement that supports competitiveness is postponed again']. Available at: http://www.metsateollisuus.fi/juurinyt2/Tiedotteet/Sivut/Paperiliittokeskeyttity%C3%B6ehtosopimusneuvottelut.aspx

Metsäteollisuus (2012) Finnish forest industry is a long success story. Availble at: http://www.forestindustries.fi/Infokortit/abriefhistoryofthefinnishforestindustry/Sivut/default.aspx

Müller-Jentsch, W. (1997) *Soziologie der Industriellen Beziehungen – Eine Einführung,* Frankfurt/Main: Campus Verlag.

Müller-Jentsch, W. (ed) (1999) *Konfliktpartnerschaft – Akteure und Institutionen der industriellen Beziehungen,* Mering: Rainer Hampp Verlag.

Nicolaides, P., M. Kekelekis and M. Kleis (2008) *State Aid Policy in the European Community – Principles and Practice,* Alphen aan den Rijn: Kluwer Law International.

Niemelä, J. and S. Kalliola (2008) Ei yksin palkasta ['Not just about wages'], *Työelämän tutkimus*, Vol. 6, No. 3, pp. 239-250.

Nissan, A.H. (1990) From Smokestack to High-Tech: The Changing face of Paper Science and Technology during the last 50 years, *TAPPI Journal March 1990,* pp. 79-85.

O'Connor, J. and G. M. Olsen (eds.)(1998) *Power Resources Theory and the Welfare State: A Critical Approach,* Toronto: University of Toronto Press.

Ofori-Amoah, B. (1995) Regional impact on technological change: the evolution and development of the twin-wire paper machine from 1950 to 1988. *Environment and Planning A* Vol. 27, No. 9, pp. 1503–1520.

Olson, M. (1971) *The Logic of Collective Action: Public Goods and the Theory of Groups,* Cambridge: Harvard University Press.

Opetusministeriö (2008) *Metsäsektorin koulutuksen kehittäminen Suomessa - Opetusministeriön työryhmämuistioita ja selvityksiä ['Development of Schooling in the Finnish Forest Sector'],* Helsinki: Opetusministeriö.

Ovaska, R. (2007) Välimiesmenettely – kansallinen ja kansainvälinen riidanratkaisukeino [Mediation – A national and international method of conflict resolution'], Helsinki: Edita.

Pakkasvirta, J. (2008) *Pulp & Fiction – Tarinoita Globalisaatiosta ja Sellutehtaasta ['Pulp and Fiction – Stories about Globalization and a Pulp Mill'],* Helsinki: Yliopistopaino.

Paperiliitto (2005-2008) Vuosikertomus ['Annual Report']. Available at: http://www.paperiliitto.fi/www/fi/tiedotus/julkaisut.php

Paperiliitto (2005b) 2 § Liiton tarkoitus ja toiminnan sisältö ['§2: The purpose of the union and the contents of its function']. Available at: http://www.paperiliitto.fi/www/fi/paperiliitto/saannot/2_liiton_tarkoitus_ja_toiminnan_sisalto.php

Paperiliitto (2010) Energiaratkaisut tyydyttivät (22.4.2010) [The energy solutions are satisfying']. Available at: http://www.paperiliitto.fi/www/fi/ajankohtaista/arkisto.php?we_objectID=239

Paperiliitto (2011a) Paperitehtaille tulossa lomautuksia (21.11.2011) ['Lay-offs are coming for paper mills']. Available at: http://www.paperiliitto.fi/www/fi/index.php?we_objectID=468

Paperiliitto (2011b) Myllykosken kauppa varmistui (14.7.2011) ['The Myllykoski deal is confirmed']. Available at: http://paperiliitto.multiedition.fi/www/fi/ajankohtaista/arkisto.php?we_objectID=435

Parker, J. (2006) Towards Equality and Renewal: Women's Groups, Diversity and Democracy in British Unions, *Economic and Industrial Democracy,* Vol. 27, No. 3, pp. 425–462.

Pekkarinen, J. and J. Vartiainen (1993) *Suomen Talouspolitiikan Pitkä Linja ['The Broad Story of Finnish Economic Policy'] ,* Juva: WSOY.

Pellervo Economic Research (2010) *PTT-katsaus 2/2010, Metsä vastaa, mitä huudamme? ['PTT-review 2/2010: The forest answers, what do we yell?'],* Helsinki: PTT.

Pruszynski, P (2003) Recent developments in papermaking chemicals, *Chemical Technology of Wood, Pulp and Paper Keynote Lecture,* http://www.e-wpp.com/download/pdf/k11.pdf

Pöyry Oy (2008) *World Paper Markets Up To 2025,* Vantaa: Pöyry Forest Industry Consulting Oy.

Rogowski, R. (1999) Kollektives und individuelles Arbeitsrecht, in: Müller-Jentsch, W. (ed.) *Konfliktpartnerschaft – Akteure und Institutionen der industriellen Beziehungen,* Mering: Rainer Hampp Verlag, pp. 213-232.

SAK (2010), *Paperimiehestä lähihoitajaksi? Lakkautettujen sellu- ja paperitehtaiden työntekijöiden työurien kehitys Haminassa, Kemijärvellä ja Kajaanissa ['From paperworker to practical nurse? The career development of workers from closed pulp and paper mills from Hamina, Kemijärvi and Kajaani']*, Helsinki: SAK.

Saikia, C.N., T. Goswani and F. Ali (1997) Evaluation of Pulp and Paper making characteristics of certain fast growing plants, *Wood Science and Technology,* Vol. 31, pp. 467-475.

Saloheimo, J. (2004) Paperiteollisuuden työehtosopimuksen palkantarkistuksia koskevasta neuvottelulausekkeesta ['About the negotiation clause on wage reviews in the collective agreement of the paper industry'], in: Työoikeudellinen yhdistys (2004) *Työoikeudellisen Yhdistyksen vuosikirja 2003-2004 ['The yearbook of the Labor Law Association 2003-2004']*, Helsinki: Työtuomioistuin, pp. 187-198.

Sengenberger, W. (2002) Employment, Development and Economic Performance of Finland, in: Koistinen, P. and W. Sengenberger (eds) (2002) *Labour Flexibility – A Factor of the Economic and Social Performance of Finland in the 1990s,* Vammala: Tampere University Press, pp. 15-46.

Seppälä, R. (2010) Suomen Metsäsektorin Rakennemuutoksen Syyt ja Tukijalat ['The Causes and Supporting Legs of the structural change in the Finnish forest sector'], in: Pellervo Economic Research (2010) *PTT-katsaus 2/2010, Metsä vastaa, mitä huudamme?,* Helsinki: PTT, pp. 25-32.

Silva Magaton, A. da, J. L. Colodette, A. de Fatima Gomes Gouvea, J. L. Gomide, M. Coelho dos Santos Muguet and C. Pedrazzi (2009) Eucalyptus wood quality and its impact on Kraft Pulp Production and Use, *TAPPI Journal August 2009,* pp. 32-39.

State Aid Register (2012) State aid Cases. Available at:

http://ec.europa.eu/competition/state_aid/register/

Stora Enso (1999-2008) *Annual Report,* Helsinki: Stora Enso.

Stora Enso (2006) Stora Enso sells its Celbi Pulp Mill to Altri. Available at: http://www.storaenso.com/media-centre/press-releases/archive/2006/06/Pages/stora-enso-sells-its-celbi-pulp-mill-to-altri.aspx

Stora Enso (2010) Stora Enso will close down production of newsprint and directory paper at Varkaus (7.7.2010). Available at: http://www.storaenso.com/media-centre/press-releases/2010/07/Pages/stora-enso-will-close-down.aspx

Stora Enso (2012) Stora Enso to build world-class EUR 1.6 billion consumer board and pulp mill in China. Available at: http://www.storaenso.com/media-centre/press-releases/2012/03/Pages/stora-enso-to-build-worldclass.aspx

Streeck, W. (1992) *Social Institutions and Economic Performance – Studies of Industrial Relations in Advanced Capitalist Economies,* London: Sage Publications.

Swistra, G., R. D. Royce, J. E. Carney, M. N. Mangat and D. J. Monagle (1998) The role of paper chemicals in increasing machine speeds, *TAPPI Journal July 1998,* pp. 55-57.

Tainio, R. and K. Lilja (2003) The Finnish Business System in Transition: Outcomes, Actors and their Influence, in B. Czarniawska and G. Sevón (eds.), *The Northern Light – Organization Theory in Scandinavia.* Trelleborg: Liber, Abstract, Copenhagen Business School Press, pp. 69-87.

Tarrow, S. (1998) *Power in Movement – social movements and contentious politics.* Cambridge: Cambridge University Press.

Teddlie, C. and A. Tashakkori (2009) *Foundations of Mixed Methods Research: Integrating Quantitative and Qualitative Approaches in the Social and Behavioral Sciences,* London: Sage Publishing.

Traxler, F. (1999) The state in industrial relations: A cross-national analysis of developments and socioeconomic effects, *European Journal of Political Research,* Vol. 36, No. 1. pp. 55-85.

Turnbull, J.W. (1999) Eucalypt Plantations. *New Forests,* Vol. 17, pp. 37-52.

Työelake.fi, (2011), 'Unemployment path to retirement'. Available at: http://www.tyoelake.fi/vocabulary.aspx?TransId=11886&KeywordId=56808&TransLang=2

Työterveyslaitos (2010) *Työhyvinvoinnin kehittäminen ja sairauspoissaolojen hallinta paperiteollisuudessa (*HYVIS) ['The development of well-being at work and the management of absenteeism in the paper industry'], Hyvinkää: Suomen Printman Oy.

UPM-Kymmene (2000-2009) *Annual Report*, Helsinki: UPM-Kymmene

Vallan, D. (2002) Effects of anthropogenic environmental changes on amphibian diversity in the rain forests of eastern Madagascar, *Journal of Tropical Ecology,* Vol. 18, No. 5, pp. 725-742.

Vernon, G. (2006) Does density matter? The significance of comparative historical variation in unionization, *European Journal of Industrial Relations*, Vol. 12, No. 2, pp. 189-209.

Visser, J. (2002) Why fewer workers join unions in Europe: A Social Custom explanation of membership trends, *British Journal of Industrial Relations*, Vol. 40, No. 3, pp. 403-430.

Visser, J. (2006) Union Membership Statistics in 24 Countries, *Monthly Labour Review,* No. 1, pp. 38-49.

Waddington, J. (2005) Trade union membership in Europe: the extent of the problem and the range of trade union responses, ETUI-REHS Research Department background paper.

Warneck, W. (2007) *Strike Rules in the EU27 and Beyond: A comparative overview*, Brussels: ETUI-REHS.

Webb, S. and B. Webb (1898) *Industrial Democracy*, 1965 edition, New York: Kelley.

Western, B. (1993) Postwar unionisation in eighteen advanced capitalist countries, *American Sociological Review*, Vol. 58, No. 2, pp. 266-282.

Wills, J. (2001) Community Unionism and Trade Union Renewal in the UK: Moving beyond the Fragments at Last?, *Transactions of the Institute of British Geographers*, Vol. 26, pp. 465-483.

WIOD (2012), World Input-Output Database (multiple tables). Available at: http://www.wiod.org/database/iot.htm

Working Group Report (2006), *The Finnish Paper Industry – Current State and Future Challenges,* Helsinki: Finnish Forest Industries Federation. Available at: http://www.metsateollisuus.fi/infokortit/Paperiteollisuuden_tulevaisuustyoryhman_raporti/Documents/Paperiteollisuus_loppuraportti_31-05-2006.pdf (N.B. The English version is available upon request, it could not be found from the original source anymore).

Wrench, J. (2004) Trade Union Responses to Immigrants and Ethnic Inequality in Denmark and the UK: The Context of Consensus and Conflict, *European Journal of Industrial Relations,* Vol. 10, No. 1, pp. 7-30.

YLE Alueet (2011) Moni työpaikka aukeaa oppisopimuksella ['Many jobs open with an apprenticeship']. Available at: http://yle.fi/alueet/satakunta/2011/10/moni_tyopaikka_aukeaa_oppisopimuksella_2964474.html

YTK (2011) Jäsenmäärän kehitys ['Membership development']. Available at: http://www.ytk.fi/fi/tietoa_ytk_sta/jasenmaaran_kehitys/

Zimmern, B. (2003) *La Dictature des Syndicats,* Paris: Éditions Albin Michel S.A.

Zucker, L. G. (1987) Institutional Theories of Organization, *Annual Review of Sociology,* Vol. 13, pp. 443-464.