European Foundation for the Improvement of Living and Working Conditions

Wages and working conditions in the European Union

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Foreword

Income and wages are an essential component of employment and quality of work. For this reason, pay and wage-related issues have long been on the research agendas of European institutions. Since the early 1990s, there has been growing interest in understanding the nature and impact of wage systems. To a large extent, the focus has been on forms of financial employee participation, particularly in terms of profit-sharing and share ownership schemes.

To date, however, there has been relatively little research into the connection between financial participation and performance – the links between wages, working conditions, work organisation and managerial strategy, on the one hand, and between performance and quality of working life on the other. In addition to the effects on company performance, there is also a growing need to consider the implications for working conditions and the quality of working life.

This report, *Wages and working conditions in the European Union,* seeks to analyse the relationships between wages, work organisation and working conditions, as a result of managerial policy, and as an element of organisational performance and quality of working life, and to produce indicators accordingly. This report gives an overview of the results of these analyses.

We trust the data will support European policymakers, managers and financial compensation specialists in making informed choices when designing legislation or corporate compensation packages.

Willy Buschak
Acting Director

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Introduction

Income and wages are an essential component of employment and quality of work. For this reason, pay and wage-related issues have been on the research agendas of European institutions for a long time. Since the early 1990s, there has been growing interest in understanding the nature and impacts of wage systems. To a large extent, the focus has been on forms of financial employee participation, particularly in terms of profit-sharing and share ownership schemes. Investigations into the field of financial participation started with a descriptive and theory-based approach. Research activities concentrated on examining the incidence of financial participation according to differences between countries, sectors, company size, occupational groups and other factors. More in-depth analysis was subsequently conducted by the European Foundation for the Improvement of Living and Working Conditions. Exploring the impact of financial participation on industrial relations became the focus and results looked promising. With a view to greater benefits for both employees and companies, European institutions started promoting the use of broad based profit-sharing and share ownership schemes for all employees.

To date, however, there has been relatively little research into the connection between financial participation and performance (Pendleton, Poutsma, Brewster and van Ommeren, 2001; Poutsma, 2001). In this regard, one should consider wage systems and work organisation as an important aspect of the process of strategy implementation (Heneman, 2001; Heneman, Fisher and Dixon, 2001; Lawler, 1990, 1995). In addition to the effects on company performance, the implications for working conditions and quality of working life should also be considered. These links between wages, working conditions, work organisation and managerial strategy, on the one hand, and between performance and quality of working life, on the other, had not been the focus of previous research by the Foundation. In order to fill this gap, the main objective of this study has been to analyse the relationships between wages, work organisation and working conditions, as a result of managerial policy, and as an element of organisational performance and quality of working life, and to produce indicators accordingly.

More specifically, the study set out to focus on the following research objectives:

- to identify wage-related indicators;
- to analyse wages in different company environments, comparing at least four European countries and taking into account:
  - different employment conditions, e.g. contract type and flexibility of working time
  - employee characteristics, i.e. sex and age
  - organisational factors, i.e. size and sector
  - institutional aspects, i.e. employee representation and union density;
- to analyse the relationships between wages and:
  - work organisation
  - managerial policy
  - organisational performance
  - quality of working life;

- to complement this analysis through three company case studies;
- to analyse the usability and opportunities of indicators for further applications.

To achieve these objectives, three types of analyses were completed:

1. Existing European cross-national and national research was reviewed in six EU countries (Belgium, Finland, Germany, the Netherlands, Sweden and the UK).
2. Secondary analyses of Foundation survey data, i.e. European working conditions survey (EWCS) 2000 (Paoli and Merllié, 2001) and the Employee direct participation in organisational change (EPOC) survey (EPOC Research Group, 1997), were carried out at cross-national and national level in these six EU countries.
3. Three qualitative case studies were undertaken, to explore the relationships described in the literature and to test the feasibility of the derived indicators.

This report gives an overview of the results of these analyses. The data will support European politicians, managers and financial compensation specialists in making informed choices when designing legislation or corporate compensation packages.

Before reporting on the results of the analyses, Chapter 1 describes the central concepts and research model. Chapter 2 reviews existing European cross-national and national research on wages, working conditions, managerial strategy and performance. In Chapter 3, the results of the secondary analyses on the EWCS 2000 and on the EPOC survey are reported.[1] Chapter 4 outlines the findings of three qualitative case studies in Belgium, Finland and Germany. The report concludes with an overall picture of the research findings.

It is important to note that the results of the secondary analyses rely on data gathered in 2000 (EWCS) and in 1996 (EPOC survey). In particular, with regard to the descriptive data about the prevalence of wage systems or other variables, this information is quite old and may be outdated. However, for the major topics of this project – the analysis of the relationships between working conditions and wage-related policies in terms of managerial strategy – these time limitations are not of great importance, as the focus is on testing whether relationships can be found at all, and on developing explanatory models for them. Further limitations of this secondary analysis, due to the structure of the primary databases used, are outlined in Chapter 3.

[1] Detailed country specific results of the literature review and secondary analyses for Belgium, Finland, Germany, the Netherlands, Sweden and the UK are described in separate reports.

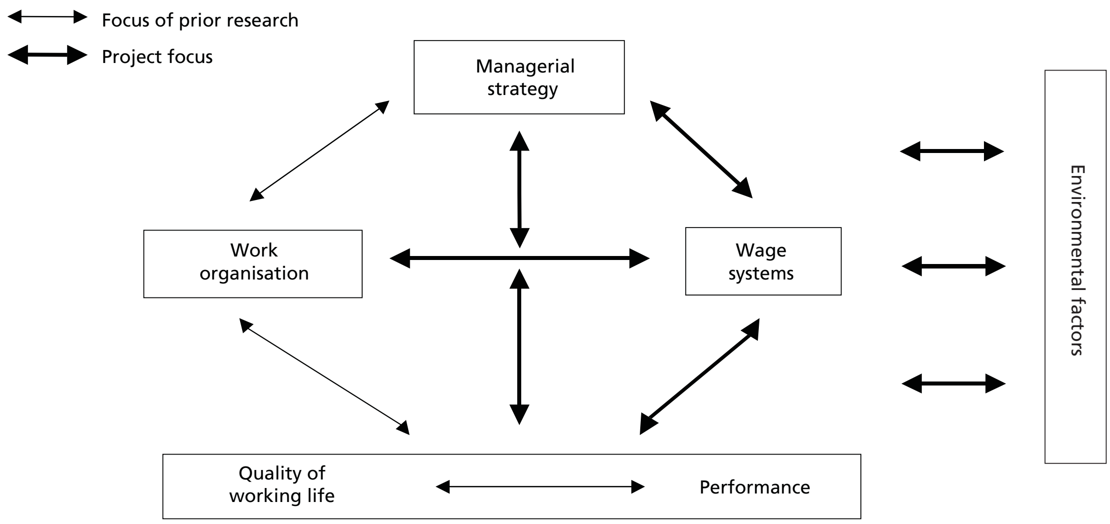
Research model 1

To establish a theoretical framework for this project, a research model was developed, which sought to relate wage structures and systems to work organisation, working conditions, various outcome measures and certain managerial strategies. Figure 1 visualises the assumed model relations, with bold arrows indicating focal research questions. These show potential relationships between wage systems and the other model variables of particular interest to this project, i.e.:

- managerial strategy;
- work organisation;
- quality of working life;
- organisational performance;
- environmental factors.

The relations between work organisation, employment conditions, quality of working life, age and gender, as indicated by the other arrows, have already been analysed in previous EU Foundation research (Paoli and Merllié, 2001) and are not the primary focus of this study. The focus here is on questions concerning wage structures and systems and at least one other variable.

Figure 1 Research model



The basic theoretical assumption is that companies that design their work organisation and wage systems according to their management strategy perform better than companies that do not have this strategic fit approach. If managerial strategy, work organisation and wage systems are not aligned, this might lead to conflicting goals and steering mechanisms, with potentially detrimental effects both on performance and on quality of working life. Ambiguity and conflict in terms of goals are a major cause of stress, and can impair employee well-being and performance.

More specifically, the assumption is that, in dynamic markets, company effectiveness depends on:

- innovative product strategies;

- work organisations characterised by participative decision-making and tasks with high variety and autonomy;
- modern wage systems, characterised by performance-based pay at team and company level, and income from shares.

(Antoni, 2000; Antoni and Bungard, 2004; Antoni and Eyer, 1993; Gomez-Mejia, 1992; Lawler, 1990). Besides these core model variables and their assumed interdependencies, differences in wages and wage systems are analysed according to age, sex, and employment conditions, particularly contract type and working time flexibility.

The model builds on the strategic management approach developed by Tichy, Fombrun and Devanna (1982). They propose that company effectiveness requires the alignment of strategy, organisation structure and human resource management. Effectiveness is not explicitly defined, but their description implies a systemic approach in being able to deal with economic, political and cultural forces, and to achieve objectives. In this study's model, two types of outcomes relevant for company effectiveness are differentiated: quality of working life, which may be more in the focus of employees and society, and performance, which may be more in the focus of management and shareholders.

Tichy et al (1982) define strategy as the process through which a company sets its basic mission and objectives, and uses its resources to achieve them. This report prefers the term managerial strategy as a process or means to achieve a company's mission and objectives.

Organisational structure is defined by Tichy et al as the organisation of work into roles, the recombination of these roles into broader organisational entities, such as departments, and the redistribution of power across this role structure. Organisational structure embodies the division of labour, the nature of jobs, their aggregation into groups, functions or businesses, and the degree of central top management control. This report shares this understanding, but uses the term work organisation, as the focus is on the division of labour, and the nature and aggregation of tasks.

With respect to human resource management, Tichy et al consider four basic interdependent activities forming a human resource cycle: personnel selection, performance appraisal, rewards, and personnel development. In a type of total reward management approach, they also consider various forms of pay, such as salary, bonuses, stock options, benefits, and a wide range of other potential rewards, such as: upward and lateral promotion into desirable positions; management praise; career opportunities; appreciation from customers and/or clients; personal sense of well-being, e.g. achieving objectives; opportunity to learn; job and financial security; providing organisational responsibility; respect and friendship from co-workers. The model in this project focuses on wage systems, as one important aspect of reward management.

The strategic management approach by Tichy et al (1982) stimulated research in strategic and human resource management. Within the field of strategic management, many studies have analysed the relation between company and reward strategy (Boyd and Salamin, 2001; Carroll, 1987; Dolmat-Connell, 1999; Gomez-Mejia, 1992; Gupta and Govindarajan, 1984; Montemayor, 1996; Thompson and Strickland, 1992). Concepts of strategic fit between company and reward strategy were developed, stating that reward systems should be in line with the corporate and business unit strategies, in order to have an influence on organisational performance (Gomez-Mejia, 1992; Lawler, 1990, 1995).

Similar concepts were developed in human resource management (HRM) research, stating that HRM practices have to be aligned to promote company effectiveness. They emphasise the importance of high employee involvement and commitment, some using these aspects for branding high involvement management (Lawler, 1986) or high commitment management (Wood, 1996). Popular current approaches stress the presumed high performance effects of aligned HRM practices by calling their concepts high performance works systems, high performance work organisations, or high performance practices. A wide variety of HRM practices have been associated with these concepts, which makes it difficult to establish clear definitions and distinguish concepts. In general, it might be helpful to view high performance works systems as the broadest concept, encompassing high performance works organisations. Both concepts comprise various single high performance practices.

The concept of high performance works systems (HPWS), introduced by Appelbaum, Bailey, Berg and Kalleberg (2000), states that three elements have to be aligned to ensure company performance and employee satisfaction, commitment and well-being:

- opportunity to participate, characterised by autonomy in decision-making, self-directed team membership, off-line team membership and communication;
- incentives, financial and non-financial;
- skills focusing on personnel selection and development, to ensure adequate employee skills.

Compared with the strategic management approach developed by Tichy et al (1982), the concept of HPWS is less comprehensive, proposing that the opportunity to participate reflects many aspects of organisational structure. According to the Tichy et al model, the two other variables – incentives and skills – refer to most aspects of human resource management, including wage systems as financial incentives, which are the focus of this project. However, it does not integrate environmental forces and company strategy, but rather promotes a specific set of HRM practices as being the best for company effectiveness.

The concept of high performance work organisations (HPWO) can be perceived as describing characteristics of work organisation, but its definition varies between authors. Differences do not appear to be driven by theory, but in terms of indicators available to calculate a HPWO index. For example, Bauer and Bender (2001) focus mainly on work characteristics, defining HPWO by teamwork, job rotation, decentralised decision-making, flat hierarchy, horizontal communication and diversified tasks. However, in his definition of HPWO, Thompson (2002b) also includes employee relations and human resource practices. The latter include wage systems, such as performance-based rewards, and broad job grading structures. This illustrates that considerable differences exist as to which high performance practices (HPP) are included in definitions of HPWO.

Furthermore, ambiguity exists in relation to which HRM practices are regarded as high performance. Some studies try to solve this empirically, by analysing the differential impact of single HPPs or clusters of HPPs on outcome variables (Frick, 2002). Research within this high performance paradigm has been criticised for its conceptual ambiguity and its generalised best practice claim, particularly as reviews report mixed findings regarding performance and uncertain implications for workers and unions (Godard, 2004). Obviously, more conceptual clarity and empirical research is needed in this field.

As a consequence of these criticisms, this study follows a more focused approach. The model concentrates on wage systems, i.e. financial rewards as part of reward systems and human resource management. It does not use the concepts of reward or compensation systems beyond that defined remit. Reward systems can encompass all forms of returns, financial as well as non-financial, that employees receive as part of their employment relationship. Compensation or remuneration systems can entail a range of material rewards and benefits (Milkovich and Newman, 1999). The wider focus in this report is on work organisations and on their task characteristics, particularly variety and autonomy, as well as delegation and participation in decision-making, because research has shown that these variables enhance employee motivation and performance, and quality of working life (Antoni, 1990, 1996; Hackman and Oldham, 1976; Semmer and Udris, 2003). As outcome variables, both company performance and quality of work life are considered, reflecting the interests of management, owners, employees and society as the key stakeholders in organisational effectiveness.

Based on the assumptions that work organisations, characterised by delegated tasks with high variety and autonomy and participation in decision-making, support employee motivation and well-being, the study adopts the popular concept of HPWO to describe this kind of work organisation. Following the model of Bauer and Bender (2001), wage systems are not included in this concept, as distinct concepts are needed to analyse the relationships between the variables. Unlike the work of these authors, this report does not include teamwork in general, job rotation, the reduction of hierarchical levels, or horizontal communication, as these variables are either ambiguous or not based on theory. For example, teamwork may refer to teams with very restricted tasks and no direct participation, or to self-regulating teams with high task variety and autonomy, which should not be mixed up in a single category. Similarly, job rotation between equally meaningless tasks does not create a new motivating task, whereas tasks with different demands might increase variety and autonomy. For this reason, job rotation cannot be interpreted without knowing task characteristics. Consequently, task characteristics are used here to describe work organisation and to define HPWO. For the same reason, other aspects of working conditions are also differentiated, such as employment conditions and indicators for quality of working life, as distinct model variables, in order to analyse their various relationships.

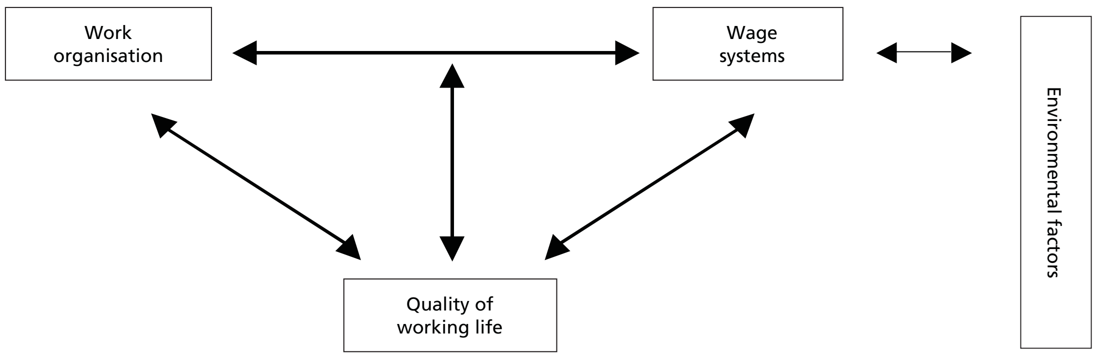
Similar to Tichy et al (1982), it is assumed that environmental factors, such as economic, political or cultural forces, can influence model variables. For this reason, different company environments are explored. In particular, six European countries are compared, encompassing both liberal market economies, such as the UK, and coordinated or social-liberal economies, such as Germany and Sweden. Furthermore, the study takes different employment conditions into account, namely: contract type and flexibility of working time; employee characteristics, i.e. sex and age; organisational factors, i.e. size and sector; and institutional aspects, i.e. employee representation and union density. It is assumed that these aspects reflect different economic forces, such as different capital, labour and product markets, as well as different political influences, such as legislation, taxation and collective bargaining conditions, and cultural differences in Europe. As there is not enough theory to deduce specific hypotheses, the study explores whether country differences exist and whether these environmental factors are related to the other model variables.

With respect to the other model variables – and under the premise that most companies operate in dynamic markets nowadays – it is assumed that companies have better performance and quality of working life when they operate innovative product strategies, combined with work organisations characterised by participative decision-making, and delegating tasks with high variety and autonomy, as well as modern forms of variable pay systems.

Before testing this assumption, it is necessary to check whether these forms of strategy, work organisation and wage systems are used; how they are combined; and how they relate to performance and quality of working life indicators.

Due to limitations of the EWCS 2000 and EPOC data basis, which are used for secondary analysis in this study, effectiveness regarding quality of working life can only be analysed using the EWCS 2000 dataset (see Figure 2). Effectiveness regarding company performance as well as managerial strategy can only be analysed using the EPOC data (see Figure 3, in the next chapter).

Figure 2 Research model for secondary analysis of the EWCS 2000 data



Existing research 2

Cross-national European survey research on wages, working conditions, managerial strategy and performance has been carried out primarily by the Foundation. In addition, there are a number of country specific studies on these subjects. These are presented in the following sections.

Cross-national European research

Two types of Foundation survey data are available regarding salaries and working conditions in Europe. One focuses on representative samples of individual employees – the European working conditions survey (EWCS) 2000 (Paoli and Merllié, 2001). The other refers to representative samples of workplaces or companies – the Employee direct participation in organisational change (EPOC) survey (EPOC Research Group, 1997).

The EWCS aims to provide an overview of the state of working conditions in the EU, as well as to indicate the changes affecting the workforce and the quality of work. It includes a wide range of concepts in the focus of research. In the third EWCS, in 2000, questions regarding modern forms of variable pay (team bonus; profit-sharing; income from shares) were added for the first time. A similar survey using the same questionnaire was carried out in the then acceding and candidate countries (Paoli and Parent-Thirion, 2003). Regarding wage systems, the report of the 2000 survey provides mainly descriptive analysis of the following data (Paoli and Merllié, 2001):

- income levels on a 12-level income scale for the 15 EU Member States;
- income levels categorised by sex for service workers, workers and managers;
- payment systems compared by occupational groups and by country.

The following systems or components are differentiated by separate questions, i.e. as independent wage components:

- basic fixed salary/wage;
- piece rate and productivity payment;
- extra payments for additional hours of work/overtime;
- extra payments compensating for poor or dangerous working conditions;
- extra payments compensating for Sunday work;
- other extra payments;
- payments based on the overall performance of the company (profit-sharing scheme);
- payments based on the overall performance of a group;
- income from shares in the company.

The relations between wage systems and other working conditions, as well as their impact on indicators of quality of working life, have not been analysed up to now, and form the focus of the EWCS secondary analysis of this report (see Figure 2, in previous chapter).

Also at a cross-national level, the EPOC survey (EPOC Research Group, 1997; Sisson, 2002) focuses on the nature and extent of direct employee participation in European companies. Concerning wage systems, the following questions were raised: What is the relationship between the remuneration system and direct participation? Is the scope of direct participation related to particular types of remuneration system? Are changes in remuneration systems linked to effects of direct participation?

The EPOC survey measures the following components of wage systems by means of separate questions, i.e. as independent elements of pay systems:

- pay for skills or qualifications;
- bonus for individual attitude;
- bonus for individual volume of output;
- bonuses for team volume of output;
- profit-sharing schemes;
- share ownership schemes.

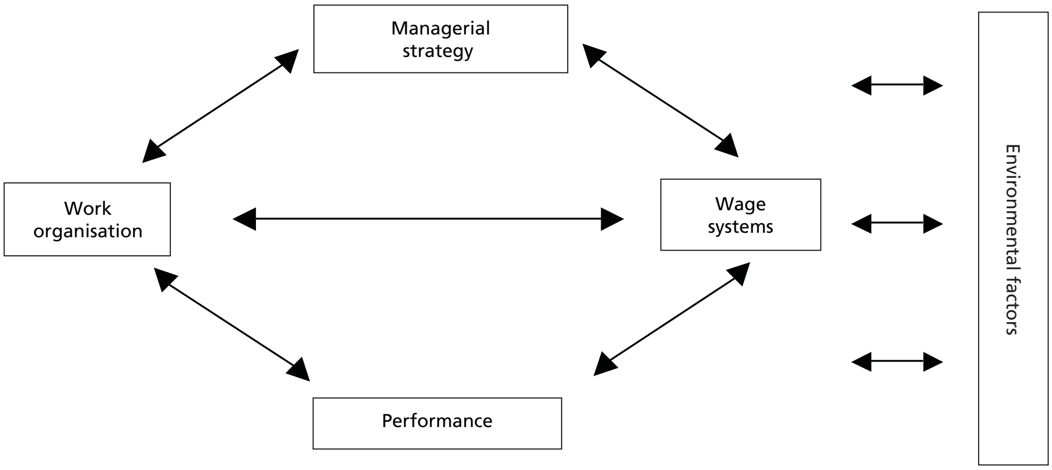
The interpretation of these wage indicators is not always clear. For example, do components reflecting skills in the EPOC study refer to graded skill requirements or to variable pay components rewarding skills? More information is needed with respect to the structure and dynamics of basic pay, i.e. criteria for grading, as well as in relation to variable pay, e.g. criteria and relative volume of variable components. Some information was collected regarding changes to the remuneration system to support management decision-making activities, but cannot be used to clarify company wage systems in general, as it refers only to system changes. In this respect, changes in remuneration structure are distinguished in terms of personal and task skills, bonus payments relating to individual attitude or volume of output, team/group volume of output, flexibility and quality, as well as different forms of financial participation (profit-sharing, share ownership).

In relation to wages and wage systems, the following key findings are reported (EPOC Research Group, 1997; Poutsma, 2001; Sisson, 2002). There is no obvious link between different forms of direct participation and specific types of remuneration systems (e.g. there is no relation between group bonuses and group consultation or delegation). However, remuneration systems in workplaces with direct participation tend to be more complex and have more special components than those without some form of direct participation. For example, pay for skills and qualifications, as well as bonuses for individual attitudes or team volume of output, are particularly prevalent in workplaces with direct participation. Furthermore, profit-sharing schemes are slightly more prominent in workplaces with direct participation, whereas bonuses for individual performance and share ownership are equally applied.

The EPOC findings suggest that there are changes in remuneration systems when forms of participation are introduced. A quarter of the workplaces introducing direct participation on a group basis changed their remuneration system. Figures are highest for permanent group consultation, and lower for temporary group consultation and group delegation. Changes in pay systems differ between countries – Italy, Sweden and the UK being the most active. The most frequently cited changes involved bonuses for team volume of output, as well as profit-sharing schemes, particularly after introducing some forms of group participation. Effects of group delegation, such as cost reduction, have been reported more often when pay for flexibility or group bonuses were introduced than when no changes were made in pay systems.

In summary, existing studies, in their analysis of the EPOC data, sought to ascertain whether relationships exist between forms of work organisation, wage systems and performance outcomes. These studies have found some promising, but also inconsistent, results. This report continues this analysis, by integrating managerial strategy and focusing on how the alignment of work organisation, wage systems and managerial strategy changes their relation to performance outcomes (see Figure 3).

Figure 3 Research model for secondary analysis of the EPOC data



The Cranet survey on international human resource management includes indicators that make it possible to analyse the incidence of financial participation, i.e. share ownership and profit-sharing, depending on organisational characteristics and human resource management instruments (Pendleton et al, 2001). The data were collected through a standardised, postal questionnaire, addressed to the senior HR/personnel specialists. Questions focus on the organisational level and consider relevant indicators of wage systems, such as:

- employee share ownership/stock options;
- profit-sharing (taking into account the hierarchical level);
- group bonuses;
- merit-based pay;
- work–life related benefits;
- pension plans;
- changes in the size of variable pay and of non-financial rewards;
- collective bargaining at sectoral level;
- collective bargaining at company level.

The Cranet survey yields little information regarding working conditions and mainly examines different aspects of remuneration systems. During the 1990s, there has been an increase in the use of financial participation schemes in the EU.

The European Industrial Relations Observatory (EIRO), part of the Foundation, published the comparative study *Variable pay in Europe* (van het Kaar and Grünell, 2001). The main focus was the incidence of various types of variable pay, details of the main forms of variable pay used (the level at which schemes are applied, criteria used, extent of the variation and the possibility of downward variation), trends in the use of variable pay, the extent and nature of collective bargaining over variable pay, the views of trade unions, employer organisations and governments, and public and academic debate on variable pay issues. The study was based on national reports submitted by EIRO's national centres. Key findings from these literature analyses are reported below (van het Kaar and Grünell, 2001).

- The larger the organisation, the more frequent the presence of variable pay.
- The incidence and relative importance of variable pay varies between sectors.
- The organisational level at which variable pay is located depends on the system that is used, e.g. piece work occurs at individual level, profit-sharing at company level.
- The criteria used for variable pay depend on the type of scheme in question. Output is, to an increasing extent, no longer the only criterion.
- Downward variations are exceptional, and sometimes are explicitly ruled out.
- Overall, the incidence of variable pay, particularly the use of share and share option schemes, is increasing throughout the EU. The more traditional forms, particularly piece work, are decreasing.
- Most collective bargaining over variable pay takes place at company level and is initiated by employers. It is not a major source of conflict in EU industrial relations.
- European governments have taken different approaches to variable pay, ranging from refusing to introduce it (e.g. Denmark, Norway, Sweden) to strong commitment (Germany, Ireland, the UK).

These surveys contain interesting information about wage systems and organisational characteristics. However, they yield little information regarding quality of working life and working conditions.

National research in Europe

Besides these European level surveys, different institutions periodically carry out employee surveys within many European countries. They ask about different aspects of working conditions, but consider only the following three aspects of salaries: the gross or net income, the elements included in that income, and the employees' assessment of the salary received. Questions regarding fixed or variable wages are usually not included. Only in Spain and the UK are there data on the balance between fixed and variable pay. Furthermore, the design of these type of surveys does not provide information about managerial strategies or organisational performance (Almovadar et al, 2004).

National surveys of companies focus on different wage aspects, and some provide information about the balance of fixed and variable pay or even working conditions and well-being. However, they apply different definitions and sampling methods, so their results are difficult to compare and to interpret (Emans et al, 2003). In those cases where working conditions are considered, usually only a few aspects are covered.

The main indicators of wages and wage systems in national studies are income level and the presence or absence of different types of pay systems or components. As indicators of work organisation, many studies have used the presence or absence of different forms of teamwork, participation, task variety and autonomy. Some have integrated several of these aspects into a high performance work organisation (HPWO) variable. Indicators of organisational performance revolving around productivity and profitability are prevalent in studies concerned with workplaces, to the relative neglect of employee-related outcomes. This situation is reversed when the primary focus of surveys addresses individual employees and working conditions. Some company specific studies use both types of indicators. Managerial strategy is not addressed in most studies; the few indicators reported appear to be questionable.

Consequently, the relationship between wage systems and managerial strategies has seldom been studied. The results so far do not show consistent relationships. In part, this might be due to the fact that there is often a time lag between changes in strategy and congruent changes in wage systems. The relations between work organisation and wage systems are certainly diverse and European research reflects that. One more or less common result is that aspects of HPWO are found more often with modern forms of variable pay (e.g. Lay and Rainfurth, 1999). Problems concerning this topic are the lack of consistent definitions and measures of variables such as HPWO. The results concerning wage systems and organisational performance are very different between European countries and even between different studies within one country (e.g. Nilsson, 1990 or Eriksson, 2002). The same holds for the relation between wage systems and work satisfaction (e.g. Holman, 2002 or Eriksson and Leander, 1995). Therefore, research is needed to find and analyse moderating variables that can explain these differences.

Unfortunately, the research focusing on age and gender in the context of wage systems is limited in its content. In terms of gender, the emphasis has been mainly on examining discrimination, which can still be evidenced in lower wages for women doing the same job as men. Age was studied almost exclusively in respect of how seniority relates to higher wages.

With regard to the relationship between wage systems and employment conditions, there are few results, indicating that modern forms of variable pay seem to be more popular with full-time than with temporary or part-time workers (Baeten and Van den Berghe, 2002). Modern forms of variable pay are more prominent than other pay systems, where flexible working times are offered. Organisational or institutional factors and their relation to wage systems have rarely been studied, though it is known that profit-sharing is found more often in the private sector and in service industries. The assessment of pay systems, particularly of variable ones, depends on the way that performance is linked to pay and the way the system is practised. Problems such as the misuse of bonuses or lack of system transparency and communication can lead to dissatisfaction with variable pay systems (Steyaert, 2000).

In summary, this review of European studies at European and national level has not shown many significant and consistent relationships between wages systems, work organisation and performance. Data have been analysed primarily at a descriptive level or concerning relationships between two variables at best, such as between wages and work organisation. This is typical for the analyses of cross-national surveys. Since samples of company-based surveys or case studies are not representative, it is difficult to generalise their results. Furthermore, it is difficult to interpret conflicting results as studies use different concepts and measurement methods, as well as different samples and time periods. Only a few studies try to explain the reasons for inconsistent findings by systematically analysing moderating variables or comparing different conditions. This study will try to solve some of these problems in its secondary analysis of the European working conditions survey 2000 and EPOC data.

Secondary analysis of Foundation surveys

3

The two main data sources for the secondary statistical analysis are the European working conditions survey (EWCS) 2000 (Paoli and Merllié, 2001) and the Employee direct participation in organisational change (EPOC) survey (EPOC Research Group, 1997), both produced by the European Foundation for the Improvement of Living and Working Conditions. Before discussing the results of these secondary analyses, it is important to mention several methodological aspects, which have to be kept in mind when interpreting these results.

Methodology

A structural problem of secondary data analysis is that the EWCS 2000 and the EPOC survey were designed to serve a different purpose than to answer the questions of this study. The EWCS aims to provide an overview of the state of working conditions in the EU, and to indicate the changes affecting the workforce and the quality of work. Some important issues central to this project, such as specific questions about institutional factors, managerial strategy and performance, are not covered by the EWCS questionnaire. Therefore, it is impossible to run any in-depth data analysis, as would have been necessary for the investigation of the contingency or strategic fit approach between performance indicators, aspects of work organisation, strategy and wage systems. The focus of the EPOC project was to investigate the nature and extent of direct employee participation in European companies. The questionnaire focuses on the scope and intensity of the various forms of direct participation and their effects on performance, as well as on management initiatives and their motives. For this reason, it does not provide much data concerning managerial strategies and working conditions, and almost no information regarding quality of working life, such as stress and job satisfaction. However, both studies overlap in relation to data on wages and work organisation, and complement each other regarding outcome variables.

Another issue to bear in mind, when analysing and interpreting the results of this project, is the problem of differences in data collection between surveys. The EWCS was designed as a face-to-face interview with randomly selected 'persons in employment', i.e. persons who worked for pay or profit during the reference week, in the 15 EU Member States in 2000. A multi-stage random sampling, called 'random walk', was used, which guarantees to a high degree that data are representative. The EPOC survey was a postal survey addressed to company managers in 10 European countries in 1996: Denmark, France, Germany, Ireland, Italy, the Netherlands, Portugal, Spain, Sweden, and the UK. It was intended to be representative of workplaces in these countries, but it should be added, from a management view only. Furthermore, it focused on the workplace's largest occupational group, and hence most questions refer to this group. As response rates varied between countries from 9% to 39%, 18% being the average, it is difficult to ascertain how representative the data are. Taking these aspects into account, observed differences in results between the EWCS in 2000 and the EPOC survey might be influenced by the different measurement periods and sample differences.

In summary, the comparability of the EWCS 2000 and the EPOC survey suffers from the diverging concepts, methods and periods of measurement, but does provide some potential for comparative and even more for complementary analysis.

Concepts of secondary analysis

In the EPOC survey and the EWCS 2000, a variety of wage indicators are used. In the EWCS, employees were asked about piece rate or productivity payments, payments based on the overall performance of a group, payments based on the overall performance of the company (profit-sharing scheme), and income from company shares. Whereas piece rate systems follow the tradition of the Tayloristic production paradigm, rewarding workers only for fast work and high quantities, the other forms of variable pay have a broader focus as they refer to overall performance, including quality or other objectives. To contrast them from traditional piece rate systems, they are termed modern forms of variable pay[2]. One would expect different relations between traditional piece rate pay and the other model variables – particularly regarding quality of working life – compared with modern forms of variable pay, whereas the different forms of modern pay should show a similar result pattern. The analyses for this study showed support for these assumptions, leading to the decision to put the different forms of modern pay into a single category, and forming a new variable regarding modern forms of variable pay.

In order to compare results from the EPOC survey and the EWCS, modern forms of variable pay are defined in the same way, i.e. employees having:

- team bonuses, based on the overall performance of a group (EWCS 2000) or on the team volume of output (EPOC); and/or
- payments from profit-sharing schemes (based on the overall performance of the company); and/or
- income from shares (share ownership schemes) in the company.

In defining this variable, it was necessary to accept some ambiguities, because the questions in both surveys left some room for interpretation regarding what kind of performance indicators were actually measured. For example, respondents reporting bonuses based on the overall performance of a group might have complex bonus systems, combining aspects of product quantity and quality, throughput times and on time delivery; or they might have systems based on product quantity only. Similarly, team volume of output might refer to bonus systems, integrating both product quantity and quality, e.g. counting only sellable products, as well as direct and indirect labour times (e.g. planning or maintenance, besides direct production time); or it might refer to traditional group piece rate, counting all products and taking only direct labour times into account. Combining piece rate and productivity payment in a single indicator, as in the EWCS, does not allow for a clear categorisation.

However, these measurement problems, which should be avoided in future surveys, reduce differences between groups and relations between variables, and lead to conservative estimates. This means that if the expected differences or relations are still found – and they are – these underestimate the real differences or relations. Table 1 lists all wage system variables used in the secondary analysis.

[2] Labelling something as 'modern' is always questionable in terms of time-frame, but variable forms of pay, which are not based on piece rate only, are comparatively new. Modern does not necessarily mean better, but reflects more contemporary trends.

Table 1 Wage system variables used in secondary analysis

Wage systems	
EPOC	**EWCS 2000**
Modern forms of variable pay • Bonuses for team volume of output • Profit-sharing schemes • Share ownership schemes	Modern forms of variable pay • Payments based on the overall performance of a group • Payments based on the overall performance of the company (profit-sharing scheme) where an employee works • Income from shares in the company that an employee works for
	Piece rate or productivity payment
	Basic fixed pay

Questions regarding work organisation differ between the EPOC survey and EWCS; hence, no directly comparable work organisation variable can be formed. High performance work organisation (HPWO) was chosen as a concept of work organisation in secondary analysis of the EWCS 2000 data, characterised by:

- time autonomy;
- task autonomy;
- task variety;
- responsibility;
- participation;
- participation effects.

The total number of positive answers regarding these questions was summed up in an HPWO indicator, ranging from a minimum of zero to a maximum of 18. This HPWO scale also showed good internal consistency (Cronbach's alpha). For further analyses, a median split was used to differentiate between high and low forms of HPWO.

In the EPOC survey, these aspects were not measured. However, since forms of direct participation, particularly group delegation, can be regarded as a key aspect of HPWO, the intensity of group delegation was analysed instead. Group delegation is described in the EPOC study as follows: rights and responsibilities granted to groups of employees to carry out their common tasks without constant reference back to managers – most often known as 'group work' (EPOC Research Group, 1997). In the questionnaire, group delegation was described as: management giving non-managerial employees, in the largest occupational group at workplace level, increased responsibility to organise and do their jobs without reference back for one or more of the following:

- allocation of work;
- scheduling of work;
- quality of work;

- time keeping;
- attendance and absence control;
- job rotation;
- coordination of work with other internal groups;
- improving work processes.

The total number of positive answers ranged from a minimum of one to a maximum of eight. This number was used to assess the intensity of group delegation, which can be seen as an indicator of group autonomy. This scale also showed good internal consistency. Further analyses used a median split to differentiate between high and low intensity of group delegation. Table 2 shows the work organisation variables used in the secondary analysis.

Table 2 Work organisation variables used in secondary analysis

Work organisation	
EPOC	**EWCS 2000**
Group delegation Group decision rights regarding: • allocation of work • scheduling • quality of work • time keeping • coordination of work with other internals • attendance and absence control • job rotation	High performance work organisation (HPWO): • task variety • task autonomy • time autonomy • responsibility • participation • voice (participation effects)
	Teamwork
	Interdependent tasks
	Monotonous tasks
	Repetitive tasks

The concept, innovation strategy, has been drawn from the EPOC questionnaire referring to question nine, which asks about initiatives taken by the management in the last three years. Initiatives towards product innovation were taken as an indicator for a strategy of innovation.

Organisational performance and quality of working life are perceived as two different stakeholder perspectives on company effectiveness. The EPOC survey provides some measures of organisational performance, whereas the EWCS 2000 includes indicators for quality of working life. Concepts for secondary analysis from both surveys are displayed in Table 3.

Health problems and physical load are aggregated scales, based on different indicators of the EWCS 2000, showing good internal consistency.

Table 3 Effectiveness variables used in secondary analysis

Effectiveness	
EPOC	**EWCS 2000**
Organisational performance: • management reduction • cost reduction • throughput time reduction • quality improvement • total output increase • sickness decrease • absenteeism decrease • employee reduction	Quality of working life: • sustainable work • job satisfaction • work–life balance • excessive demands • physical load • health risks • health problems

Methods and procedure of data analysis

The next section will describe the findings of the secondary analyses. For a better understanding, the results are presented in diagrams, showing and comparing percentages of dichotomous variables.

As this research aims at identifying relationships between the variables of the research model, it used mainly product moment correlations to test these relationships statistically. The coefficients range from -1 to +1.[3] A negative relation indicates that a person scoring high on one variable has a low score on the other variable; a positive correlation describes a relation of a high score on one variable connected to a high score on the other.

It should be kept in mind that, based on observed correlations, no causal relation can be deduced. However, if there is no correlation, no causal relationship can be assumed. Nevertheless, the analysis discusses logical and reasonable explanations for these relations and suggests potential causes. For testing interaction effects, logistic regression analysis was used. Although regression analysis tries to predict (criteria) variables by using other (predictor) variables, this does not imply causality. Regression coefficients display the relative weight of the predictor variables.

Based on the research model, the relationships between model variables were analysed, starting with relations between two variables. The analysis then moved on to control for the influence of other variables. Therefore, at the first level of analysis, the focus is on the following bivariate relationships between indicators of wage systems and:

- managerial strategy;
- work organisation;
- quality of working life;
- performance;
- employment conditions (contract type and working time flexibility);

3 In the literature, different suggestions of categorising effects/correlations can be found (e.g. Cohen, 1992: .10 to .30 small effects, .30 to .50 middle and above .50 large effects), which depend on conventions and theoretical expectations. As rather small effects are expected, due to the multitude of influencing factors, particularly regarding performance and quality of working life, significant correlations below .10 are perceived as weak effects, .11 to .20 as small, .21 to .30 as medium, and above .30 as large effects.

- personnel factors (age, sex);
- organisational factors (size, sector);
- institutional factors (density of union members, employee representation).

At the second level of analyses, three variables were examined and analysed for contingent relationships. As illustrated in the research model, it analyses the relationships between wage systems and:

- work organisation for different types of managerial strategies;
- performance for different types of work organisation;
- quality of working life for different types of work organisation.

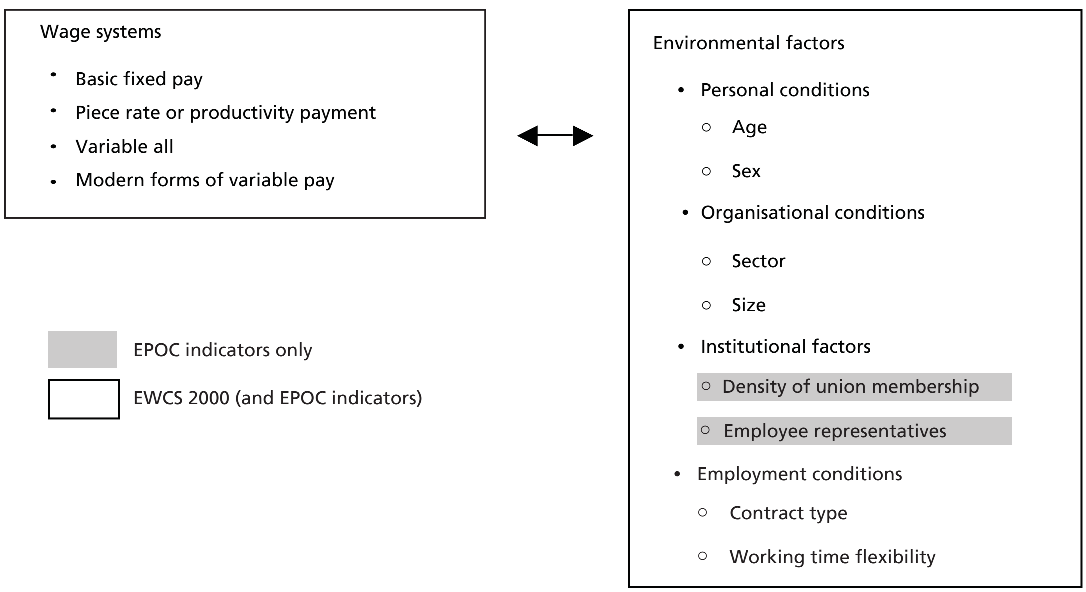
The third level of analysis examines four variables, analysing whether there are interdependencies between specific forms of strategy, wage systems, work organisation and performance. This goes beyond most existing survey research, which has focused on descriptive research or on bivariate correlations.

Prevalence of wage systems

The description of findings from secondary analysis of the EPOC and EWCS 2000 datasets begins with the relationships between indicators of wage systems, particularly the concept of modern variable pay, and indicators of environmental factors. Figure 4 shows the relevant part of the research model and indicators.

Figures 5 and 6 give the comparative breakdown for the occurrence of different types of wage systems among the countries included in this project. Obviously, there are differences between countries in relation to the prevalence of pay components, especially regarding variable pay elements. The stacked percentages for countries in Figure 5 reach above 100% because of the

Figure 4 Research model and indicators for wage systems and environmental factors



possibility to respond positively for more than one pay component in the EWCS 2000 interview. For instance, respondents can report that they receive basic or fixed pay and an additional income from shares. From the overall picture in Figure 5, it can be concluded that basic or fixed pay is the most dominant pay component reported in the EWCS in 2000. High rates for modern forms of variable pay are to be found in Finland (10%) and Sweden (10%), with the lowest rates in Belgium (4%) and Germany (5%). The highest rates for piece rate or productivity payment are to be found in Finland (16%) and Germany (7%). An above average rate for all forms of variable pay (piece rate, additional payment, pay based on the performance of a group/team or company or income from shares) is reported for Finland (23%). High rates for basic or fixed pay and a small amount of other variable pay components are reported for Belgium.

Figure 5 Percentages of types of wage systems, by country (EWCS 2000)

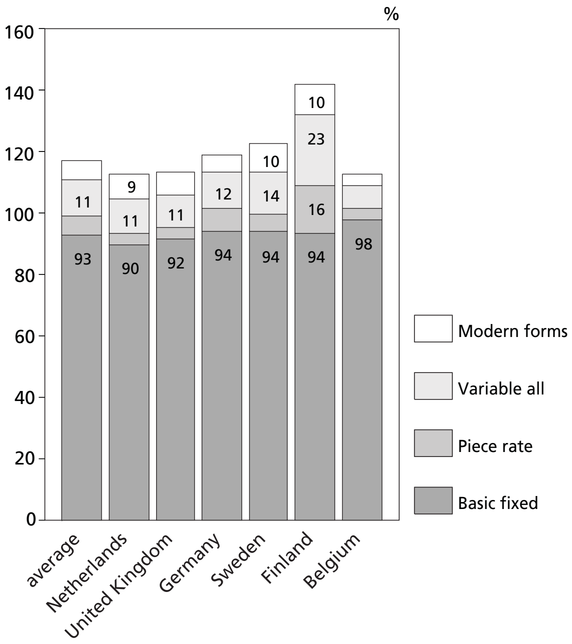


Figure 6 Percentages of modern variable pay, by country (EPOC)

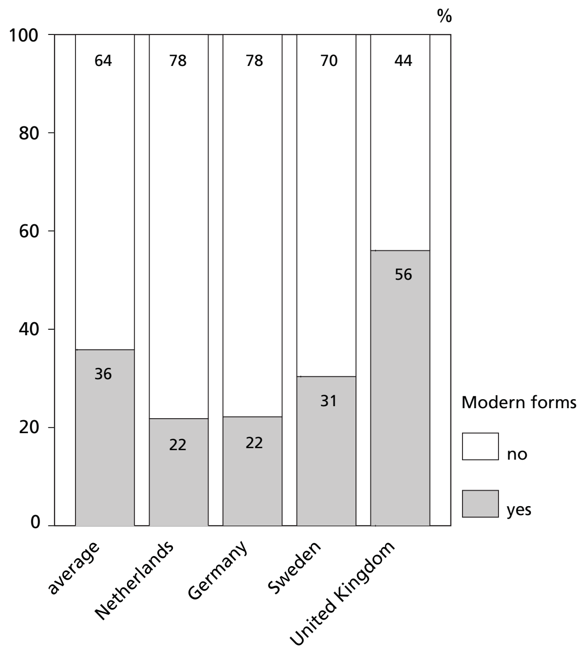


Figure 6 shows the country breakdown of modern forms of variable pay (performance-based pay at team and company level, or income from shares only), drawing on data from the EPOC survey. From a management perspective, much higher rates are reported. More than half of all respondents in the UK (58%) reported the prevalence of modern forms of variable pay in their company. This is almost twice the proportion of the other countries.

Higher rates for the EPOC data could be due to sample differences or different knowledge and frames of reference, when answering wage-related questions. The samples of both studies are difficult to compare, as the EWCS is based on random sampling, to ensure a representative population, whereas, as has been noted, the EPOC survey may be questioned in terms of sampling method, low response rates and its questions focusing on the largest occupational group of the respective company.

Furthermore, employees may not be able to describe their pay components as accurately as management can (some might not even know their pay components, according to empirical studies). Another aspect of this problem might be that employees focus on pay practice, whereas management answers according to pay systems: i.e. employees might receive stable income ('fixed' wages), even though the wage systems have components, which could vary in principle, but do not in practice. The time gap of four years for data generation between the surveys (EPOC 1996, EWCS 2000) could also account for differences within countries, but other studies show that variable income has generally increased over time (see the national reports, available on request).

Results suggest that there is a link between income level and wage systems, particularly for modern forms of variable pay (Figures 5 and 6). As can be seen from Figure 7, the proportion of employees with any kind of variable pay (piece rate or productivity pay and modern forms of variable pay) ranges from 8% in the lowest income group to 17% in the highest. The proportion of employees with modern forms of variable pay, i.e. profit-sharing, gain sharing, or other payment related to group performance, ranges from 3% in the lowest income group to 11% in the highest, whereas the range for piece rate pay is only from 5% to 8%. It seems that modern forms of variable pay or traditional forms (piece rate) are paid as an additional component, on top of the basic pay that more than 90% of employees receive.

Figure 8 focuses on the percentage of employees receiving modern forms of variable pay and shows that, even in the high income class bracket, the wage package of 89% of employees does not include this form of pay. Modern forms of variable pay and income level are correlated positively in analyses at cross-national as well as national level. These significant correlations indicate that modern forms of variable pay are found more often in high income jobs.

As has been indicated in the research model, the links between wage systems and personal characteristics, such as age and sex, are of particular interest. The roles of gender and age were

Figure 7 Percentages of types of wage systems, by income level (EWCS 2000)

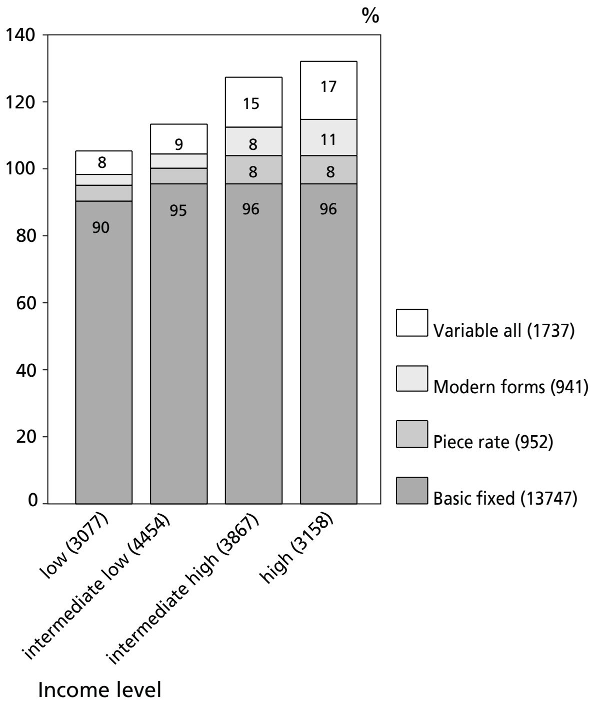
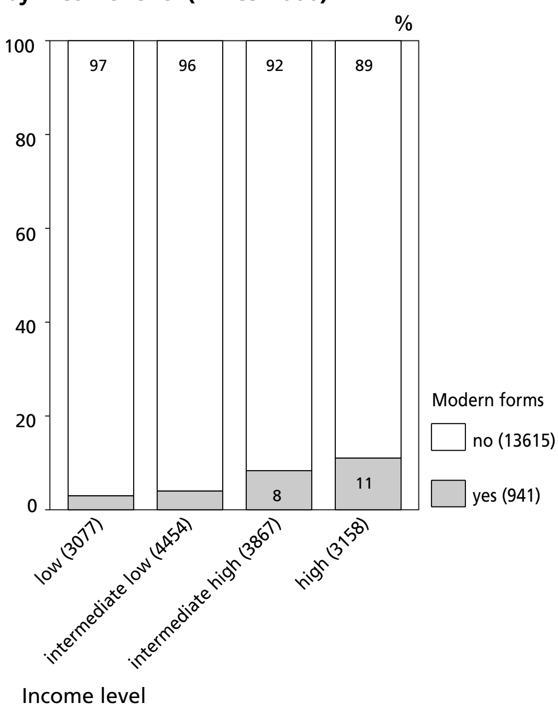


Figure 8 Percentages of modern variable pay, by income level (EWCS 2000)



investigated by examining their relationships with types of wages systems and income level. Figure 9 illustrates that male employees receive more variable pay components, compared with female employees. The proportion of men receiving piece rate or productivity pay, additional payments and modern forms of variable pay is higher for each of these categories than for women. At cross-national level, a significant negative relation has been found between gender and modern forms of variable pay, indicating that women receive modern forms of variable pay less often than men, as shown in Figure 10.

These results are also found at national level, with the Netherlands showing the biggest gap and the UK showing the smallest (almost non-existent) difference between men and women within this sample. According to these partly varying findings, it is difficult to interpret the results and further investigation might be necessary. One explanation could be that this relation is influenced by the fact that women still work more frequently in jobs lower in the hierarchy and pay level, and that modern forms of variable pay mainly apply to jobs at the upper end of the hierarchy. The difference in compensation between men and women can be illustrated by the fact that women tend to receive lower incomes. This could be partly due to the higher proportion of females working on temporary or fixed-term contracts or in different types of jobs. As another possible explanation, one has to consider job discrimination: it seems that women generally earn less money in comparison with men.

Figure 9 Percentages of types of wages systems, by sex (EWCS 2000)

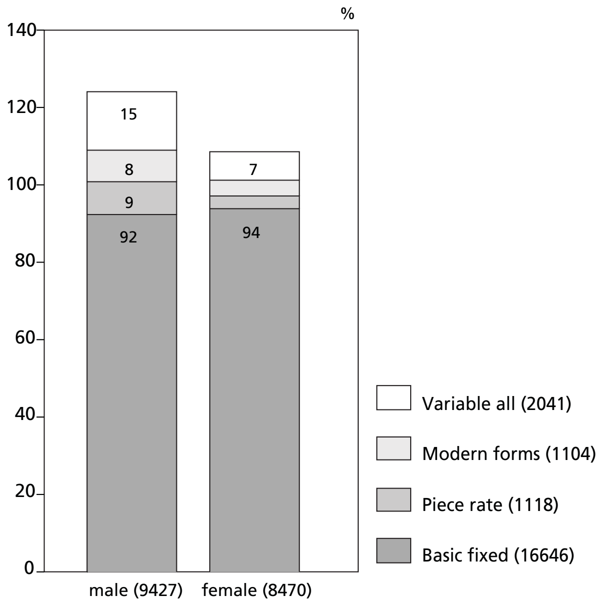
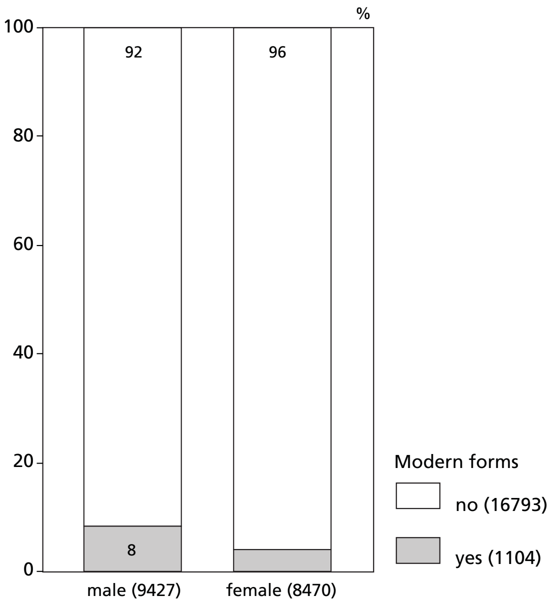


Figure 10 Percentages of modern variable pay, by sex (EWCS 2000)



There is no relation between types of wage systems and age, as all kinds of wage systems are found at different age groups (Figure 11). This counters expectations that seniority and a long-term commitment to a company are associated with variable pay. Modern forms of variable pay and age do not show any significant correlation, either at cross-national or national level. Hence, modern forms of variable pay seem to be applied independently from age. However, there is a relation between age and income level, as the percentages for the youngest age group (15 to 25 years), and in the 45-64 age group, diminish in the higher income categories (Figure 12). The proportion of employees within the age group, 26–44 years, is greatest at every income level. Employees at this age are to be found particularly in the intermediate high and high income levels, supporting the assumption that higher income is linked with age[4].

Figure 11 Percentages of types of wages systems, by age (EWCS 2000)

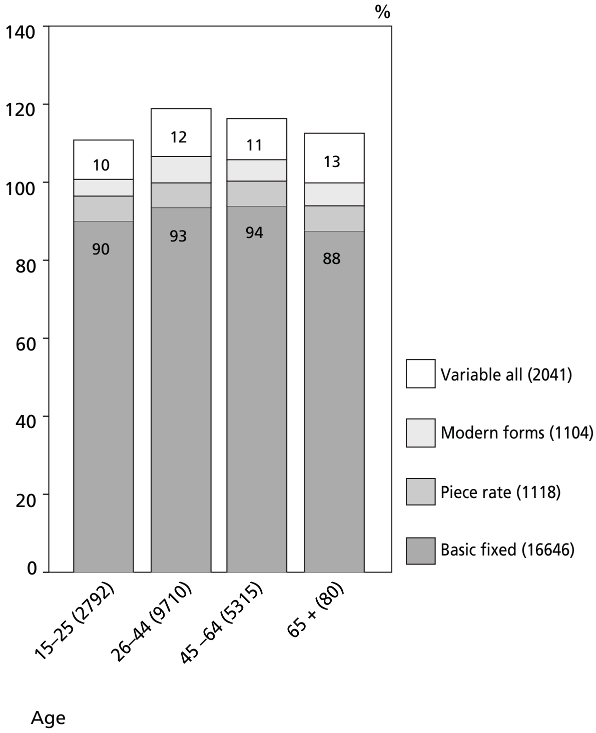
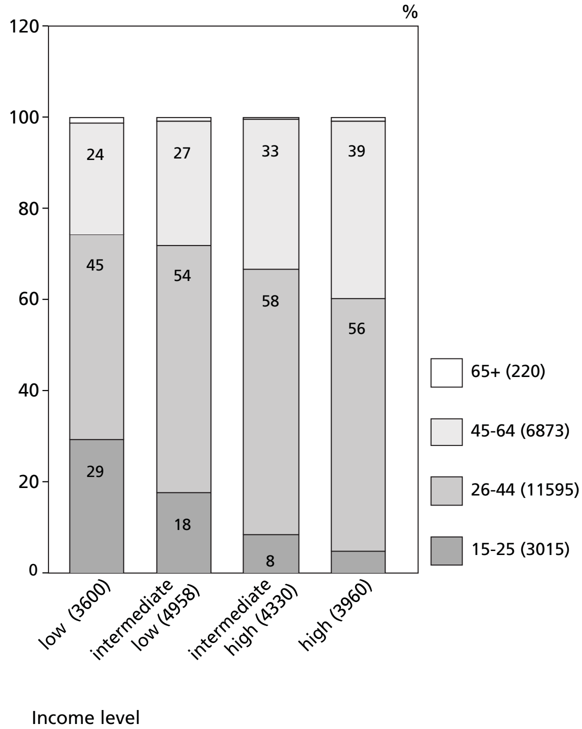


Figure 12 Percentages of age, by income level (EWCS 2000)



Investigating the relationships between wage systems and employment conditions (contract type, working time flexibility) reveals that the proportion of employees who receive modern forms of variable pay is higher, when working on an unlimited contract (Figure 13). Long-term or permanent contracts seem to be related positively to group/team or company performance-based pay or income from shares. Cross-national results show a low significant positive relation between modern forms of variable pay and contract type, indicating that modern forms of variable pay are found more often with unlimited contracts than with fixed-term or temporary types of contracts. This finding suggests that companies tend to use more complex pay packages when employees work on long-term contracts.

At national level, these findings could not be replicated for the six countries selected: Finland and Sweden show significant negative relations, which means that people working on unlimited contracts are less likely to receive modern forms of variable pay than people working on fixed-term or temporary contracts; in Belgium, Germany, the Netherlands, and the UK, no significant relationships were found. These rather unusual results might be due to country specific laws and regulations. In Scandinavian countries, modern forms of variable pay seem to be more common with temporary contracts.

[4] Relations between age and income level or wage systems do not change when the more specific age categories (15–24; 25–34; 35–44; 45–54; 55+) of the EWCS 2000 dataset are used.

Figure 13 Percentages of modern variable pay, by contract type (EWCS 2000)

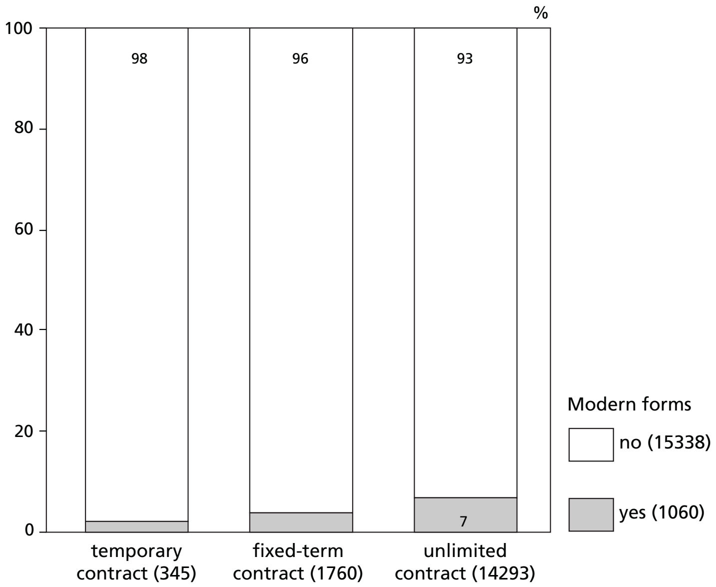


Figure 14 shows that employees working to flexible working time schedules receive modern forms of variable pay, more often than employees working on schedules with fixed start and finish times. The EPOC data also show that there is a weak but significant association between employees in workplaces with working time flexibility and modern forms of variable pay, such as performance-based pay at team and company level and income from shares (Figure 15). Although the differences are not impressive (34% to 48%), it seems that workplaces with working time flexibility are linked with modern forms of variable pay. The cross-national analysis of the EWCS 2000 dataset shows a significant positive correlation between modern forms of variable pay and working time flexibility.

Figure 14 Percentages of modern variable pay, by working time flexibility (EWCS 2000)

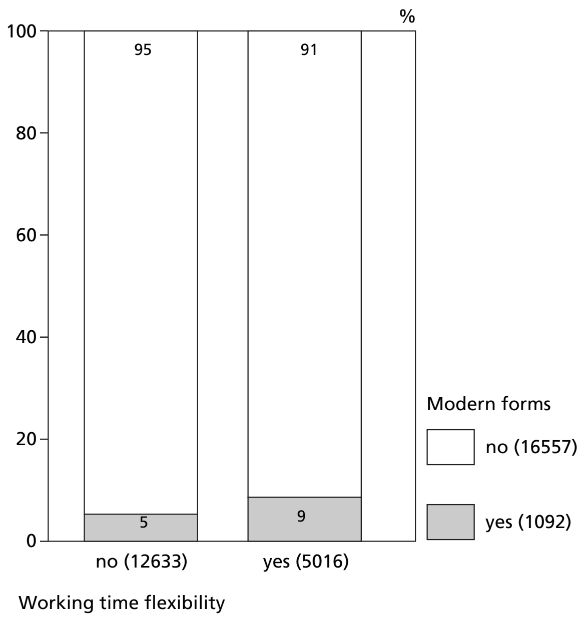
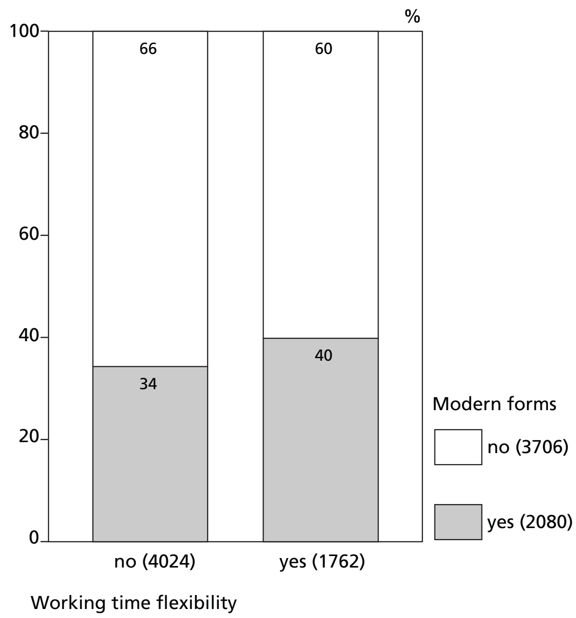


Figure 15 Percentages of modern variable pay, by working time flexibility (EPOC)



At national level, these findings could not be replicated for the selected countries. In all six countries, negative relationships between modern forms of variable pay and working time flexibility were found, although these relations were significant only in Germany and the UK. This means that, at national level – at least for these six countries – organisations with variable pay are less likely to have flexible working time schemes. Analysis of the EPOC national sub-samples shows an inconsistent pattern of results: whereas Germany, Sweden, and the UK support the cross-national results, no relationships are found for the Netherlands, indicating that there is no relation between working time flexibility and modern forms of variable pay. These inconsistent results, especially concerning the differing results between EPOC and EWCS data of the same countries, probably reflect differences in concepts, methodology and samples between the two surveys.

The next figures describe the relationships between wage systems and organisational factors in terms of sector and size. Figure 16 illustrates that variable pay is close to non-existent in the public sector. Some 96% of employees working in companies in the public sector responded that basic or fixed pay is part of their remuneration. Results for the private sector show a higher prevalence of other types of wage systems (15% variable all, 8% modern forms, 8% piece rate or productivity payment). Analysing the EWCS 2000 data shows that modern forms of variable pay are found significantly more often in the private than in the public sector. Establishments in the public sector seem to rely on traditional compensation strategies and forms of remuneration, which include, to a higher degree, basic or fixed pay. Nevertheless, a great proportion of employees in the private sector (92%) also work for companies without modern forms of variable pay. This leads to the impression that basic or fixed pay is still setting the overall standard for compensation.

Figure 16 Percentages of types of wage systems, by sector (EWCS 2000)

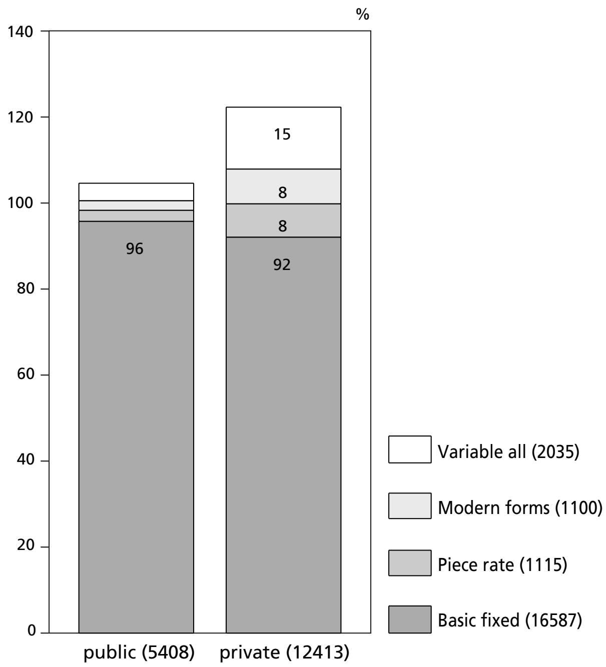
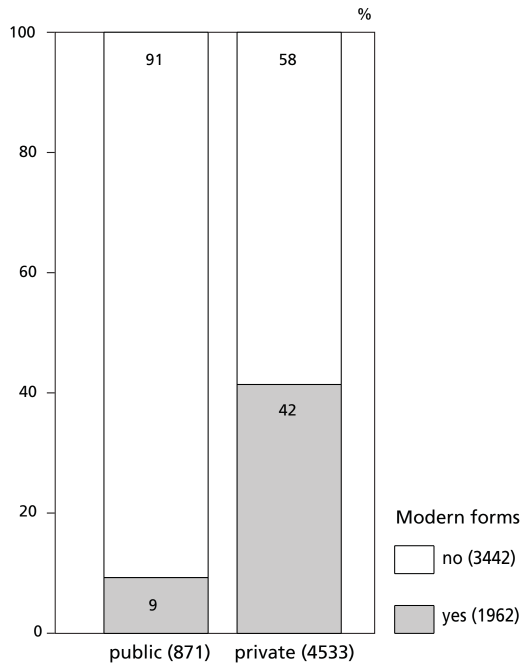


Figure 17 Percentages of modern variable pay, by sector (EPOC)



Findings of the EPOC survey (Figure 17) show similar results to the EWCS. Performance-based pay at team or company level, and income from shares, are more commonly used by companies in the private sector. Some 42% of managers working in private owned establishments responded that their company had introduced modern variable pay schemes. Compared with the proportion of 9% in public companies, this result illustrates the imbalance in the prevalence of modern variable pay components between sectors. As has been noted, differences between the EWCS and EPOC results could be explained by the probably better overview and knowledge that managers have about the wage system used by the company for which they work. Another reason may be attributed to the different scope of surveyed countries and the resulting differences between both surveys. While the EWCS included all 15 European Member States in 2000, the EPOC survey draws on a smaller number of European countries. Analysing the EWCS data only for those countries covered by the EPOC study resulted in no significant differences. The relationships appear quite stable across different sub-samples. The positive relation between modern variable pay and companies in the private sector was replicated for all countries, with Sweden showing the strongest relationship in both surveys.

Figure 18 shows the distribution of different types of wage among seven categories of company size, measured by the number of employees working at the establishment or the largest occupational group. The proportion of almost all types of variable pay elements grows stronger with increasing company size. In general, the reward packages seem to become more complex as the percentages, especially for the variable pay components, rise. The bigger the company, the more likely it is that employees report on different wage systems contributing to their remuneration. Figure 19 illustrates findings drawing on EPOC data. Percentages for companies with modern forms of variable pay range from 10% for smaller companies with one to five employees, to 50% for companies whose size exceeds 500 employees. Companies with a large number of employees seem to be more open to and more capable in using performance-based pay at team and company level, or income from shares as part of their compensation strategy.

Data from both the EWCS 2000 and EPOC survey support the assumption that modern forms of variable pay are found more often in bigger companies. At national level, the strongest relationship was found in Finland, meaning that there is a stronger link between modern forms of variable pay and larger companies in Finland than in other countries covered by this secondary analysis. No significant relationships were found for Belgium (EWCS 2000) and for Sweden (EPOC). One interpretation of this positive relation between modern forms of variable pay and size is that larger companies may have a more differentiated wage system. They may have to be more flexible to keep ahead in the competitive market and, therefore, possibly more open to innovative compensation systems. Another explanation is specific statutory factors, legislation and national tax policies that further or hinder the use and spread of modern variable pay.

Institutional factors play an important role when it comes to the implementation of wage systems. Attitudes and opinions of unions, work councils, and other employee representatives highly influence negotiations about the introduction of new or modern forms of pay. These have to be considered as important factors when exploring the prevalence of wage systems. The EPOC survey provides data through which the influence of institutional factors can be examined. Indicators include the number of employee representatives (of trade unions, workers councils and/or advisory

Figure 18 Percentages of types of wage systems, by size (EWCS 2000)

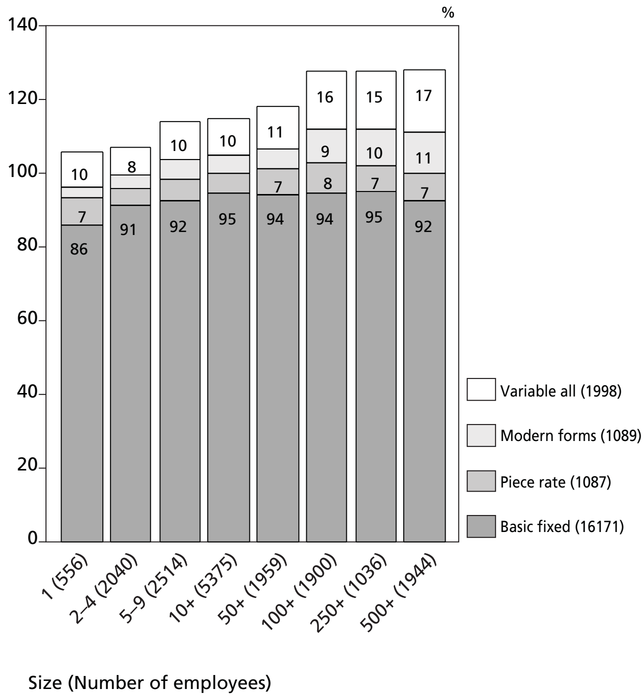
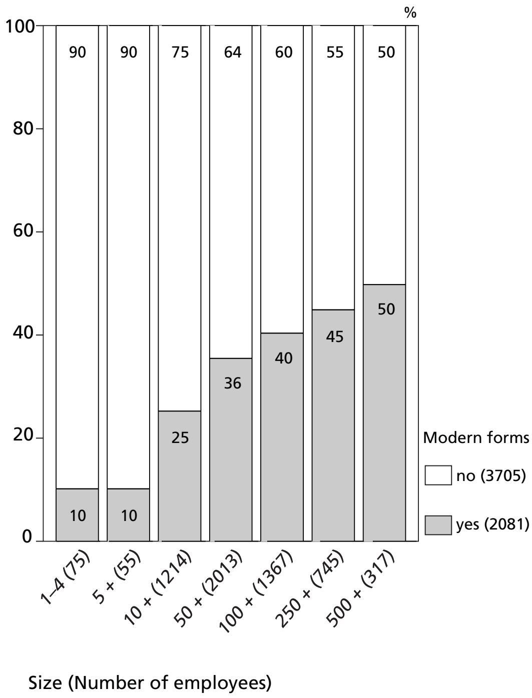


Figure 19 Percentages of modern variable pay, by size (EPOC)



committees), recognised for the purposes of consultation/negotiation and joint decision-making, and the density or degree of union membership, i.e. the proportion of union members within the workforce of a company.

Figure 20 shows a slightly positive relationship between modern forms of variable pay and employee representation. Some 46% of companies reporting a high degree of employee representation have performance-based pay at team or company level, or income from shares, which is true for only 30% of companies that report no representatives at all. It seems possible that a higher degree of representation is associated with a higher incidence of modern forms of variable pay, although this relationship could be influenced by company size. No similar relationship exists with regard to the density of union membership. The prevalence of modern pay, by differing degrees of union membership (Figure 21), illustrates that these two variables are quite independent. However, correlation analysis shows a very weak but significant negative relationship, indicating that higher degrees of unionisation are slightly linked with less prevalent modern forms of variable pay.

The weak significant positive relation between modern forms of variable pay and employee representation at cross-national level cannot be replicated at national level in Germany, the Netherlands and Sweden. Only in the UK is there a weak significant positive relation, although all other correlation coefficients also show positive relations. Consistent weak or small negative correlations between modern forms of variable pay and the degree of unionisation are found both in cross-national and national analysis. Significant negative relationships are found in the Netherlands and particularly in the UK, indicating that the greater the number of employees of an organisation who are trade union members, the less likely that modern forms of variable pay are

Figure 20 Percentages of modern variable pay, by employee representation (EPOC)

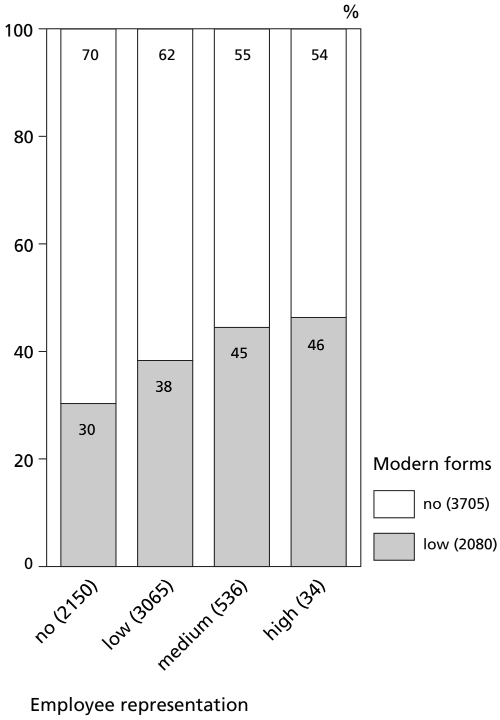
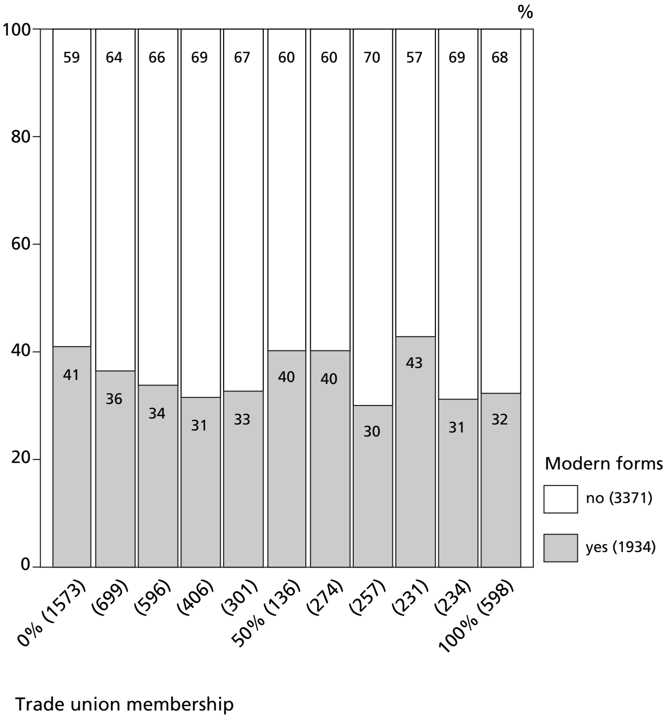


Figure 21 Percentages of modern variable pay, by trade union members (EPOC)



applied in the compensation system. In Sweden, a similar tendency exists but shows no significance; no relation seems to exist in Germany. These findings might be an indicator for a slightly negative attitude of unions towards variable pay in most European countries. The fact that modern forms of variable pay tend to be found more frequently where numbers of employee representatives are higher indicates that, at least in some countries, local employee representatives have a different perspective than trade unions towards modern forms of variable pay.

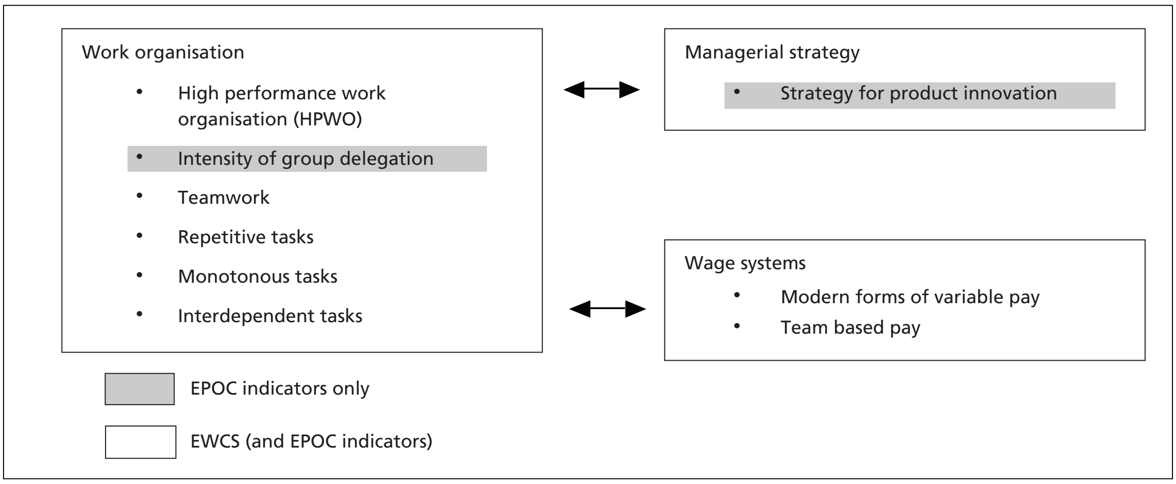
Relations between wage system, work organisation and strategy

The connection between work organisation and the wage system is a focal point in the research model. As a concept of work organisation in secondary analysis of the EWCS 2000 data, the indicator high performance work organisation (HPWO) was formed, and is characterised by:

- time and task autonomy;
- task variety;
- responsibility;
- participation;
- effective participation.

Deriving indicators for work organisation from the EPOC survey, to match the concept of high performance work organisation as described for the EWCS 2000 study, seemed to be impossible. Instead, a single indicator was used to examine relations between work organisation and wage systems. Figure 22 provides an overview regarding relevant indicators for work organisation, managerial strategy and wage systems.

Figure 22 Research model and indicators for wage system, work organisation and strategy



Group delegation is described in the EPOC study as the right to make decisions on how employees perform their work on a group basis, without reference to immediate managers. This would include decisions on, for instance, the scheduling of work or time keeping. Figures 23 and 24 show the country breakdown for these concepts of work organisation after a median split, dividing them into high and low forms.

The assumed relationship is found between specific forms of wage systems and aspects of high performance work organisation. Correlations are small, but significant. Figure 25 shows that modern forms of variable pay, i.e. having income related to the performance of a group or company and/or income from shares, are found more often at high performance work organisations. The percentage of employees working on jobs with a low HPWO profile (5%) is compared with those working on jobs with a higher profile (11%). This result was also found at national level, indicating that modern forms of variable pay are applied significantly more often in organisations with task

Figure 23 Percentages of HPWO, by country (EWCS 2000)

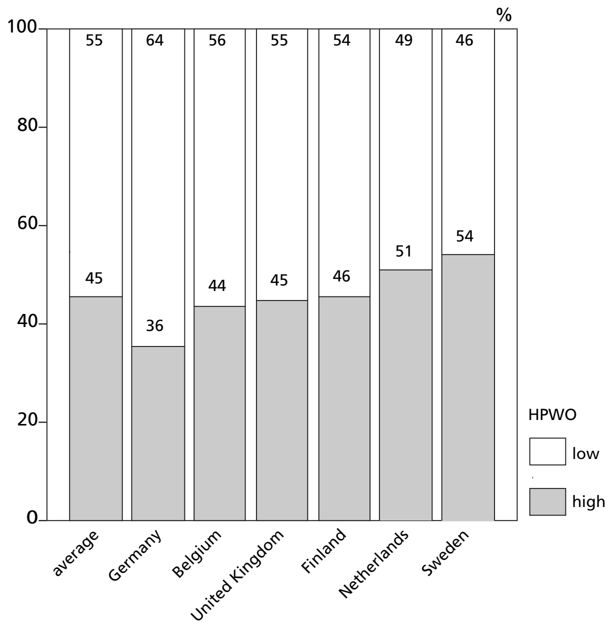


Figure 24 Percentages of group delegation, by country (EPOC)

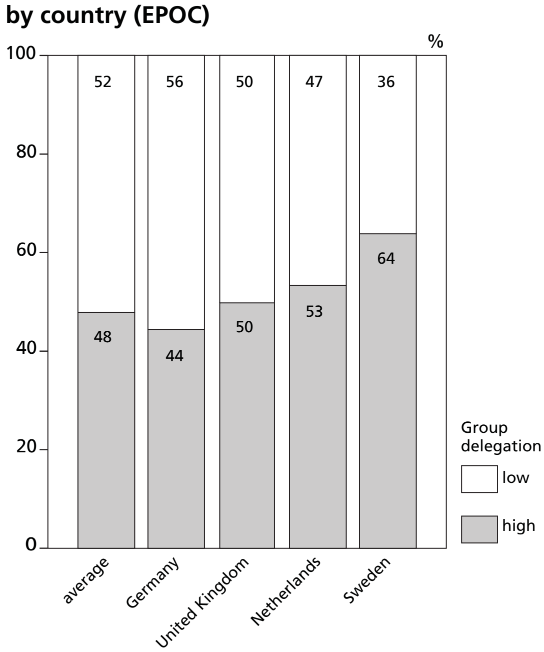


Figure 25 Percentages of modern variable pay, by HPWO (EWCS 2000)

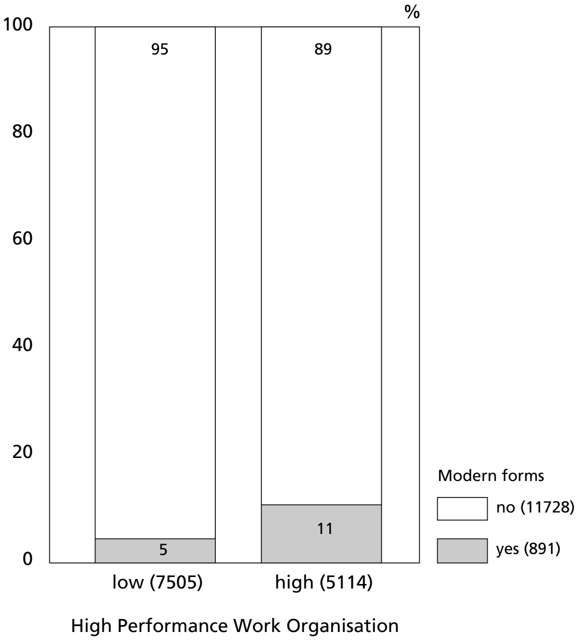
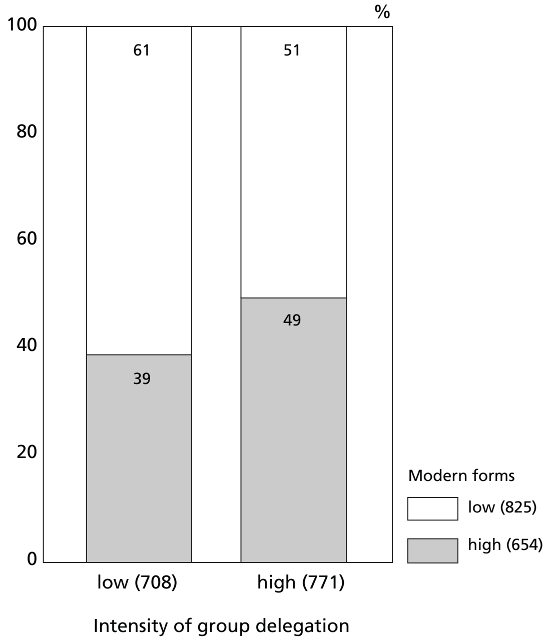


Figure 26 Percentages of modern variable pay, by group delegation (EPOC)



or time autonomy, a greater task variety, responsibility and effective participation. The relations at national level are all significant and of almost equal size.

As Figure 26 shows, modern forms of variable pay are found significantly more often at workplaces with a high intensity of group delegation. Approximately half of such workplaces are linked with performance-based pay at team and company level, or with income from shares. This result was also found at national level for Germany and the UK. The Netherlands and Sweden do not show significant relationships. A more differentiated interpretation is given in the context of further analyses, later in this report.

However, the type of wage system seems to be less dependent than expected on the type of work organisation. For example, there is only a weak relation between team-based pay and teamwork (Figure 27) or interdependent tasks. Team-based pay is found significantly more often with teamwork at cross-national level, but results vary for the national sub-samples in the EWCS dataset. The link could be replicated at national level for Belgium, Finland, Sweden and the UK, which show almost equal significant positive relationships. In Germany and the Netherlands, no significant relationships were found. That team-based pay is applied more often in organisations with teamwork seems obvious. An individual-based compensation system in a team-based work organisation might provoke competitive behaviour, and does not promote group supportive behaviour. For this reason, it is astonishing that the observed relationship is so small. This lack of alignment could be one reason why teamwork is sometimes less successful than expected.

Team-based pay and interdependent work organisation show an even smaller significant relationship than that found between team-based pay and teamwork. For the selected countries, none of the correlations is significant and all are close to zero. The findings indicate the lack of

Figure 27 Percentages of team-based pay, by teamwork (EWCS 2000)

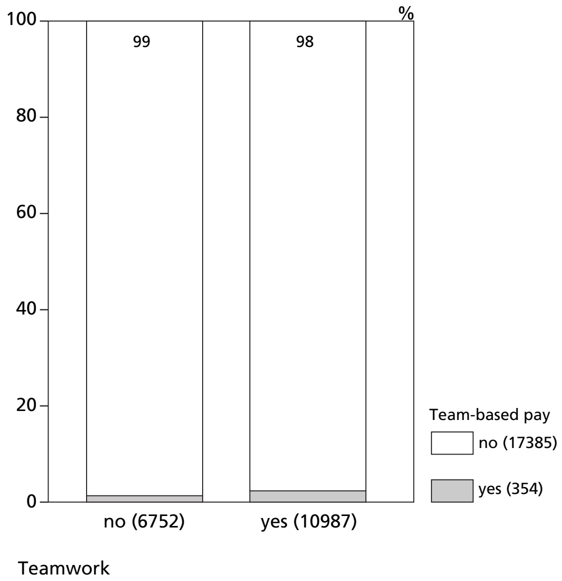
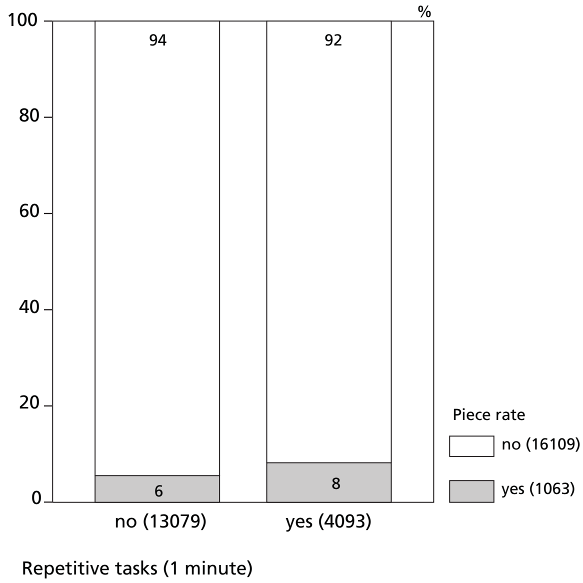


Figure 28 Percentages of piece rate/productivity pay, by repetitive tasks (EWCS 2000)



alignment between work organisation and compensation system. Interdependent work should be compensated in a form that supports cooperation between the dependent co-workers.

Traditional forms of variable pay, such as piece rate or productivity payments, are found slightly more often at workplaces with repetitive and monotonous tasks. As can be seen in Figure 28, there is only a marginal difference (6% and 8%) between the proportions of employees receiving piece rate or productivity pay with or without repetitive tasks. The same finding can be inferred from data on the prevalence of monotonous tasks. Obviously, the vast majority of employees engaged in repetitive or monotonous tasks do not get piece rate pay, although significant weak associations exist between both monotonous and repetitive tasks and piece rate or productivity pay. At national level, the same pattern of results is found for four of the six countries: Finland, Germany, Sweden and the UK show significant relationships, whereas there is no significant relation in Belgium and the Netherlands.

So far, this chapter has introduced indicators for wage systems, and individual, employment and organisational conditions and factors. The EPOC survey makes it possible to derive an indicator for managerial strategy, which is important for analysing the alignment hypothesis. Company strategy was not explicitly addressed in the EPOC study, but questions were asked regarding management initiatives in the last three years. It was possible to use answers referring to product innovation as an indicator for a company's innovation strategy. Figure 29 gives the country breakdown for innovation strategy. In every country, more than a quarter of managers reported that their company had introduced a product innovation strategy in the past three years. Establishments with an innovation strategy (Figure 30) have modern forms of variable pay (46%) more often than those without such a strategy (32%). These findings are replicated in the country specific analyses, with the UK showing the highest correlation, and the Netherlands the lowest and the only non-significant correlation.

Figure 29 Percentages of innovation strategy, by country (EPOC)

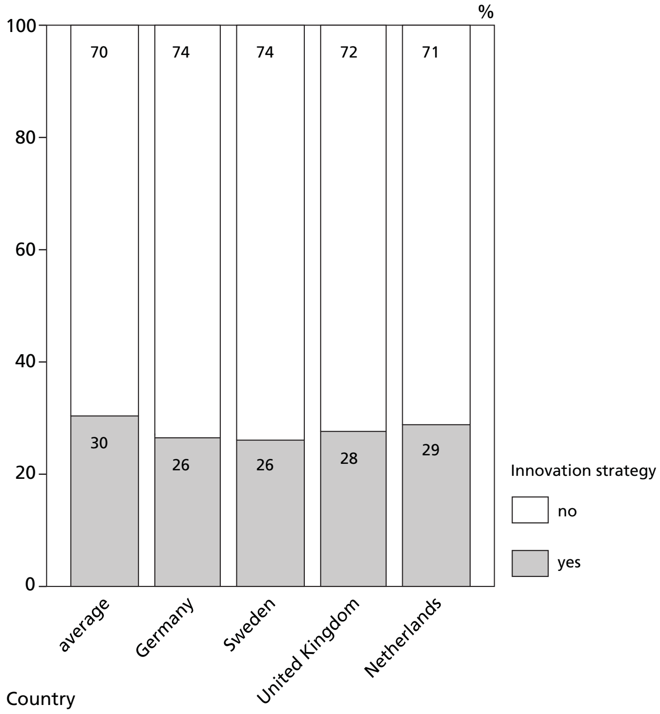
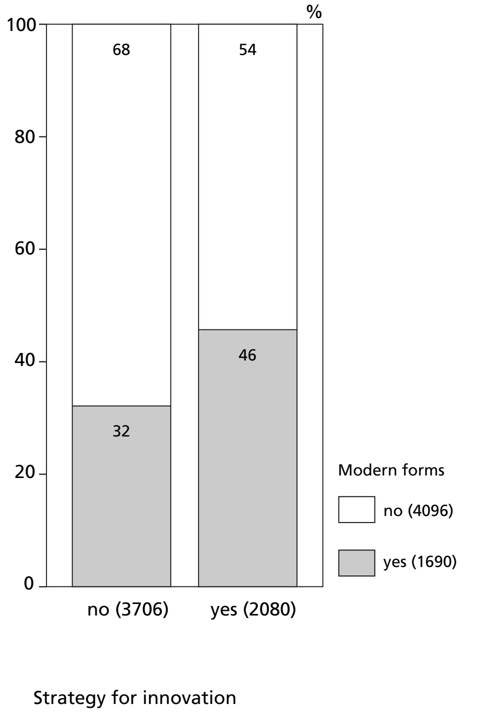


Figure 30 Percentages of modern variable pay, by innovation strategy (EPOC)



Effectiveness of wage system, work organisation or strategy

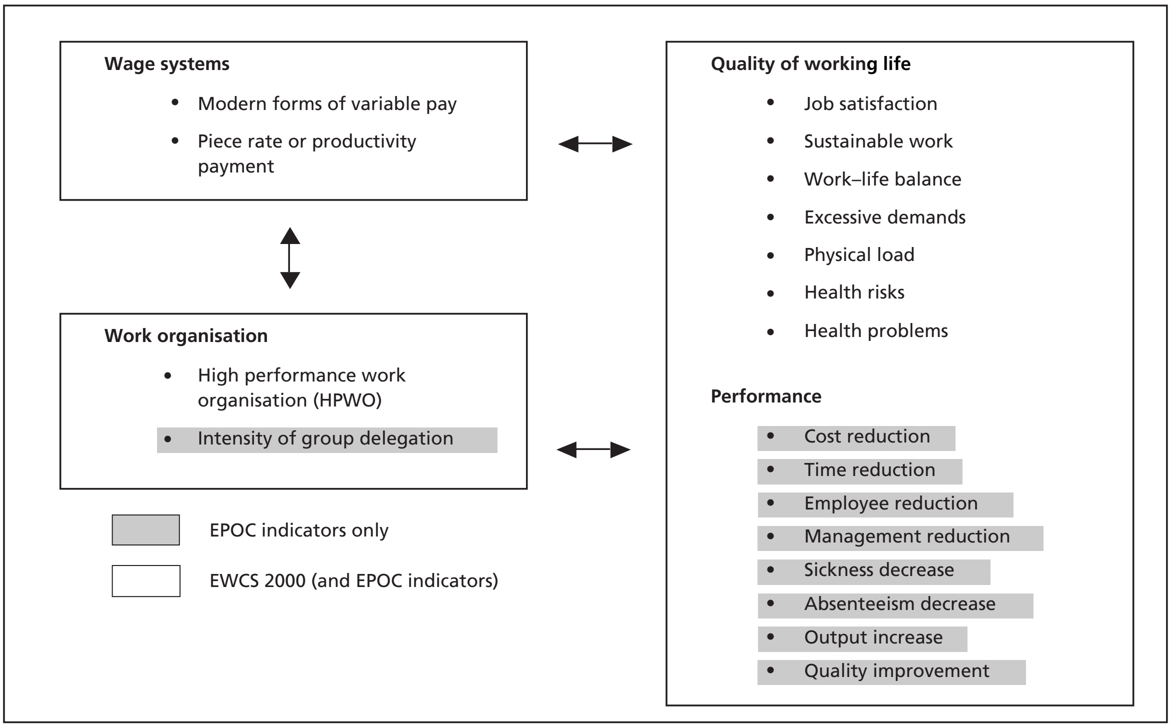
The effectiveness of wage systems can be measured by a wide variety of criteria. Apart from performance or productivity indicators – such as the increase of output rates or quality standards and the reduction of costs or scrap percentage – a series of indicators relate to the quality of working life and the well-being of the employees. Low rates in absenteeism, sickness, stress and the assessment of work as sustainable and satisfying could be used as indicators for the success of a particular type of wage system.

The EWCS 2000 provides no data regarding managerial strategy and organisational performance[5]. However, the design of the questionnaire enables analysis of the effectiveness of wage systems in terms of employee well-being and the quality of working life. Single source indicators have been formed for job satisfaction, the perceived sustainability of work, and work–life balance. These indicators are derived from single questions included in the EWCS 2000 questionnaire. Further quality of working life indicators include personal skills and work demands (excessive demands), the presence of physically challenging tasks (physical load), the general perception of health risks, and health-related problems, e.g. hearing problems or backache. Indicators for organisational performance and quality of working life are shown in Figure 31.

The research model assumes that there is a relationship between wage systems and quality of working life. These expectations are only partly supported because data analysis reveals no consistent results. Figure 32 shows that employees receiving traditional forms of variable pay, such

[5] Questions regarding management strategy and company performance could perhaps be included in the EWCS 2005, to assess employee awareness of company goals and goal achievement.

Figure 31 Research model and indicators for wage system, work organisation, performance and quality of working life



as piece rate or productivity pay, are more likely to report that their work is less sustainable[6] than those having other types of wage systems. An analysis of the national sub-samples of the EWCS 2000 dataset leads to similar results. Weak but significant negative relationships are found for Belgium, Germany and Sweden, while findings for Finland and the UK are negative but not statistically significant. In the Netherlands, there seems to be no relation between piece rate pay and sustainability.

Analysis of EWCS 2000 cross-national data indicate a weak significant positive relation between job satisfaction and modern forms of variable pay[7]. Nevertheless, the distribution in Figure 33 illustrates that there are no substantial differences between categories of satisfaction and the proportions of employees receiving modern forms of variable pay. Percentages range from 4% to 6%. Employees with modern forms of variable pay are not more satisfied with their jobs than those without. Additionally, basic or fixed pay is associated with higher job satisfaction, and a weak negative relationship is found between job satisfaction and piece rate or productivity pay.

The national results show the same pattern of findings, but, because of smaller sample sizes, hardly any significant relations. One consistent finding is the negative correlation pattern between job satisfaction and piece rate pay in most of the sample countries (significant for Germany and the UK), indicating that employees working on piece rate are less likely to be satisfied. The negative

[6] Work is termed 'sustainable', in this instance, if employees think they will be able to do their (same) job when they are 60 years old (Q.37, EWCS 2000).

[7] Question 38 in the EWCS 2000 asks about satisfaction with working conditions, after covering all kinds of different aspects of the job and its outcomes. Hence, it may be assumed that employees have a broad reference frame, including most job aspects, when answering this question. Therefore, the question may be regarded as an indicator of job satisfaction.

Figure 32 Percentages of piece rate/productivity pay, by sustainable work (EWCS 2000)

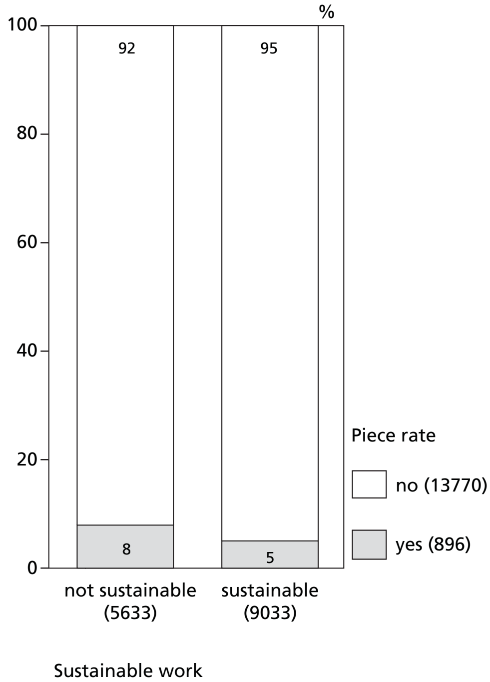
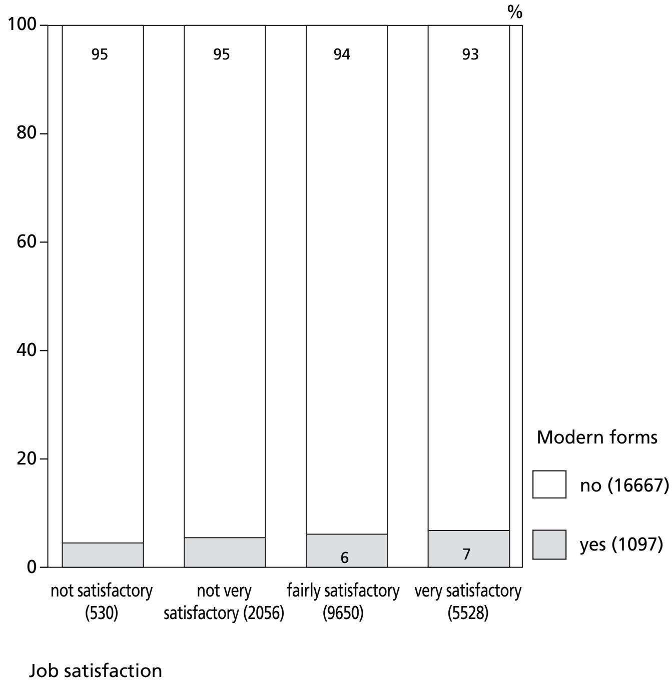


Figure 33 Percentages of modern variable pay, by job satisfaction (EWCS 2000)



correlation pattern between job satisfaction and piece rate pay, and the positive pattern for modern forms of variable pay, seem to indicate that employees evaluate these two forms of variable pay differently.

Significant positive relations between high performance work organisation (HPWO) and job satisfaction can be reported for the overall sample, as well as for sub-samples of all countries, showing the strongest association for Sweden and the weakest for Belgium. These weak positive relationships between job satisfaction and modern forms of variable pay, and the strong connection between HPWO and satisfaction, suggest that job satisfaction is more dependent on the type of work organisation than on the type of wage system. One plausible interpretation of these results is that HPWO increases the quality of working life and, therefore, leads to higher job satisfaction. As pointed out earlier, however, one has to be cautious, as correlations do not prove causal inferences.

Cross-national analysis reveals an interesting pattern of findings for the other variables used to explore the relationship between modern variable pay and quality of working life. Modern forms of variable pay seem to be related to a negative perception of employee work–life balance. Employees with modern variable pay report more often that work and social commitments do not fit very well. Although modern forms of variable pay are negatively correlated with physical load – and, therefore, less likely to be found at workplaces with high repetitive and physically demanding tasks (blue collar job profiles) – the correlation with health problems is significantly positive, although at a very low level (Figure 34). This means that people receiving modern variable pay report health problems slightly more often than those receiving other forms of payment.

Figure 34 Percentages of modern variable pay, by health problems (EWCS 2000)

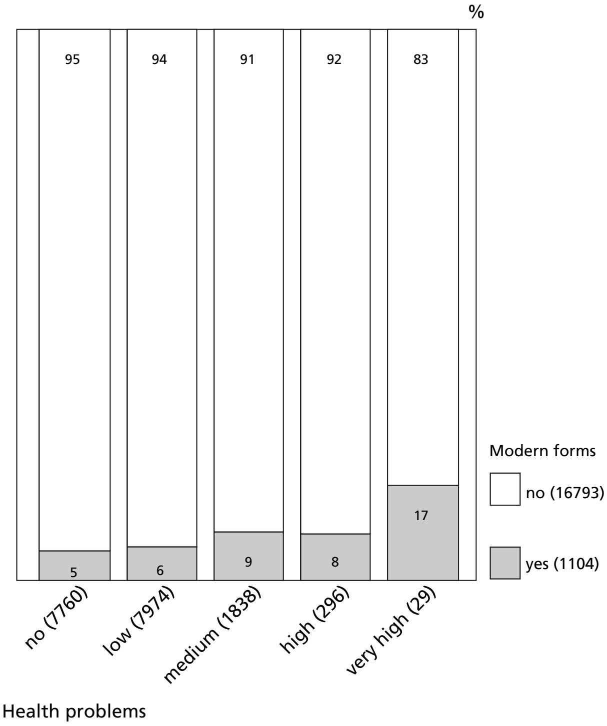
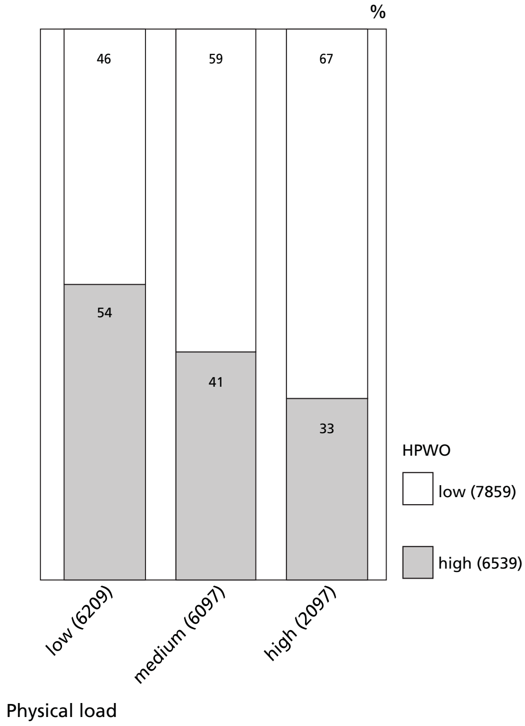


Figure 35 Percentages of HPWO, by physical load (EWCS 2000)



The results change, however, when HPWO is taken into account. Employees more frequently report a positive work–life balance and feel they have a sustainable job, when they work in organisations characterised by a high HPWO profile. They also report fewer health problems, physical load and excessive demands. The strongest relationship exists between HPWO and physical load. However, almost no relationship exists regarding health risks. As can be seen in Figure 35, employees working at high HPWO profile workplaces are more likely to report that their work includes only low physical load. In general, HPWO seems to support a more positive assessment of working conditions and other factors that contribute to a higher quality of working life.

While EWCS 2000 data provide no information about organisational outcomes, the EPOC questionnaire includes questions about indicators for organisational effectiveness. Managers were asked if they could report any outcomes with regard to the introduction of direct participation. Criteria for the assessment of performance are: reduction in the numbers of employees and managers, decrease in absenteeism and sickness rates, output increase, quality improvements, time and cost reduction. For two out of the eight criteria, companies with modern forms of variable pay report more effects resulting from the introduction of group delegation activities than those without such pay (Figures 36 and 37). The two criteria are: output increases, and reduction in the numbers of managers.

Figure 36 shows that the percentages for positive responses, with regard to output, increases in range, from 46% without modern forms of variable pay to 60% with modern forms of variable pay. In terms of reducing the numbers of managers, the figures range from 22% to 33%. At a national level, the number of cases decreases (ranging from 17 to 125 respondents), which makes a statistical interpretation of the results for most criteria questionable; and only five out of 32 results are significant. In the UK, modern forms of variable pay seem to be linked with cost reduction and a lower decrease in absenteeism and in numbers of employees. In Sweden, modern forms of variable pay seem to be associated with less quality improvements and less sickness decrease. However, these few significant results should be interpreted with caution, as they might be due to sample effects. Furthermore, they could be dependent on the influences of unknown third variables, especially as correlation patterns differ between countries, which might indicate institutional differences.

Figure 36 Percentages of performance, by modern variable pay (EPOC)

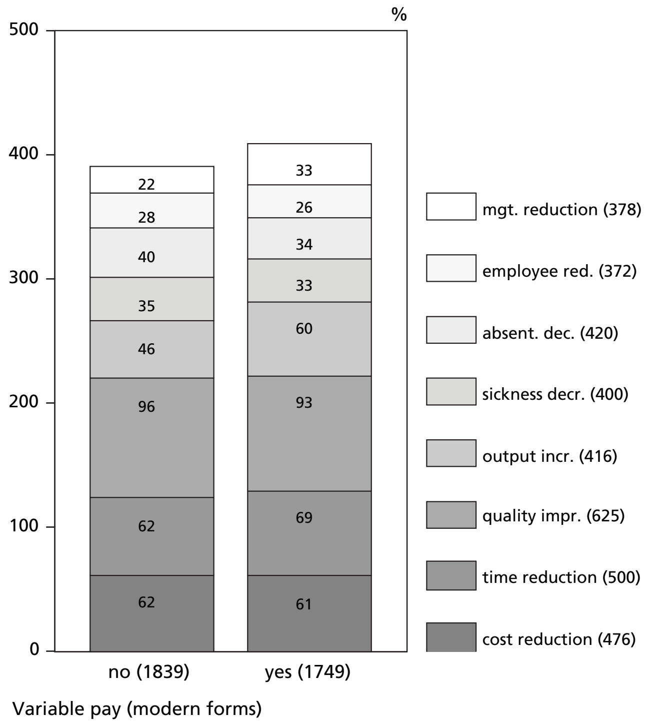
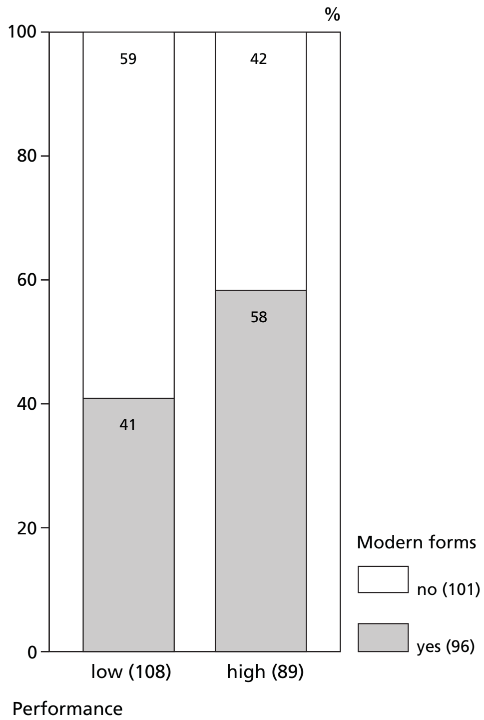


Figure 37 Percentages of performance, by modern variable pay (EPOC) (aggregated performance variable)



Taking into account these predominantly insignificant relationships, between modern forms of variable pay and performance, it seems that wage systems on their own have only a minor influence on performance. The next step is to analyse the influence of moderating variables, such as aspects of work organisation and strategy, which might explain why no relationship is found between wage systems and performance at a general level. Based on the theoretical model, it is expected that an inconsistent alignment between wage systems, work organisation and strategy weakens the impact of modern wage systems on performance.

Effectiveness of system alignment

As reported earlier, an important conclusion from reviewing research literature is the influence of other organisational factors that contribute to the success of compensation strategies. Positive responses regarding effectiveness are supposed to be dependent on the alignment of different elements within the organisational system. If certain aspects of work organisation, managerial strategies and wage systems are aligned consistently, then they should facilitate and foster positive outcomes.

At this point, the study moves away from the first level of data analysis of relationships between two variables, to examine three and, in the case of the EPOC data, four of those variables simultaneously and to look for contingent relationships.

Based on the EWCS data, it was possible only to analyse the effects of the alignment between work organisation and wage systems on quality of working life.[8] These analyses showed mixed results. No alignment effects were found for the indicators, work–life balance, job satisfaction and sustainable work. However, alignment effects were found indicating that high performance work organisations are more successful in reducing health risks, health problems, physical load, and excessive demands, if they are combined with modern forms of variable pay. More research is needed, however, to corroborate these findings.

In the case of the EPOC data, the association between modern forms of variable pay and performance indicators under different conditions are analysed, first with regard to the intensity of group delegation, before taking managerial strategies into account in the second step. Filtering the data allows the analysis to control the influence of group delegation as an aspect of work organisation. Given the assumption that the alignment of wage systems and work organisation

Figure 38 Percentages of performance, by modern variable pay and low group delegation (EPOC)

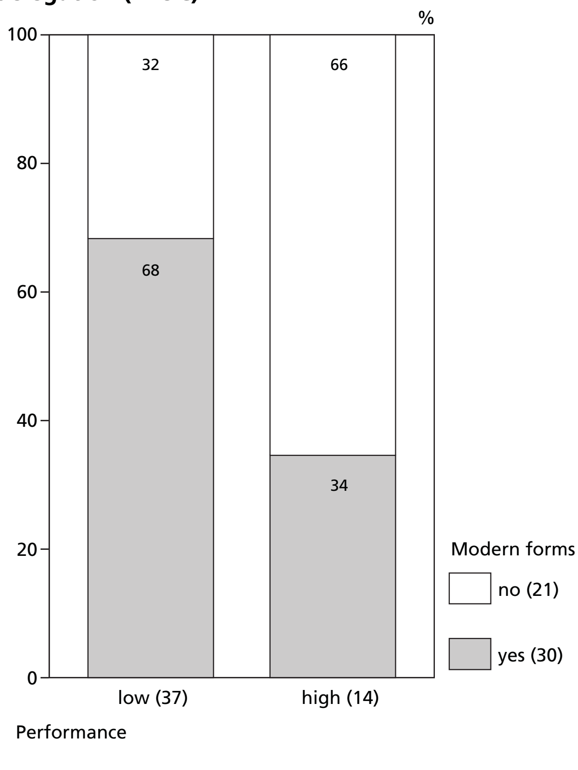
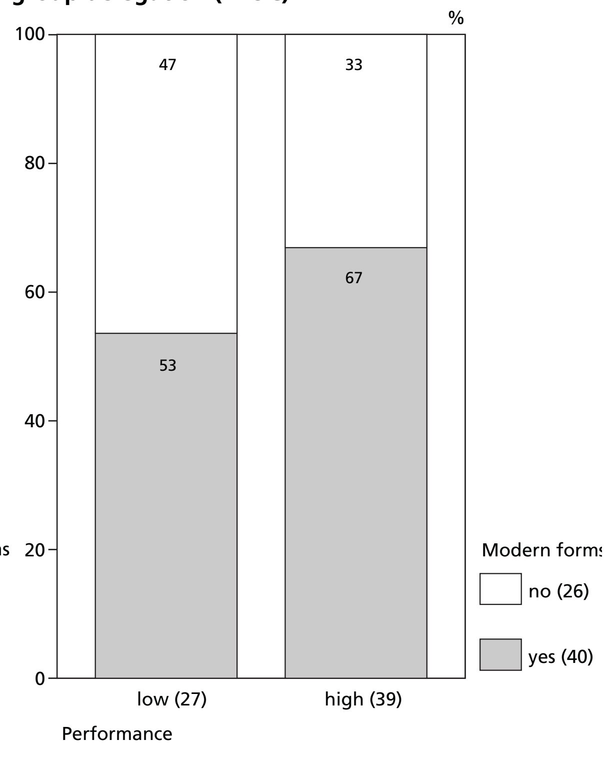


Figure 39 Percentages of performance, by modern variable pay and high group delegation (EPOC)



8 For this purpose, the study looked for interaction effects, using hierarchical linear regression analysis and, for binary dependent variables, logistic regression analysis.

leads to positive effects on organisational performance, modern forms of variable pay are related to performance indicators for high and low intensity of group delegation. Using an aggregated variable for performance indicators, Figure 38 shows that, with low intensity of group delegation, 34% of the companies using variable pay report higher positive effects, compared with 67% for companies having a high intensity of group delegation (Figure 39). This emphasises the importance of the alignment hypothesis.

The following figures show the breakdown of the single performance indicators, which were used to form the aggregated performance variable, as presented in Figures 38 and 39. Companies with a low intensity of group delegation and modern forms of variable pay report more often than companies with other forms of wage systems, that the introduction of group delegation does not lead to time reduction, quality improvements, or reduction in the number of employees and managers (Figure 40). Managers from companies with a high intensity of group delegation and modern forms of variable pay report more often that the introduction of group delegation does lead to cost and time reduction, and to a reduction in the number of managers (Figure 41)[9]. A higher output increase is also reported, but the findings are not of statistical significance. Due to small sample sizes at national level, these analyses were only performed at cross-national level.

This second level of analysis also explored the influence of innovation strategy on the relation between work organisation and wage systems. The important questions are: Does the influence of strategy make up for differences in the relationship between the wage system and work organisation; and does strategy play an important role for the alignment of these variables? Can

Figure 40 Percentages of performance, by modern forms of variable pay and low group delegation (EPOC)

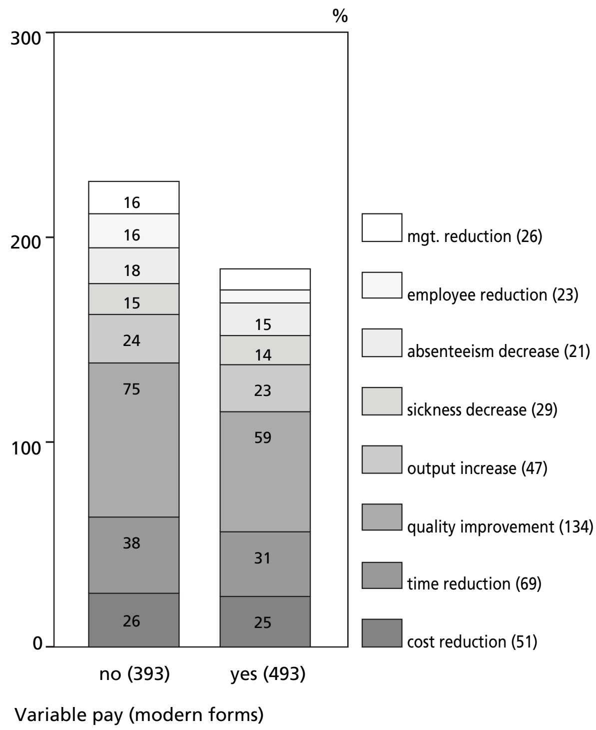
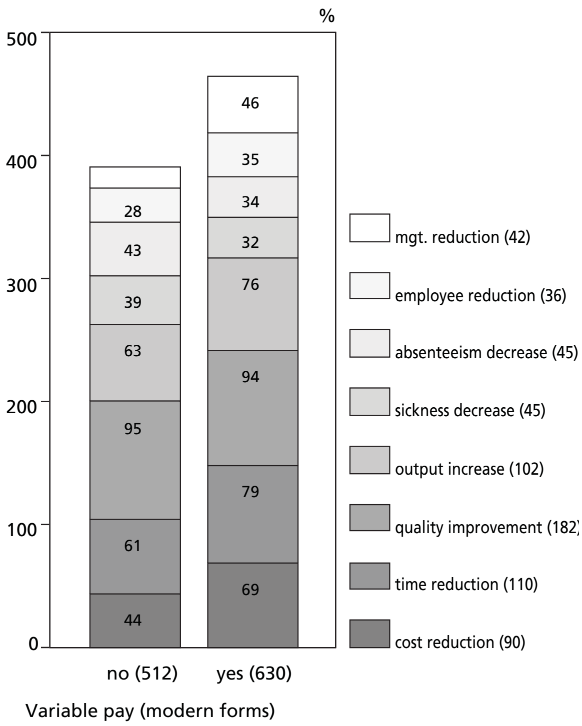


Figure 41 Percentages of performance, by modern forms of variable pay and high group delegation (EPOC)



[9] These interaction effects were tested using logistic regression analysis.

the alignment of wage systems and work organisation be regarded as strategy driven, as it is postulated, in the strategic fit approach?

For companies without an innovation strategy, having a low or high degree of group delegation does not seem to influence whether or not they use modern forms of variable pay (Figure 42). Significant relationships were not found at cross-national nor at national level. However, companies with an innovation strategy and intensive group delegation choose modern forms of variable pay more often than companies with low group delegation, as can be seen in Figure 43. Percentages differ from 40% for a low intensity of group delegation to 69% for a higher intensity. Strategy seems to play an important role in the introduction of modern forms of variable pay, when aligned with a high intensity of decisive power and control, transferred from management to employees. At national level, this is only the case for Germany. In the UK, the Netherlands and Sweden, no significant relationship was found. In summary, there seems to be a positive relation between modern forms of variable pay and group delegation, only for companies that implemented a strategy towards product innovation. These findings support the assumptions made by the strategic fit approach.

Figure 42 Percentages of modern variable pay, by group delegation without innovation strategy (EPOC)

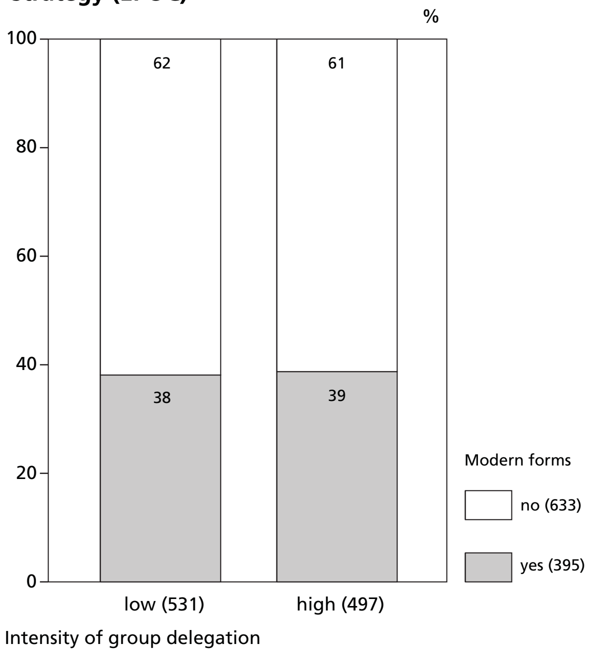
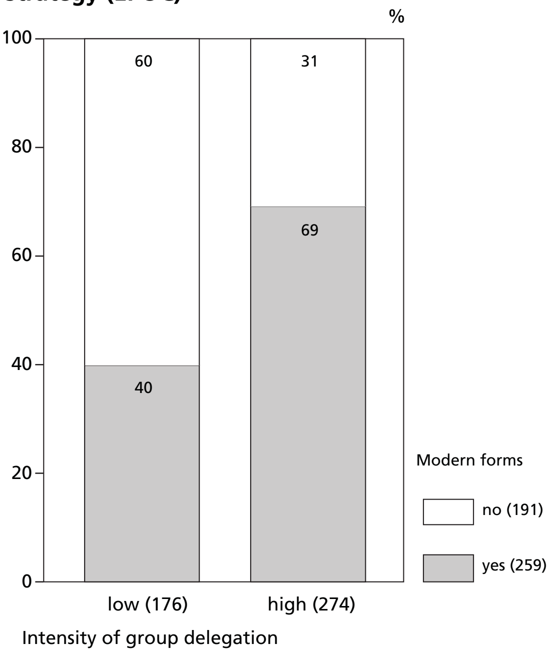


Figure 43 Percentages of modern variable pay, by group delegation with innovation strategy (EPOC)



Moving on to the third and highest level of analyses requires the arrangement of four variables. This expands the scope of contingency and takes into consideration, for further analysis, indicators for strategy, wage systems, work organisation and performance. The exploration of contingency relationships is difficult because selecting sub-samples and applying filters to these samples reduces the number of cases, when it comes to investigating the influence of moderating variables. The EPOC questionnaire contains jump rules that structure the way through the course of questions and lead to calculating with smaller numbers. Due to the small number of cases, ranging from 27 to 105, only big differences or very strong relationships become statistically significant.[10]

Assuming that an alignment of wage systems, work organisation and strategy facilitates positive organisational outcomes, then looking at companies without an innovation strategy and a low intensity of group delegation should show less positive responses. As Figure 44 shows, 75% of companies with modern forms of variable pay, a low intensity of group delegation and no innovation strategy report low positive effects. The result for companies with high group delegation is 49% (Figure 45). The proportion of companies reporting high positive effects, together with modern forms of variable pay, a low intensity of group delegation and no innovation strategy, is 22%, compared with 55% for companies with high group delegation. This finding underlines the important influence of group delegation in an analysis of the alignment of variables.

Figure 44 Percentages of performance, by modern variable pay, low group delegation without innovation strategy (EPOC) (aggregated performance variable)

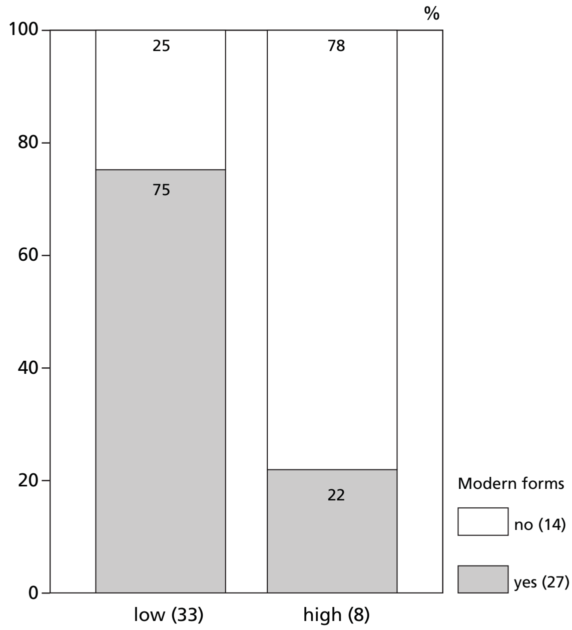
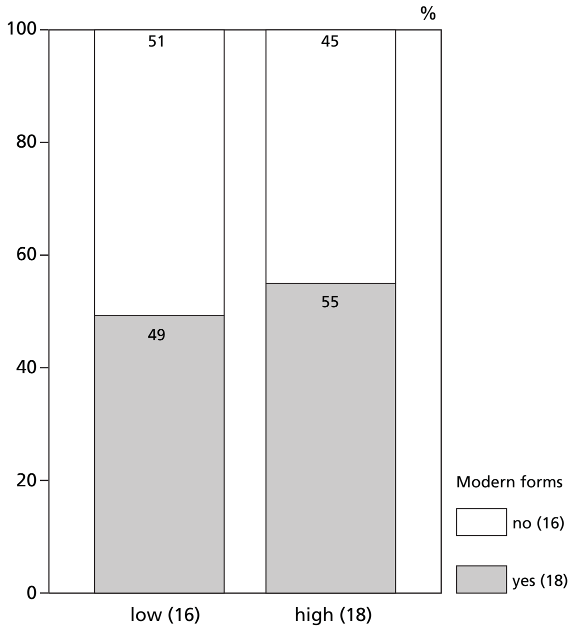


Figure 45 Percentages of performance, by modern variable pay, high group delegation without innovation strategy (EPOC) (aggregated performance variable)



Figures 46 and 47 show the breakdown for the single performance indicators. Companies with modern forms of variable pay, a low intensity of group delegation and no innovation strategy report, more often, that the introduction of group delegation does not lead to time reduction, quality improvement and output increases, nor to a reduction in absenteeism or in the number of employees (Figure 46). As expected, companies with modern forms of variable pay, a high intensity of group delegation and no innovation strategy report more positive effects. Managers in these companies state that the introduction of group delegation leads to cost and time reduction, output increases and a reduction in the number of managers.

Figures 46 and 47 also reveal that there are visible differences in the distribution of positive outcome responses. For instance, percentages of cost reduction in a less aligned set of variables

10 Due to these few cases, no logistic regression analysis can be done to test for interaction effects.

Figure 46 Percentages of performance, by modern variable pay, low group delegation without innovation strategy (EPOC)

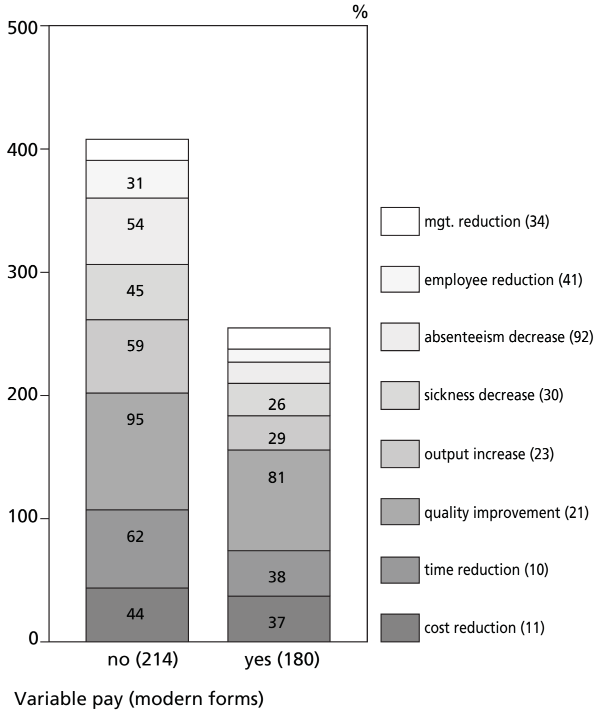
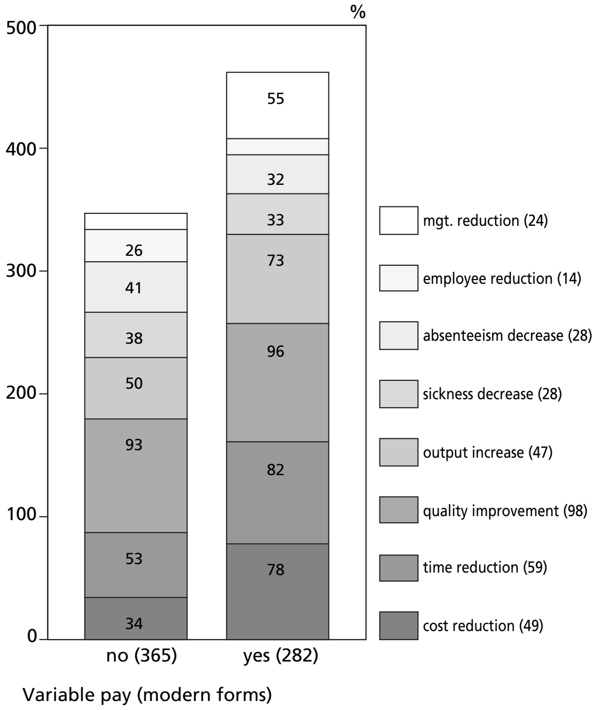


Figure 47 Percentages of performance, by modern variable pay, high group delegation without innovation strategy (EPOC)



are 37% for companies with modern forms of variable pay, and 44% for companies without such forms of pay (Figure 46). This ratio alters when there is a high intensity of group delegation, ranging from 34% (without modern forms of variable pay) to 78% (with such forms of pay). These findings illustrate the importance of group delegation when combined within a set of aligned variables, even with the exception of innovation strategy.

Companies with modern forms of variable pay, a low intensity of group delegation and an innovation strategy report, more often, that the introduction of group delegation leads to a decrease in absenteeism, but does not lead to a reduction in the number of managers and employees. Figure 48 shows that the proportion of companies with modern variable pay and with a decrease in absenteeism is 71%, whereas the proportion for companies without such pay is only 29%. Results for a reducing in the number of managers and employees point in the opposite direction, with percentages ranging from 22% (with modern forms of pay) to 63% (without modern forms) in the case of managers, and from 24% (with modern forms) to 55% (without modern forms) for employees.

Besides these positive and negative correlations, none of the other relationships between modern forms of variable pay and outcomes are of statistical significance. This resembles the inconsistent picture that was presented in Figure 40, where the alignment of variables was not achieved because of the low intensity of group delegation. Contrary to assumptions, the reported positive effects do not increase with the examination of aligned variables. Companies having modern forms of variable pay, a high intensity of group delegation and an innovation strategy do not report any different effects from the introduction of group delegation (Figure 49). Statistical analysis showed no significant results for any of the outcome indicators. These findings do not support previous

Figure 48 Percentages of performance, by modern variable pay, low group delegation with innovation strategy (EPOC)

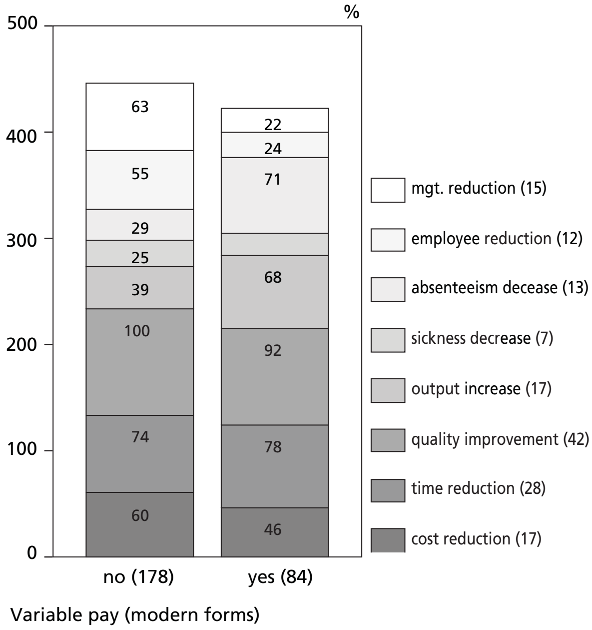
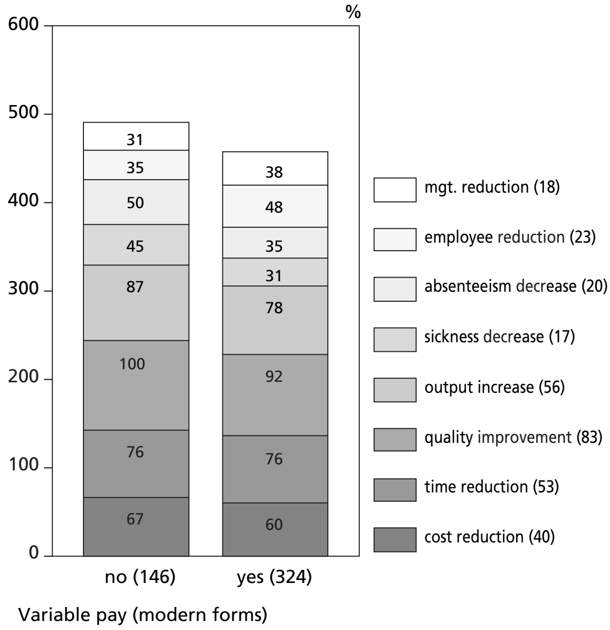


Figure 49 Percentages of performance, by modern variable pay, high group delegation with innovation strategy (EPOC)



figures, where the reported positive effects of the aligned variables gave a different picture. These results may be due to the small number of cases, but it seems that innovation strategy may compensate for modern pay effects and group delegation, although high group delegation companies report positive effects slightly more often than companies with low group delegation. However, one has to bear in mind the comparatively small sample when interpreting the results; effects might be due to sample effects.

Summary and discussion

What are the lessons learned from this secondary analysis of the EWCS 2000 and EPOC data, with respect to indicators and relationships between model variables?

Identification of indicators

The main indicators of wages and wage systems in the EWCS 2000 and EPOC survey are income level and the presence or absence of different types of pay systems, such as: basic fixed salary, piece rate and productivity payment, payments based on the overall performance of the company (profit-sharing scheme) or the overall performance of a group, income from shares in the company, pay add-ons such as extra payments for additional hours of work/overtime, compensation for poor or dangerous working conditions, for Sunday work or other extra payments. The interpretation of these wage indicators is not always clear. Future studies should distinguish between base pay, i.e. grading structure, and variable pay, i.e. bonus payments and financial participation, and should specify criteria for grading, as well as components and criteria of variable pay. For analysing both surveys, modern forms of variable pay were defined as an aggregated indicator encompassing team bonus and/or profit-sharing and/or income from shares.

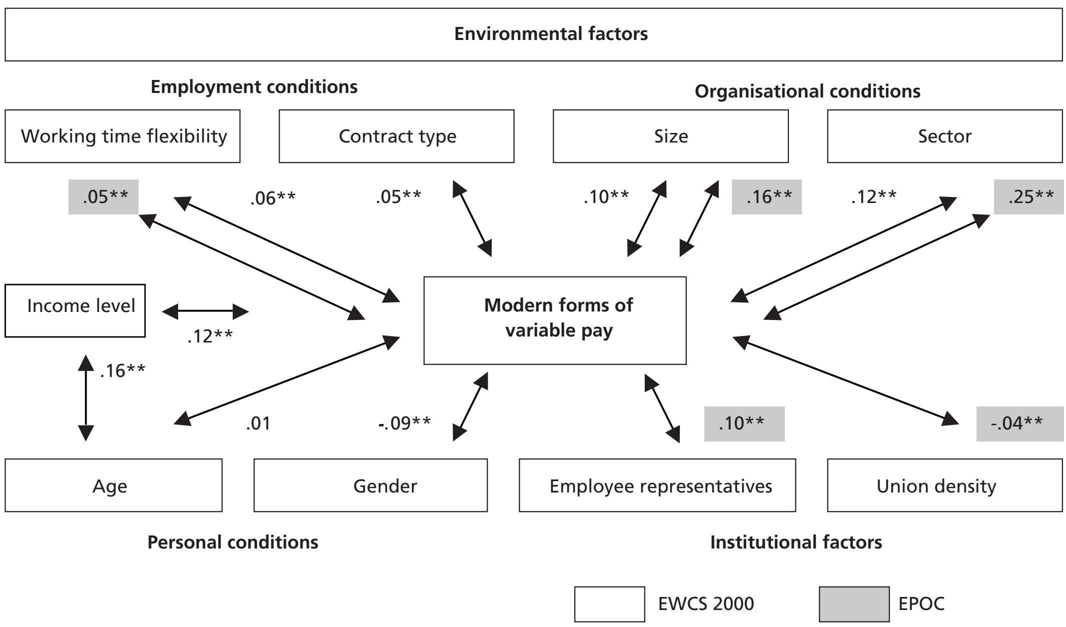
As indicators of work organisation, many studies have used different forms of participation, task variety and task autonomy, as well as the presence or absence of teamwork or job rotation. As team characteristics and their effects differ between teams, e.g. high or low degrees of participation or autonomy in decision-making, one cannot deduce task characteristics, solely from the incidence of teamwork. Similarly, the effects of job rotation depend on the variety of the tasks. For these reasons, the common practice of aggregating these aspects into one high performance work organisation (HPWO) variable may be questioned. Therefore, HPWO was defined in this study as characterised by time and task autonomy, task variety, responsibility, and effective participation, with reference to the EWCS 2000. In the EPOC survey, only direct participation was measured, and the intensity of group delegation was analysed as a key aspect of HPWO.

Regarding outcomes, employee-related outcomes are used in the EWCS, but organisational performance indicators are missing. Conversely, the EPOC survey focuses on organisational effects of direct participation, to the relative neglect of employee-related outcomes. Managerial strategy is not addressed in the EWCS 2000 and not explicitly addressed in the EPOC survey. Instead, analysis of the EPOC data made use of the question regarding product innovation initiatives as an indicator for an innovation strategy, which is not a very elaborate strategy measure. Future EWCS and EPOC surveys could address these aspects more explicitly.[11]

Prevalence of forms of wage systems, work organisation and strategy

Basic or fixed pay, without variable pay, is by far the most common wage system reported in the EWCS 2000, with modern forms of variable pay very much the exception, at only 6%. In contrast,

Figure 50 Results of secondary analysis: Wage system and environmental factors



[11] For example, questions regarding management strategy and company performance could be included in the EWCS, to assess employee awareness of company goals and goal attainment. The EPOC survey could ask management to distribute questionnaires among employees or request their consent to approach employees (representatives) directly, via the Internet or telephone, to ask about quality of working life indicators.

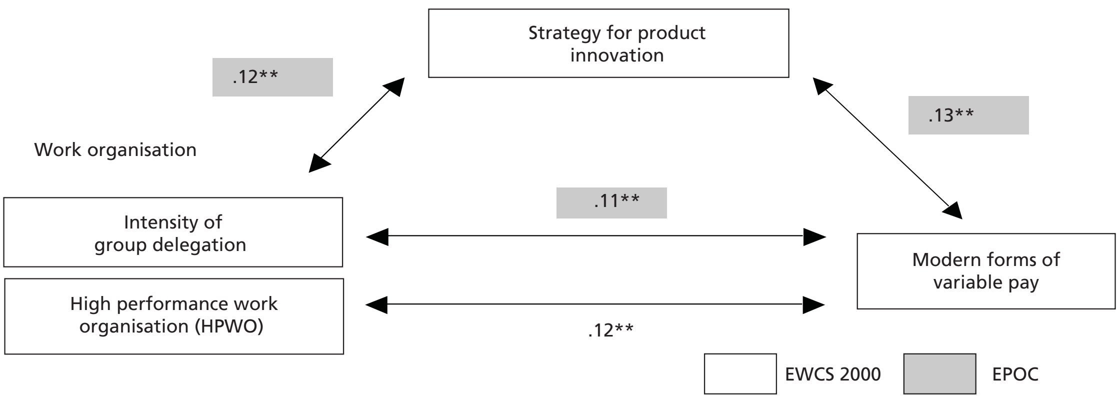
about every third workplace in the EPOC study reports the use of modern forms of variable pay for the largest occupational group. Considerable differences exist between countries, which in part might be due to supportive government legislation (Poutsma, 2001). Figure 50 displays the strength of relationships between indicators of wage system and environmental factors, as they have been found at cross-national level.

With respect to the relationship between wage systems and gender, cross-national results of the ESWC 2000 consistently show men receiving more modern forms of variable pay than women and, as Paoli and Merllié (2001) have already shown, earning higher wages. This corresponds with findings in national studies, which show that various factors cause direct or indirect discrimination (e.g. Belgian Federal Government, 2004; Ylöstalo, 2003). No relationship was found in the EWCS 2000 data between the type of wage system and age, despite contrary findings in some national studies (e.g. Ilmakunnas et al, 2003).

Concerning the relationship between wage systems and employment conditions, the EWCS 2000 results show that employees working full time have modern forms of variable pay, more often than temporary or part-time workers do. The same is true for employees with flexible working times, compared with those having fixed working times. National differences do exist, which might be due to national laws and regulations.

In the EPOC survey, modern forms of variable pay are found, more often, in the private sector than in the public sector, as well as in larger companies, which also corresponds with other findings (Pendleton et al, 2001). The relations of other organisational factors or institutional factors and wage systems have rarely been studied.

Figure 51 Results of secondary analysis: Wage system, work organisation and strategy

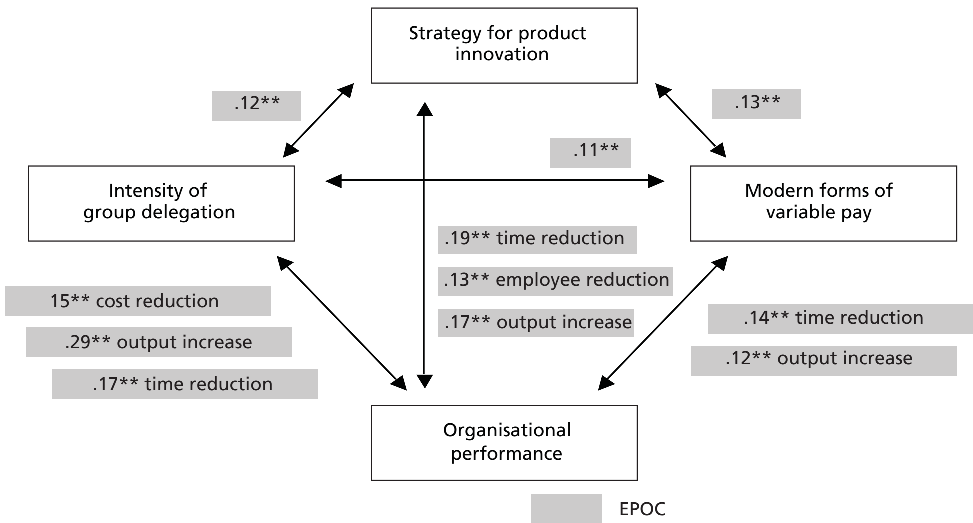


Relation between wage system, work organisation and strategy

The result of this secondary analysis of the EWCS 2000 and EPOC survey is that aspects of HPWO are found, more often, with modern forms of variable pay; this is consistent with existing research (e.g. Lay and Rainfurth, 1999; Pendleton et al, 2001; Poutsma, 2001). Furthermore, every third company reports the use of group delegation (EPOC Research Group, 1997) and almost the same number have taken innovation strategy initiatives. Figure 51 gives an overview of the associations between indicators of work organisation, strategy and wage systems.

Furthermore, EPOC data show that modern forms of variable pay and high intensity of group delegation are found much more often in companies with an innovation strategy, whereas no link exists for companies without an innovation strategy. All correlations between wage system, work organisation and strategy are rather low, but can be found in almost all the sample countries. Only a few studies have analysed the relationship between strategy and wage systems, and they found no consistent relationships (Bahnmueller, 2001; Thompson, 2002a). This might be partly due to the fact that there is often a degree of time lag between changes in strategy and congruent changes in wage systems. This can be caused by sequential implementation, e.g. by changing strategy first, then work organisation and, lastly, wage system. Another reason might be restrictions of collective bargaining, which cause a time delay or may even block alignment of pay systems. An indication that collective bargaining could delay or hinder alignment is that, in the UK – where there is a deregulated liberal market economy – the relationship between innovation strategy and modern forms of work systems is much stronger than the average, and much stronger than in Germany, the Netherlands and Sweden, all of which can be characterised by socio-liberal markets and strong institutionalised participation rights. Interestingly, the UK also shows the strongest negative relationship between union density and modern forms of variable pay.

Figure 52 Results of secondary analysis: Organisational performance

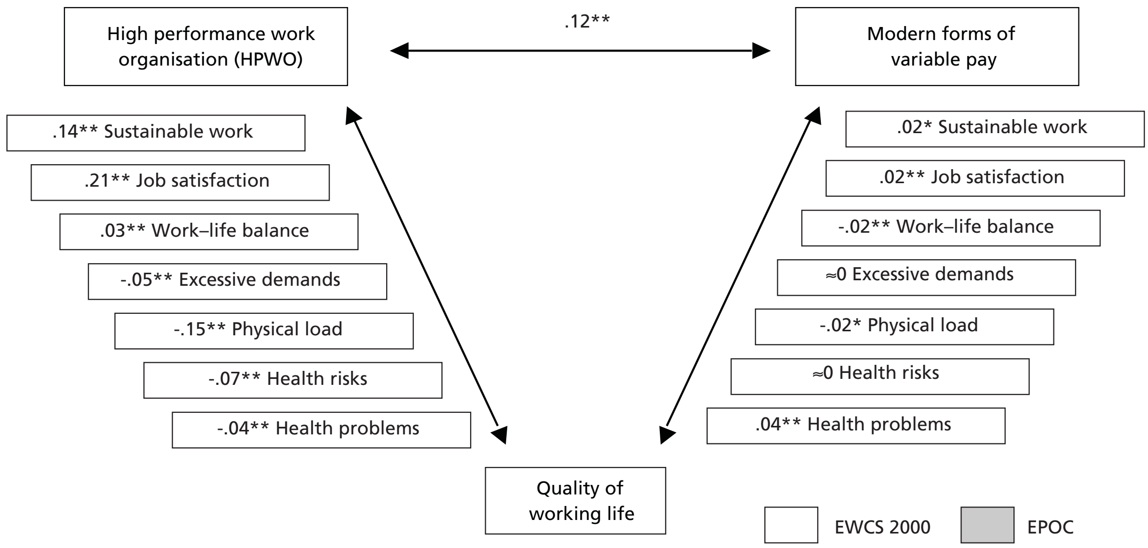


Effectiveness of wage systems, work organisation or strategy

In the EPOC survey, each of the three variables – modern forms of variable pay, high intensity of group delegation and innovation strategy – shows positive bivariate correlations with two or three out of eight outcome variables. This means, for example, that more companies in the EPOC survey report output increases, if they have an innovation strategy, high intensity of group delegation or modern forms of variable pay (Figure 52).

Regarding employee-related outcomes, the EWCS 2000 data show that HPWO has much stronger positive relationships, than modern forms of wage systems have, with indicators of quality of working life, such as job satisfaction, sustainable work or work–life balance. Figure 53 describes all correlations between indicators of wage systems and work organisation, and indicators for quality of working life.

Figure 53 Results of secondary analysis: Quality of working life



Correlations between HPWO and quality of working life indicators reach medium level with respect to job satisfaction, whereas they are weak for modern forms of wage systems, at cross-national and national level. The results of existing studies concerning wage systems and/or work organisation and organisational performance are very different between European countries, as well as between different studies within a country (e.g. Nilsson, 1990 or Eriksson, 2002). The same is true for the relation between wage systems and work satisfaction (e.g. Holman, 2002; Eriksson and Leander, 1995).

Why are most of the correlations so low with respect to the relationships between wage systems, work organisation and quality of working life and performance? Interpreting these results, the following aspects have to be taken into account:

- With regard to indicators of quality of working life, it is known from research in the area of work-related stress that only low correlations can be expected, due to interpersonal differences and the furthering and hindering influence of many different variables.
- Low reliability and validity of assessments might also be one reason for the low correlations between reported effects of group delegation and other variables.
- Many factors influence the relationships between model variables in different directions and lead to low correlations. If some of them are controlled, e.g. by holding them constant or integrating them in the analyses, as was done in this study, correlations increase. However, this reduces sample size and correlations might become insignificant.

System alignment and effectiveness

The analysis of the EWCS data, regarding effects of the alignment between work organisation and wage systems on quality of working life, showed mixed results. No alignment effects were found for the indicators work–life balance, job satisfaction and sustainable work. However, high performance work organisations seem to be more successful in reducing health risks, health problems, physical load, and excessive demands, if they are combined with modern forms of variable pay. More research is needed, however, to corroborate these findings.

Results based on the EPOC data show that alignment effects also exist between group delegation and modern forms of variable pay, for at least three out of eight analysed organisational performance outcomes. More companies with modern systems of variable pay and a high intensity of group delegation report reduction of costs, output times and management personnel, as a result of group delegation, compared with companies having a low intensity of group delegation.

Existing research regarding high performance work systems also shows inconsistent results at best (Godard, 2004); more research is needed to find and analyse the moderating variables, which can explain these differences.

Company strategy seems to be one important moderator of the relationship between wage systems and work organisation, and organisational performance. Results based on the EPOC data show that the effects of wage systems depend on strategy.

- If a company has an innovation strategy and high intensity of group delegation, the type of wage system does not matter for group delegation effects (Figure 55).

Figure 54 Performance, by modern variable pay, low group delegation with innovation strategy (EPOC)

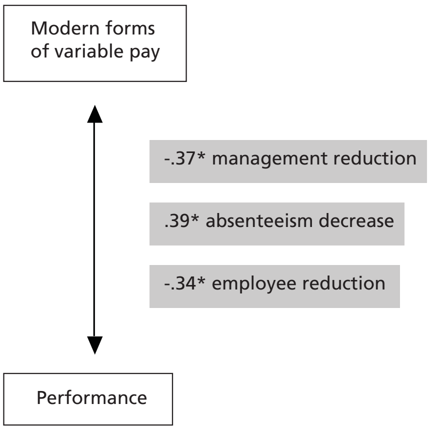
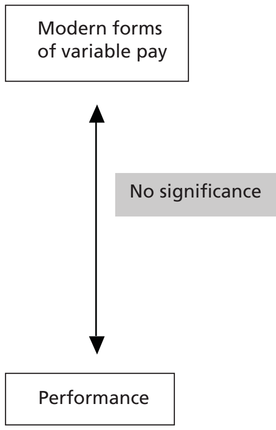


Figure 55 Performance, by modern variable pay, high group delegation with innovation strategy (EPOC)



- If an innovation strategy is combined with low intensity of group delegation, three out of eight outcomes of group delegation are dependent on having modern forms of variable pay: these companies report management and employee reductions less often, and absenteeism decreases more often (Figure 54).

If a company has no innovation strategy, effects of group delegation differ for both low and high group delegation, where modern forms of variable pay are present:

  - Companies with low group delegation report less group delegation effects concerning five out of eight outcomes, i.e. less throughput time and employee reductions, less output and quality increases, and less absenteeism decreases (Figure 56);

Figure 56 Performance, by modern variable pay, low group delegation without innovation strategy (EPOC)

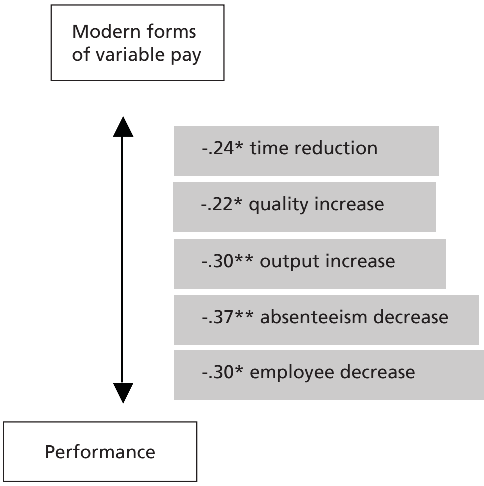
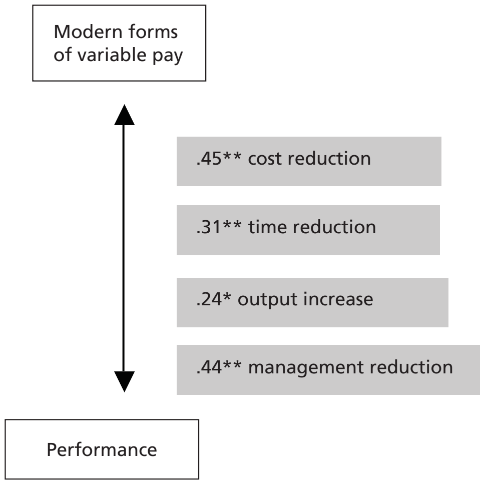


Figure 57 Performance, by modern variable pay, high group delegation without innovation strategy (EPOC)



- Companies with high group delegation report more group delegation effects regarding four out of eight reported outcomes, i.e. more cost, throughput time and management reductions, as well as more output increases (Figure 57).

Assessing the results

Comparing the effects of work organisation and wage systems, the data indicate that work organisations show much stronger relations to quality of working life, such as job satisfaction. Regarding performance, data directly measuring performance outcomes were not available, as the EPOC survey only measured direct participation effects. Within these limits, the analyses indicate that the intensity of group delegation seems to be more important than wage systems in achieving group delegation effects. This supports the notion that aspects of work organisation have stronger effects than wage systems have, not only on quality of working life, but also on performance outcomes. Furthermore, the data support the theoretical assumptions that one should not consider only isolated variables, to improve quality of working life and performance outcomes, but rather should align these variables, based on their explicit or implicit steering mechanisms for employee behaviour.

The data show that interaction effects exist between work organisation and wage systems, regarding quality of working life indicators and organisational performance. Furthermore, the results support the view that alignment between strategy, work organisation and wage systems promotes company performance. This means that, if these variables are aligned, they have stronger effects than if considered independently. It is important to be aware that, if strategy, work organisation and wage systems imply different goals and directions for employee behaviour, this might adversely affect performance and quality of working life. These counteracting effects can be considered as one reason for the observed low correlation between work organisation and wage systems, and performance and quality of working life. The relationships become much stronger when these counteracting effects are controlled and an analysis is made of the effects of work organisation, with high degrees of direct participation and autonomy, combined with modern forms of wage systems, such as team bonuses and/or profit-sharing.

What kind of mechanisms might underlie these interaction effects? Company strategy comes first: a product innovation strategy requires that one is the first to market, to meet unfulfilled customer wishes and requirements. Costs are not irrelevant, but they are not the number one priority, as one can fix market prices for new products, within certain limits. To be able to develop and launch new products successfully, one must not only have creativity and a clear customer focus, but also competent and flexible employees along the whole process chain, who are able and willing to react quickly to market opportunities and changes. This requires a flexible and market-oriented work organisation, process and customer focus, few hierarchical levels, employee participation and delegation, and efficient communication processes, allowing employees to react quickly to changing demands. Wage systems can support these processes, by rewarding competence development and taking responsibility, as well as the achievement of core business goals. Variable forms of pay, based on team outcomes or company profit, are often business goal-oriented, whereas traditional piece rate pay is only based on parts produced, without taking quality or process goals into account.

However, these interpretations remain speculative and require a better empirical basis. More research is needed to specify and to explore these mechanisms, and to explain the inconsistent results and country differences. Nevertheless, the results of these secondary analyses of the EWCS 2000 and EPOC data are promising, although the surveys were not designed to answer these research questions. To gain a better understanding of company decision processes regarding the strategic alignment of wages and work organisation, and the influence of collective bargaining, three case studies were prepared. More in-depth information for various countries has been collected through a review of existing national studies and the secondary analyses of the EWCS 2000 and EPOC data. These country reports provide a detailed and complete picture of the situation in Belgium, Finland, Germany, the Netherlands and the UK, and are available on request from the European Foundation for the Improvement of Living and Working Conditions.

Case studies 4

Only a few studies have addressed the influence of company strategy on wage systems and work organisation, or how collective bargaining influences the ability of companies to align wage systems and work organisation to their strategy. As these aspects were not part of the focus of the EWCS 2000, and only marginally so in the EPOC survey, secondary analyses of these datasets offer limited insights. An analysis of the EPOC survey shows a very weak negative correlation between modern forms of variable pay and degree of trade union membership. However, the data suggest that the alignment of company strategy, wage systems, and work organisation has an impact on company effectiveness. For this reason, more research is needed regarding these questions and, particularly, in relation to whether and how companies want to align strategy, wage systems and work organisation, and how conditions of collective bargaining influence their ability to do so. As a first step, it was decided to carry out three exploratory case studies, in Belgium, Finland and Germany. The methods used and their results are described in the following sections.

Methodology

As not much is known about European companies, in terms of the issues mentioned above, and as resources were limited, exploratory case studies were the method of choice. These case studies aim to gain a better understanding of the various actors and interest groups, their goals, intentions, actions and opinions regarding strategies, wages and work organisation, and how these influence company practices, outcomes and working life.

They analyse the model variables and their influencing factors in a company setting, and describe their dynamics, mutual interdependencies and consequences, from the perspective of key actors and interest groups or stakeholders of a company.

To control for sector effects and gather comparable data from different countries, it was decided to draw all three case studies from the banking sector and to focus on retail banking. The banking sector was chosen for practical reasons, in terms of available contacts, and because it has been subject to consolidation processes for the last couple of years. Therefore, it was expected to illustrate new strategies, reorganisation of work processes and wage systems. Due to limited resources, the field was restricted to three case studies. Belgium and Finland belong to the smaller countries of the EU, Belgium since the outset, whereas Finland entered in a later round of accession, and experienced dramatic economic changes quite recently. Germany represents one of the large and traditional EU countries, with significant recent changes in the banking sector; in 2003, a new collective labour agreement was introduced in that sector, regarding modern forms of variable pay.

The case studies are based on interviews with individuals and focus groups, representing key stakeholders of pay systems. Available documentary material on current pay systems and practices was also analysed. In all three cases, human resources, line management and employee representatives were interviewed as key stakeholders, using common guidelines. Interviews lasted about two hours, on average. All the groups, i.e. HR management, line management and employee representatives, were asked to describe company strategy, wage systems and work organisation, to explain why things are done the way they are done, how they work, what consequences they have, and what should or will be changed in the future. In particular, the interviews sought to explore whether and how collective bargaining conditions further or hinder the strategic alignment of wage systems and work organisations. The focus was on wage systems for operational, i.e. non-managerial, employees who were subject to collective bargaining.

In particular, the following topics were covered:

- strategy – characteristics of company, HR and pay strategy, reasons for the existence of different pay schemes, links between compensation strategy, general HR strategy, and company philosophy, objectives and strategy;
- work organisation – for instance, description of tasks and task interdependence, individual and group consultation and delegation;
- wage systems and practice – characteristics of base pay, as well as variable pay (each existing system described separately), in terms of structure, rules and processes in systems and practice;
- alignment of pay systems to strategy and work organisation, and the effects on company performance (e.g. costs, quality, output), employee behaviour (e.g. turnover, absenteeism, innovative action), and attitudes (e.g. work climate, commitment);
- vision of wage systems, strategy, work organisation and their alignment;
- collective bargaining – influences on current pay systems and future developments.

Case study: Belgium

This case study is based on an analysis of documentary material on current pay systems and respective practices, as well as on two interviews with a HR manager and a union representative and one focus group interview with line managers. These represent the key stakeholders of pay systems in a Belgian bank.

The representative of the human resources department, at corporate level, was interviewed in order to gain an understanding of the company's philosophy and strategy in general, and, in particular, of its HR and pay strategy, as well as of other factors affecting its pay systems. These pay systems were described in detail and evaluated during the interview with the HR representative. The line managers and one union representative were interviewed to assess the different dimensions and effects of the pay systems and to consider future developments that should take place to improve the pay systems.

The financial institution in question employed almost 14,000 employees in 2003, about half of which belong in the category of operational employees. Some 45% are managerial employees and 1% form part of the top management. Three out of four (76%) hold a higher education degree, and about a quarter work on a part-time contract. Although attention is also paid to the pay systems for the bank's lower and middle management, the study mainly focuses on the operational employees and, more specifically, on those working in the retail division as client advisors, with about three to four per office. These employees have to handle 80% of the financial service products on offer.

Strategy

The financial institution was formed as the result of a large merger between Belgian banks some years ago. After the merger, the organisation's focus was mainly internal, as it sought for synergies and economies of scale. Recently, the bank appointed a new CEO, who has changed the strategic focus from an internal to external (customer) orientation, aiming that it should become a 'friendly bank'. The different stakeholders are well aware of this new direction. The financial institution provides banking and insurance products, and aims to be a universal bank assurance provider. Its most important products are loans, insurance, savings accounts and investments. The main client focus includes private persons, self-employed people, and small and medium-sized enterprises (SMEs).

The values of this financial institution are professionalism, service, honesty, openness, and enthusiasm. Another very important element, which could be added to these values, is independence, i.e. it is not interested in becoming part of a large international group. Its business model is based around strong customer relationships, although cost considerations also play an important role. This means that its strategy is somewhat mixed.

Within the HR strategy, the internal cost focus is still predominant. The second strategic HR element is the long-term relationship between the company and the employee. At first glance, these priorities may seem contradictory. However, encouraging part-time work can facilitate both strategies. Two examples of this long-term relationship are the pension plan (with defined benefits), and the fact that employees who perform poorly in one area are offered a chance to stay, by means of job rotation. The third strategic HR element is openness of communication. Competence management is the fourth strategic HR element. This is linked with career management, i.e. there are assessment centres for different career phases. In practice, line management, the HR department and the union representative are satisfied with performance management and the assessment process. The only comment in this regard was that line management needs more coaching in giving feedback to employees and in assessing them. However, there have been some recent developments in tackling this issue. The fifth strategic HR element is the need for differentiation, followed by a flexible work organisation (e.g. flexible working hours).

There is no formal or clearly defined pay or reward strategy. The most important characteristics underlying the reward systems are cost, employee performance and long-term employability. There is a clearly defined positioning of wage rates, determined by total (financial) compensation. The bank believes in paying market rates on average. For high performers, there is a 75 percentile positioning for the best performers.

Work organisation

The operational employees always use the same set of instruments and software, which makes the work quite repetitive. Roles and functions are clearly defined and, as a consequence, there is little task diversity. On the other hand, there is frequent contact with customers, which brings some task variety. The work requires a rather high level of qualification, as many purely clerical tasks have disappeared in today's computerised work environment. Job rotation is an issue with respect to older employees, bearing in mind the strategic element of long-term employability. However, the financial institution is not yet sure which direction to take in this respect.

In addition, work in this type of retail bank office is more team-based than an individual activity, and the company is also trying to flatten hierarchical levels.

There is work consultation at an individual level, in addition to annual attitude surveys focusing on satisfaction and involvement. Employees are also encouraged to make suggestions, and this can even be linked to a bonus. In terms of individual consultation, customer relations is the most common issue. This is an example of the strategic alignment of the work organisation. Goal setting, and training and development are also popular consultation issues. Delegation is a much more difficult issue due to risk management. In the financial services sector, procedures are very important for security reasons.

To summarise, the financial institution is trying to reduce the number of hierarchical levels. The work of employees in the retail division is characterised by a small degree of variety and autonomy, but teams play an important role and there is consultation. However, delegation is limited. It can be concluded that some elements of high performance work organisation are present, but certainly not all characteristics.

Wage systems

The financial institution's reward system is rather conservative. There is more focus on financial rewards, with limited employee choice in determining the reward package, and limited risk sharing between employer and employee. However, the HR representative perceived that reward is strongly linked to performance, i.e. financial as well as non-financial results, and competencies. Furthermore, both individual and team performance play a role.

Administrative employees are entitled to a salary, overtime pay, bonus, profit-sharing, stock options and stock. Table 4 gives a general overview of the pay systems that are applicable to the operational and managerial employees.

Table 4 Overview of pay systems: Case study 1

	Operational employees	Managerial employees
Base pay: grading	Job-related	Competency-related
Base pay increases: within grade	Age-related	Performance-based (merit matrix)
Base pay increases: to another grade	Mainly based on competencies	Based on job, as well as competencies and performance
Variable pay: individual	Not applicable However, there is a bonus for extraordinary performance	Individual bonus Bonus for extraordinary performance
Variable pay: team	Cluster bonus	Cluster bonus
Variable pay: profit-sharing	Growth in earnings per share	Growth in earnings per share

There is a base salary concept for operational employees, which is mainly driven by collective agreements, at sector and company level. The sector plays the most important role and has defined four grades. In the meantime, the organisation had already added two categories in order to recognise different levels.

Within the grades, age is the determining factor for the incoming base salary and for the annual raise. Promotion to another (higher) category is mainly competence based. Accordingly, seven competencies have been defined: skills and knowledge, customer relations, commercial attitude, self-management, output drive, working in teams, and entrepreneurship. Employees can only move to another grade when their overall competency profile has increased. Performance appraisal results, years of experience and last promotion also play a role in moving to another grade. There is a limited overlap between the different grades. The HR manager is dissatisfied with the method of setting base pay increases within grades for operational employees, because the system is based solely on age, with no room for differentiation. Also, the line managers claim that it does not matter whether operational employees perform well or badly, because efforts are not rewarded. However, the union representative was satisfied with the system as it guarantees complete objectivity. Nonetheless, the union representative also feels that the employees often perceive the system of 'same pay for the same job/age' as unfair.

According to the HR department, promotions, i.e. movements to another grade, are granted in a transparent manner. The problem with the formerly vague zone of transition, between operational and managerial employees, has been resolved, and the financial rewards surrounding promotional steps are clear. The only disadvantage the HR department (and the union representative) cites is that the criteria for promotion (on the basis of competencies) and their assessment are not sufficiently transparent and – according to the union representative – not objective. Line management also claims that the potential for subjectivity in granting promotions is a significant weakness in the system. The general feeling of the line is that 'the one who asks most will receive most'.

Variable pay systems for operational employees are mainly profit-based and team-based. There is profit-sharing, depending on the earnings per share. The amount is fixed per grade, i.e. every employee within the same grade receives the same amount. It is difficult to give firm data but, in general, profit-sharing for operational employees amounts to between €2,000 and €3,000.

Team pay is based on the profitability of the cluster to which the employee belongs. A number of retail bank offices form a cluster. Their bonus is distributed based on the profitability ranking of the cluster, compared with the overall profitability of all clusters. The budget for the cluster bonus is calculated in relation to the total profit-sharing budget; on average, 15% is allocated to the cluster bonus.

Operational employees are not entitled to an individual bonus. However, 10% of these workers may be entitled to an exceptional bonus. The base amount is €500, but it can be doubled. This bonus can only be granted to employees who have performed exceptionally, i.e. employees who have performed above their job requirements. Line management has almost complete discretion in granting these bonuses, as there are no predefined criteria or distribution. Overall, operational employees' variable pay is rather limited; the profit share can be considered as semi-fixed pay, as it is distributed on a monthly basis and has always been paid out. Even if profitability actually dropped, there would still be profit-sharing. This means that the real variable pay, on top of fixed pay, may amount to only 4% of base pay. In managerial levels, this is 12%. The reason for such a difference lies in the basic amounts that can be allocated to variable pay, which are decided by the management.

There are five job levels for managerial employees, designed as clustered categories, based on job evaluation and classification. Experience also plays a role in determining the starting salary. A company-specific job classification scheme exists, which is not subject to collective bargaining. Job levels range from A (lowest) to E (highest top management); legal advisors and private banking consultants, for example, are part of level C. The job classification system that frames this structure is aligned with the competency model. The following competencies play a role in determining to which job level the individual belongs: operational management, skills and knowledge, communication and contacts, self-management, management and coaching.

A predefined bonus budget exists, depending on the level of the department. The maximum amount per employee is €7,000 a year. Managerial employees are also granted a cluster bonus and profit share. These systems are comparable to those for the operational employees. However, negotiability on the level of the operational employees' pay systems is almost non-existent, whereas managerial employees are allowed some room for negotiation with regard to grade assessment.

Through means of sounding boards and consultation platforms, the workforce can be involved in the design and operation of their pay system. In any case, none of the above mentioned variable pay components was the subject of a collective labour agreement. A conversation takes place each year between line management and the individual employee, on the performance evaluation outcomes. Promotion to another grade is also communicated in writing. Each individual receives a personalised overview of his or her total remuneration package each year. According to the line managers, the reward system is transparent and clear. However, as noted above, the union representatives were less satisfied. They claim, for example, that the criteria for promotion and the granting of bonuses are opaque and at the discretion of the line manager. The financial institution wants to counter this feeling of subjectivity, and is currently trying to insert more objective aspects into the assessment procedures. The unions themselves see no obvious solution to the problem of subjectivity.

An important general remark from line managers and the union representative is that the difference in total cash, between operational and managerial employees, is too large. They attribute this to the limited amount of variable pay for operational employees. As will be shown, the budget for bonuses for operational employees is very low, compared with the budget provided for managerial employees. Nonetheless, both the HR department and union representatives are satisfied with the settlement of variable pay, albeit for different reasons. The HR department says that the variable pay system covers three important aspects (individual, team and company) and has a strong strategic link with the organisation. The union representatives realise that the system behind variable pay is essentially solid, but lacks the necessary transparency and objective criteria for assessment. Line management is dissatisfied with the system, as it stands.

Alignment and effectiveness of wage systems

A direct link between managerial strategy and wage systems is difficult to discern. The variable part of the wage aims at rewarding performance and results, as set out in the cluster goals (customer satisfaction, financial results, credit risk management, operational risk management, long-term goals/actions). Customer satisfaction is to be measured once a year (April/May), via a postal inquiry. There is an attempt to encourage teamwork through the cluster bonus. However, many employees see the cluster as a ‘bridge too far’ for the granting of bonuses, with individuals unable to control the results of the cluster.

The union representative evaluates the alignment of the pay system to the organisation’s strategy as satisfactory, particularly for managerial employees, but to a lesser extent for operational employees. However, line management believe that there is no link between wage systems and strategy. HR is neither satisfied nor dissatisfied with the strategic alignment.

According to the HR department, the current pay systems have a negative effect on motivating operational employees, but a positive one on managerial employees. They also argue that pay only motivates in the short term. Line management, however, states that pay has a clear positive effect on the motivation of operational employees (e.g. stimulus by incentives). The union representative believes that pay has no effect on the motivation of operational employees, because the variable part is too low; but it has a slightly positive effect on motivating managerial employees.

The HR department and line managers share the opinion that pay does not have an influence on recruitment; line management even argues that it has a negative effect on attracting people. Possibilities for self-development within the organisation, career planning and security are more important aspects that recruits take into account. People choose a specific function or job, and take the wage that comes with it. The union representative, on the other hand, thinks that pay has an overall positive effect on recruitment. People also apply on the basis of the company’s image as a good payer. HR is of the opinion that pay does not affect the retention of staff, but the line managers and union representatives are convinced that it does, both in terms of turnover and commitment.

Line managers and union representatives report that pay affects the work climate and cooperation in a negative way, while the HR department ascribes a positive effect to pay. It states that pay issues never trigger social conflicts, and this is confirmed by the union representative. Most conflicts are caused as a result of discontentment with criteria for promotion. It is worth noting though that the line managers believe that pay does cause social conflicts.

According to HR and the union representative, pay does not seem to have any influence on well-being in general, i.e. on absenteeism, stress and job satisfaction. HR believes that there might be an effect, only where there is a huge discrepancy between the wage and the job. However, the line managers argue that pay has a strong effect on job satisfaction. The HR department attributes a significant positive effect on skill and competence development to pay. The line managers agree on this positive effect, but to a slightly lesser extent. Union representatives state that pay does not have a similar effect for operational employees, but that it does for managerial employees.

There is a link between wage systems and performance. The different stakeholders have varying opinions on which aspects are influenced by pay. The HR department focuses on cost, production and service quality, and on the total output increase. However, HR believes that wage systems are positively related to performance, in the case of managerial employees, whereas there is no link for operational employees. The line managers and union representatives agree on the positive effect on production and service quality but, according to them, pay only has a minor negative effect on the number of employees and management.

A remarkable difference between the assumptions of the HR department and line management is the effect of pay on customer orientation. According to HR, it has a highly positive effect, both with regard to complaints and customer satisfaction. Line management states, however, that there is no effect at all, on either of these aspects. Union representatives agree that pay has a moderate positive effect on customer orientation.

Vision/Future developments

The HR department and union representative are neither satisfied nor dissatisfied with the pay system in general. The system in itself is good, but some aspects could be changed for the better, such as the criteria for promotion. The attitude of the line managers is more positive: they argue that the organisation is well aware of the weaknesses of the system, and that actions are being taken in this respect. The line management is much more in favour of the system for managerial employees, and would like to see that adapted for operational employees. The relation between fixed and variable pay should be 80–20, which is far from the present 96–4 for operational employees. Some 10% should be used for rewarding cluster performance, and 10% for individual performance. Line management is against a system that is purely based on age, for pay increases.

The union representatives are in favour of a strict implementation of the systems in collective labour agreements. In the future, they are willing to show openness towards performance-related pay for operational employees. The problem of subjectivity in assessing performance is crucial. The unions also suggest introducing cafeteria plans.

Important strengths that must be maintained for the future include: openness in communication and other practices; social responsibility of the financial institution towards its employees (special rates on certain products, supplemental pension, luncheon vouchers, extra child benefits in June, part-time retirement, extension of the investment period for options, education possibilities); and experienced functioning of the HR department.

Influence of collective bargaining conditions

Finally, the case study sought to determine whether collective bargaining has an influence on the strategic alignment of operational employees' wage systems. Although it is almost impossible to isolate collective bargaining from other influences, it has been found that operational employees' pay systems are, according to the stakeholders, not linked to the organisation's strategy, because of the lack of differentiation, and because salary increases are based on age. At the same time, operational employees' pay systems are heavily influenced by collective bargaining, at a sectoral level. This might mean that collective bargaining has a negative influence, where generic sectoral influences mean that company-specific strategic issues are not taken into account. However, it became clear in the study that union members are realising that such pay systems lead to dissatisfaction, in the case of the best-performing employees. On the other hand, the amount and system of variable pay are not the subject of collective bargaining. These could be used for a more strategic alignment. Although the systems are changing, at present, top management does not allocate sufficient financial means, to have a motivating effect on operational employees.

Case study: Finland

This second case study relates to a Finnish bank, which specialises in investments and savings. The bank offers services to both retail customers and companies, although the particular branch office studied serves only retail customers. The compensation and benefits (HR) manager, at corporate level, was interviewed in order to gain an understanding of the company's philosophy and strategy in general, and, in particular, of its HR and pay strategy, as well as of general factors affecting pay systems. The pay systems and their development trends were mapped and described. The documentary material on current pay systems and the interview with the compensation and benefits manager provided an insight into how the pay systems should be; the principles underlying these systems are studied here. One branch manager, two employees and the shop steward of the branch office were also interviewed, focusing on work and pay practices, as well as on development trends. The study sought to identify how pay matters stand in practice, and how they influence the company's performance, and employee behaviour and attitudes.

Strategy

The banking sector in Finland has a more or less common business strategy concerning financial products. It is envisaged that, in the future, there will be more emphasis on long-term investment products, since growth expectations lie in this area. Basic banking products are accessed increasingly through the Internet or other self-service media. In this study, the bank's strategic goal is to be the most customer oriented and competent financial services banking group in Finland. It aims to offer customers any financial service they need, drawing on strategic partners when necessary. Efficiency, expertise and good service are the key elements to success. This strategy includes offering reliable advice to private customers, in managing their accounts. The HR strategy supports the business strategy, for example, by identifying and developing competencies, and by providing a business school for career development.

Pay policy is embedded in the HR strategy. Regarding the base pay level, the company aims at average sector rates (the financing sector is among the highest paying sectors in Finland), making regular market comparisons. Measuring total compensation, including performance-based pay, the estimation is that the company has paid slightly above average, due to extensive variable pay systems in the last couple of years.

The bank's strategy seems to be well aligned to its salary systems. Goals are checked each year and adapted, if necessary, at management level. However, the overall HR strategy is not well known and is transparent only at branch office level. Despite this, the pay strategy is clearly formulated and closely related to what is considered significant.

Work organisation

Work organisation in retail banking is based on group work, although work tasks are executed individually when meeting customers. However, employees are organised in groups, led by a manager. Weekly meetings are held for all staff and for each group, dealing mostly with managerial issues, such as achievement of goals and the quality of customer service. Managers also meet each employee individually every week, to discuss work-related and personal matters.

Work organisation is aligned with the overall strategy. The organisation was restructured quite recently to match requirements. Retail customer branches were organised into customer service groups that handle daily banking transactions, customer relationship groups offering services related to the management of customers' finances, and customer acquisition groups that largely operate outside branches looking for new customers. The new service organisation makes it possible to take care of banking duties without delay, and to engage more efficiently in in-depth financial advisory services.

In the branch office that was studied, there are three groups and 21 employees. One group consists of five employees in customer service. Customers would meet a member of this group when entering the office, in order to draw money from their account, pay a bill, etc. The two other groups of employees – each consisting of seven to eight staff – specialise in loans and investments. Customers would meet these employees by appointment only, e.g. if considering buying a house or shares in an investment fund. The two specialised groups have their own managers, while the branch manager directs the customer service employees. Thus, in this branch, there are currently three different employee roles or jobs (plus the role of manager): employees with a service counselling role in customer service; and employees with a customer counselling role or financial expert role in the two specialised groups.

In the specialised customer relationship roles, employees take care of their own clients and are set individual targets. The first meeting with a customer may take one and a half hours, which implies three to four customers per day. The teams are decided on the basis of facilitating customer service flow and employee skills. Project groups and ad hoc groups are formed when needed.

The company's cooperation board holds several meetings during the year. Its purpose is to promote and develop cooperation between the employer and employees, and among the staff. The board has 15 members, seven of which represent the clerical staff, two of which are managers and specialists, and six representing the employer. Staff representatives also participate in the meetings of the company's board of directors, having the right to be present and to express their opinions.

Possibilities for participation are quite uniform in different branch offices. The participation system is set up and implemented in each office by management. The weekly meetings at branch, group and individual levels have been noted above. Quality of products and customer relations are examples of items on the agenda. However, employees remarked that 'maybe there are too many meetings, considering that we have our own targets'. There is also a regular practice of work climate surveys in the bank and a suggestion scheme. It is possible to influence decision-making and there is a certain level of autonomy concerning work scheduling, quality of work and client deals. When employees have ideas about improving work processes, 'they can always suggest and try out new ideas'. Groups are able to apportion work targets to each individual, according to competence or efficiency.

Wage systems

The systems are different for the different professional groups. The basic salary system forms the most significant part of employees' incomes. Individual performance is evaluated and this influences the salary. There are two basic pay systems: one for management, and one for clerical employees (Table 5). In the branch office studied, three managers are outside of the clerical employees' pay system. In addition, there are two types of clearly defined variable pay systems: a bonus system and a personnel fund.

Table 5 Wage systems used in different staff groups: Case study 2

	Base pay		Variable pay	
	Job based	**Person based**	**Short-term**	**Long-term**
Top management	Applied system at company level	Individual increases	Bonus system	Long-term bonus system Pension plan
Line management	Applied system at company level	Merit pay increases	Bonus system	Personnel fund (collective)
Specialists	Applied system at company level	Merit pay increases	Bonus system	Personnel fund (collective)
Clerical employees	Pay grades 30–80	Pay allowances by experience, years and merit	Bonus system (group and individual)	Personnel fund (collective)

All staff groups in the bank are covered by a performance bonus system. Unit or team results and personal performance are the criteria for a bonus payment. Long-term collective rewards are given through a personnel fund. Profit-sharing bonuses are paid annually to the personnel fund, according to a system agreed on in advance, and based on the company's operating profit.

The salaries of clerical bank staff are determined according to a company classification, based on a comprehensive evaluation of job demands, i.e. the complexity of tasks. Although the system is agreed on locally within the bank, it resembles the collectively bargained system used in other banks. It consists of six pay grades (30, 40, 50, 60, 70 and 80), and jobs are assigned to a grade according to job demands. For example, grade 60 is the most common group and consists of special occupational tasks in customer service, requiring a versatile knowledge of professional skills. Grade 80 jobs have independent and responsible special tasks that include responsibility of some function. Grades 30 and 40 are now practically obsolete.

In addition to grades, different steps exist, depending on job seniority, i.e. the number of working years on the job: three, six, nine and 12 years. Minimum monthly income varies by 22% from grade 50 (without job seniority allowances) to grade 80 (without job seniority allowances). Within a grade, the monthly income varies by 15% from no job seniority allowances to all job seniority allowances. The variation within a grade can go even higher – up to 25% – when merit pay increases are used. These increases are not included in the collective agreement and are allocated as part of a performance management process. Employees receive an evaluation of their performance, on a scale from one to five, during a performance review with a superior. Each manager takes care that their own subordinates are fairly evaluated, compared with other employees. Pay increases are subsequently allocated to those who receive the best evaluations in each manager's group.

In addition to the above, the variable pay system consists of two different components. First, there is a collective bonus system, in the form of a personnel fund. The idea of the personnel fund is that company staff can establish, own and regulate the fund, which is based on the profit share paid by the company. All staff belong to the fund, except top management. Usually, shares are paid to the fund if a company's annual profit exceeds a pre-fixed threshold and meets possible other criteria. The duty of the fund's board is to look after its members' shares and to invest them profitably. The first personnel funds were established in 1990 after legislation (814/1989) was passed in parliament. In recent years, it has been possible for each employee to draw money from the personnel fund.

The second part of the variable pay system is a group or individual-based annual bonus. Each person has performance goals, and the branch office has overall goals. To receive a bonus, targets have to be surpassed, and at least five performance measures are selected for each employee. The bonus is, however, subject to management consideration, where no direct link to performance measures is established. First of all, when the annual result is calculated, the company board decides the total amount that can be paid in bonuses overall. Then, the bonuses are allocated to business areas, business units and, finally, to branch offices. The branch office manager can then allocate bonuses, according to individual performances. This practice was implemented at the beginning of 2004. Prior to this, the bonus system was tightly linked to office-level and individual-level performance measures. This change was implemented because management wishes to have more control over the costs and to be free to award high performers.

The salaries of branch managers and specialists are subject to the collective labour agreement and are therefore entitled to general increases. They also have a merit increase system. Top management is not included in the collective labour agreement, and their salaries are eligible for individual increases. The variable pay system for management and specialists varies across different groups. The general principle is that all groups have some long-term bonuses. A pension plan is offered to management and to some middle management. The personnel fund is available for middle management and specialists. Significant short-term bonuses are also used, as well as individual targets.

Alignment and effectiveness of wage systems

The wage system is clearly aligned to the strategy of the company and to the work organisation. The salary system has an effect on motivational aspects and performance, while the variable pay system encourages performance and effort. The influence of the basic pay system is more indirect, though it does appear to encourage employees to stay in the bank, in addition to work motivation, flexibility in terms of time and tasks, and recruitment of new employees. It also has an effect on competence development. Some competencies, such as investment and sales, are valued in the grading system, which may have increased training attendance in this area. However, the establishment of new grades may also have had a negative effect on work climate.

The bonus system has an effect on performance, e.g. productivity and service quality, since the link to performance goals is obvious. The bonus system used in previous years was a tool for managers to communicate important goals and motivate their personnel: 'It is a nice extra sum (bonus), though uncertain.' Employees may be advised, 'now we are a bit behind our goals, so let's see what we can do to achieve them.' Bonuses have at least a temporary motivating effect when they are paid. However, there may be a weak negative effect on well-being, since they mean an increased workload. In recent times, the amount of sick days has increased. Individual bonuses may also have some negative effects on work climate when, for example, it is known that a couple of employees received maximum bonuses, while others received less. The fairness of bonus distribution may be a subjective and, therefore, possibly divisive issue.

The personnel fund is regarded as an equitable system, since it rewards all employees for company success. Otherwise, it is not so easy to see its impact on quality of working life or performance indicators. Strategically, such reward systems are designed to be motivating for staff, and neutral in terms of cost structure. The success of the payment systems, e.g. the new bonus system, is evaluated in an annual personnel survey.

Vision/Future developments

It is likely that more emphasis on variable pay and performance pay will be the future trend in this case, though this will probably happen gradually. A collective bargaining system will slow down the trend. The common trend for some time has been to determine pay, increasingly, on an individual basis, partly because of labour shortages. According to some interviewees, the grading system could also have more grades. That would permit pay increases more often. Changes in pay would also be welcomed, in the form of smaller and perhaps fixed-term individual rises. Future development seems to be in considering incremental and small steps. No mention was made of a need for radical changes, although some complaints concerning the top-down definitions of targets were expressed.

Influence of collective bargaining conditions

The bank in question has a 30-year history of local bargaining, and has had its own agreement ever since. However, collective bargaining at sector and national levels influences the overall pay increases, agreement period and general content of the agreement. The interviewees felt that the agreement has benefited company employees over the years, and does not hinder pay system development. The bargaining relationship is good, and results depend greatly on the negotiators. One of the benefits of local bargaining is that the negotiators are close to one another, and it is thus easier to understand mutual benefits. Unions favour a collective pay setting in collective bargaining. This moderates the trend to individualise pay, as it is difficult to introduce variable pay components in collective agreements.

Case study: Germany

This case study relates to a German bank, which specialises in investment funds and loan products. The human resources (HR) manager, at corporate level, was interviewed to gain a better understanding of the company's philosophy and strategy in general, and, in particular, of HR and pay strategy, as well as of general factors affecting the pay systems. The actual pay systems and their development trends are mapped. The documentary material and the interview with the corporate HR manager provide an insight into what the pay systems should be like; the principles underlying the compensation systems are studied here. Two HR specialists, the head of the staff council, three managers from different line functions and three small groups of employees (four to six people per group) were also interviewed, focusing on work and pay practices, as well as on development trends. The study sought to identify how payment matters stand in practice, and how they influence company performance, and employee behaviour and attitudes.

Strategy

Due to a recent merger, a new company strategy has been developed in a participative manner, defining top quality and increasing market share as the primary company goals. These will be reached by focusing on: core competencies, achievement and innovation, leadership by delegation and modelling, developing and challenging employees, and open communication. Core values are trust, achievement and responsibility. Based on this company strategy, the HR department has developed a strategy which states explicitly that compensation is based on performance, success and market conditions, and which emphasises that performance will be rewarded. Furthermore, it notes that transparent and fair performance evaluations are based on result-oriented and measurable goal agreements. The company has a common pay strategy for pay scale and non-pay scale employees, including base pay and performance-based pay components for both groups. Only the relation between base and variable pay differs between the groups, as non-pay scale employees have a higher percentage of variable pay. It is intended to pay market rates for both base and variable pay.

Work organisation

Different types of work organisation exist in the bank: there are interdependent tasks within business processes requiring cooperation within process teams, as well as independent tasks of individual employees. An ongoing change programme is identifying core business processes and forming teams with defined performance goals for feedback. For this reason, the delegation of tasks, competencies and responsibilities to process teams are not yet common standard.

Wage systems

There are two different wage systems: one for pay scale and one for non-pay scale employees. About 60% of the 2,600 employees are subject to the pay scale, while the remaining 40% are non-pay scale employees. For the former, base pay is determined by the pay scale agreement. Nine different grades are defined by general job descriptions, and employees are assigned to grades accordingly. Besides the general job descriptions in the pay scale agreement, which are sometimes ambiguous and partly outdated, company specific examples exist, which relate jobs to grades. The number of employees working in these different grades varies: only 15% of pay scale employees are in the first five grades, 29% in grade six and about 20% each in grades six, eight and nine. Minimum monthly income in a grade varies from €1,711 in grade one, step one, to €3,357 in grade nine, step one. Maximum monthly income in a grade varies from €2,018 (grade one, step four) to €3,777 (grade nine, step three).

Within grades, seven steps are defined, depending on job seniority, i.e. the number of years working on the job (one to two, three to four, five to six, seven to eight, nine, 10 or 11 years). In the bank, only steps between three and seven are actually in use. Within a grade, the monthly income varies by a minimum of 12% (grade nine) and a maximum of 33% (grade five), depending on the number of job seniority allowances applied. Most of the employees are in the highest step of each grade. In addition, every pay scale employee gets an extra thirteenth month of income, due to the pay scale agreement. Further extra-pay components exist on an individual basis, which are not part of the pay scale agreement, but which may or may not be tied to pay scale rises.

Table 6 Pay systems for operational employees: Case study 3

Germany	
Base pay: grading	Job demands
Base pay increases: within grade	Seniority
Base pay increases: to another grade	Changing task demands/job
Variable pay: individual	Exceptional bonus – performance
Variable pay: team	None
Variable pay: profit-sharing	Flexible in theory, 14th month of income, in practice

A variable pay component in the wage system also exists, which is not part of the pay scale agreement. Its payment depends on business success. Whether individual pay scale employees receive it or not is decided by the respective supervisor, who is given a budget, depending on business success, to distribute among the employees. Although this pay component is supposed to be variable, it has always been paid to everybody in the past, independent of individual performance, as a form of fourteenth month of income. Some people were even awarded more than a fourteenth month, subject to management discretion.

Base pay of non-pay scale employees is dependent on functional assessment and standardised career steps for different professional groups. It depends more on market conditions than for the pay scale employees. Variable pay for non-pay scale employees is also decided by the respective supervisor, from the business-success budget. It amounts to 15% to 20% of annual income, compared with the 7% for pay scale employees. Due to difficult market conditions in the last two years, the bonus budget remained constant for the first time. As a consequence, bonus rises for some people resulted in bonus decreases for others, due to the fixed bonus pool.

Alignment and effectiveness of wage systems

As the company has embarked on a new strategy, quite recently, both work organisation and wage systems are still undergoing a change process and are not yet aligned to strategy. However, the aim is to achieve alignment with the company and HR strategy. With respect to work organisation, business processes have been identified, and process teams formed, in order to delegate respective tasks and to set result-oriented and measurable goal agreements, which can be combined with performance bonuses, depending on the degree of goal achievement. Previous variable pay components were variable, only in terms of different degrees of rises, as there was no strict total bonus limit. This has been changed so that now there is a fixed bonus pool, depending on company success, to be distributed according to individual and team performance.

With respect to the effects of the existing pay system, the employee representative is satisfied and believes that it contributes to job satisfaction, particularly if one compares it with payments and benefits of other companies. In contrast, HR management is dissatisfied and wants to change the system, to make variable pay more dependent on performance, and thus consistent with company and HR strategy. Line management and the employees fall between these positions, as they value the advantages of the current system but also have certain criticisms.

The employee representative, HR and line management believe that base pay grading criteria promote competence and skills development, as base pay is dependent on job demands; hence, more competencies and skills are required to apply for better paid jobs. The employees do not recognise this link, as competence development is not directly linked to pay increases. Most stakeholders doubt the motivational effects of the current pay practice, as bonus payments, in reality, have been independent from performance, but this will be changed in the new system. However, the employee representative believes that a focus on achievement also exists without variable pay. Employee recruitment and retention has never been a problem; company benefits, culture and job security are believed to contribute to this, as well as pay. Most stakeholders do not believe that the current pay system is related to employee well-being, social conflicts or performance. All stakeholders criticise current pay practices, particularly the granting of bonuses, for lacking transparency and being inflexible.

Besides the need for strategic alignment, this lack of transparency and flexibility is a further reason for the company to change to goal agreements and bonuses, based on the degree of goal attainment. Goals and indicators based on business processes will allow better feedback and performance management, both for self-regulation and for supervisors. Nevertheless, in the new system, supervisors will still assess individual contributions to team performance and determine individual bonuses. To ensure informed bonus decisions, these will have to be discussed with the HR department. Social conflicts have not been provoked by the current pay system and practice, probably because everybody received bonus payments. Additional extra payments were not supposed to be communicated between employees and, until recently, did not mean the reduction of other bonus payments.

Vision/Future developments

Although co-determination also applies to non-pay scale employees, since they are not in a leading managerial position, it seems easier to change wage systems among these employees, compared with pay scale employees. Therefore, it is intended to introduce the bonuses, based on the degree of goal attainment, for non-pay scale employees first, and then to move on to pay scale employees.

Influence of collective bargaining conditions

The influence of trade unions is regarded as weak; however, the staff council has a policy of its own, based on the specific situation of the company. Recent changes in the staff council have made it difficult to assess its policy towards the new performance-based pay strategy of the company. It may be the case that, as some people lose their privileges – in the move from rewarding almost everybody, irrespective of performance, towards more performance-based pay and other changes, e.g. in pension plans – there might not be much support for these changes. As consent by the staff council is needed, due to federal laws of co-determination, the new pay strategy, with bonuses based on the degree of goal attainment, will be implemented for non-pay scale employees first. If the system proves to be successful, management intends to introduce it for pay scale employees too.

Summary and discussion

These three case studies sought to explore the perspectives of different stakeholders – whether and how their companies want to align strategy, wage systems and work organisation, and how conditions of collective bargaining influence their ability to do so. With respect to wage systems, the focus was on non-managerial employees subject to pay scale agreements. For this purpose, employees and their representatives, as well as HR and line management, were asked their opinions regarding strategies, wage systems and work organisation, and how these influence company practices, outcomes and working life. Although these three different banks – in Belgium, Finland and Germany – have company specific strategies, work organisations and wage systems, they also have much in common.

In all cases, efficient performance, competence, and open communication play a role in company strategy. General company, HR and pay strategy are well aligned in Finland and Germany, whereas, in the Belgian bank, pay strategy in particular seems to be less clear-cut and aligned than in the two other cases. The competence level of the employees is rather high and competence development plays a major role in all banks.

Work itself is mainly individually based in all cases, but employees are organised in teams. They have common goals, although work restructuring is still in process in the German case. Task delegation seems to be limited in the Belgian case, but consultation and open communication exist there too. In the other two cases, individual and group goal setting seem to support delegation to varying degrees, depending on leadership styles.

In the Belgian and Finnish banks, work organisation seems to be aligned with strategy, while, in the German case, the work organisation is currently being reorganised to achieve a better degree of alignment.

With regard to wage systems for operational employees and base pay, in particular, grading depends on job demands in all the banks, as set out in collective labour agreements. Wage increases within grades depend on age in Belgium and job seniority in Finland and Germany. In the Finnish case, wage increases within grades are also merit based. Changes between grades require further competencies in the Belgian case, or changing task demands or jobs in the other two cases.

All the banks offer variable pay, which is currently not subject to collective labour agreements, but paid on top of the wage levels defined by collective bargaining. In the German case, recent collective labour agreements for the banking sector allow for some variable pay. In the Belgian case, one part of the profit-sharing for operational employees will be included in the pay scale from 2005. Different forms and combinations of variable pay are used: individual and/or team bonuses and/or profit-sharing. Only Belgium has no individual bonus yet, but will introduce it in 2005. Team or cluster bonuses and profit-sharing exist as additional elements (Belgium and Finland), or are used as a pool for individual bonus assignment (Germany). This might reflect the fact that people work mainly individually but that interdependencies, particularly regarding common goals, exist. In Belgium, team and individual performance-based pay is, or will be, directly linked to the attainment of performance goals. In Finland and Germany, performance is measured but bonuses are subject to management discretion.

Table 7 Pay systems for operational employees in case studies

	Belgium	Finland	Germany
Base pay: grading	Job demands	Job demands	Job demands
Base pay increases: within grade	Age	Seniority Merit	Seniority
Base pay increases: to another grade	Competencies	Changing task demands/job	Changing task demands/job
Variable pay: individual	Exceptional bonus – performance	Individual bonus	Exceptional bonus – performance
Variable pay: team	Cluster bonus – performance	Team bonus	None
Variable pay: profit-sharing	Profit-sharing	Personnel fund	Flexible in theory, 14th month of income in practice

Management obviously tries to align strategy, work organisation and pay system in all banks, but only in the Finnish case has full alignment already been achieved. Different stakeholders seem to assess the effects of wage systems differently, which is particularly apparent in the Belgian and German case studies, whereas the views seem to correspond more in Finland. Collective bargaining at national or sectoral level seems to hinder, or at least slow down, the alignment of strategy, work organisation and pay system in all cases. This is because it favours a collective pay setting, which makes it difficult to include regulations allowing companies to tailor their wage systems, and to implement variable pay components, particularly at the expense of fixed elements. The same is somewhat true, albeit to a lesser degree, at company level, where company specific issues can be taken into account. For this reason, it is easier to align wage systems for managerial employees. Consequently, they are either already better aligned or, as in the German case, wage systems are changed there first. As collective bargaining, at sectoral level, determines wage levels and pay increases, this limits the financial resources for further variable pay elements, on top of collectively agreed wages; as a result, it also limits the ability for the strategic alignment of variable wage components or systems.

What can be concluded from these results? The three cases indicate that management seems to desire the strategic alignment of work organisation and wage systems, both for operational and managerial employees. Collective bargaining is perceived to slow down this process. Nevertheless, there is a tendency for more emphasis on variable pay, such as pay for performance and/or profit-sharing. In Germany, the pressure on unions to change parts of fixed wages to forms of variable pay has increased in recent years. In the German banking sector, the latest collective bargaining agreement included, for the first time, an option to bargain and introduce variable components at company level, for up to 4% of annual pay-scale income. However, hardly any bank has yet concluded local agreements or implemented them. This is partly due to the limited proportion of variable pay that can be introduced, compared to what is already implemented. It seems difficult to reach local agreements, as the local parties, particularly staff councils, might be hesitant to agree to this option.

Table 8 Alignment of strategy, work organisation and wage systems in case studies

	Belgium	Finland	Germany
Company strategy	• Efficient performance • Competence • Open communication	• Efficient performance • Competence • Good service • Long-term investment	• Achievement • Innovation • Competence • Open communication
Work organisation	• High employee competence level • Competence development • Individual-based work, organised in teams • Consultation • Open communication	• High employee competence level • Competence development • Individual-based work, organised in teams • Consultation and delegation • Open communication	• High employee competence level • Competence development • Individual-based work, organised in teams • Consultation and delegation • Open communication
Alignment HR – pay strategy	• Less clear cut pay strategy • Less well aligned	• Very good	• Restructuring in process
Company strategy and work organisation	• Well aligned	• Well aligned	• Restructuring in process
Company and pay strategy and work organisation	• Work in progress	• Well aligned	• Work in progress

As was seen, particularly in the German case, company strategies are changed first, then work organisation and finally wage systems, if consensus between management and the staff council can be achieved. In terms of strategy, it makes sense to define goals first, before changing structures and processes, according to the principle of organisation theory that structure supports function. As wage systems are based on job demands with respect to base pay and process goals for variable pay, it is logical to design and implement work structures and processes before the wage systems are changed. Taking these arguments into consideration, it is to be expected that changes in wage systems usually lag behind changes in strategy and work organisation. Furthermore, wages are regulated by individual contracts, local, sectoral or national collective labour agreements and legislation, which have to be taken into account or changed before changes in wage systems can be made. This can lead to further time delays, assuming that consensus can be achieved and that changes can be implemented at all.

One alternative to avoid changing existing wage agreements is to add other wage components to existing systems. This ‘add on’ strategy has become quite common, particularly for implementing variable pay components. However, increasing competition and cost pressures limit the use of this alternative, as personnel costs become so high that more and more companies cannot afford to continue that option. Nonetheless, changing complete wage systems, without increasing costs at sectoral level, has been time consuming. For example, in Germany, it took almost 20 years to bargain a new collective wage agreement in the metal and electrics industry. It will take several more years to implement it, in order to minimise personal losses in terms of base pay income. These practical considerations might explain the low alignment between wage systems, work organisation and company strategy.

Another interesting aspect of the case studies is that the different stakeholders assess the effects of wage systems so differently, especially in Belgium and Germany. These results bring into question the reliability and validity of the results of studies based on similar expert effect ratings, such as the Foundation's EPOC survey. Low reliability and validity of assessments might also be one reason for the low correlations between reported effects of group delegation and other variables. The effects of interventions should be rated by different stakeholders, to check for consistencies and group biases, and should be substantiated by objective data where possible.

Conclusions

The main objective of this project was to analyse the relationships between wages and working conditions, as a result of managerial policy and as an element of organisational performance, and to identify indicators accordingly. Its outcomes support, by and large, the theoretical assumption that companies, which design work organisation and wage systems according to their business strategy, achieve positive effects both on performance and quality of working life, as implicit and explicit goals and steering mechanisms fit together, avoiding or reducing goal and leadership conflicts. These assumptions are derived from a theoretical model that was developed, based on the strategic management approach (Tichy et al, 1982). Cross-national European and national research was reviewed in six countries (Belgium, Finland, Germany, the Netherlands, Sweden and the UK), with inconsistent results concerning the model assumptions. The next step was to analyse the European working conditions survey (EWCS) 2000 (Paoli and Merllié, 2001) and the Employee direct participation in organisational change (EPOC) survey (EPOC Research Group, 1997). This showed some significant relationships between model variables, as expected, particularly at cross-national level, as well as differences between countries. Finally, three qualitative case studies were carried out to explore these relationships. These studies indicated that management seeks to align strategy, work organisation and wage systems, but that several factors prevent, or at least delay, the alignment of wages in particular.

Identification of indicators

The main indicators of wages and wage systems in these studies are: income level and the presence or absence of different types of pay systems, such as basic fixed salary, piece rate and productivity payment, payments based on the overall performance of the company (profit-sharing scheme) or of a group, or income from shares. The interpretation of these wage indicators is not always clear. As an aggregate indicator for analysing both surveys, this study defined modern forms of variable pay as having team bonus and/or profit-sharing and/or income from shares.

As indicators of work organisation, many studies have used different forms of participation, task variety and task autonomy, as well as the presence or absence of teamwork or job rotation. The common practice to aggregate these aspects into one single high performance work organisation (HPWO) variable may be questioned, as it does not necessarily compare like with like (e.g. the effects of job rotation depend on the actual variety of the respective tasks). Therefore, HPWO was defined in this analysis of the EWCS 2000, based on the following characteristics: time and task autonomy, task variety, responsibility, and effective participation. As only aspects of direct participation were measured in the EPOC survey, this analysis focused on the intensity of group delegation, which like team autonomy, is a key aspect of HPWO.

Regarding outcomes, studies concerned with workplaces, such as the EPOC survey, focus on indicators of organisational performance, with an emphasis on productivity and profitability, to the relative neglect of employee-related outcomes.

The case study findings show that the views of the different stakeholders, regarding the effects of wage systems or other interventions, can vary considerably. This raises doubt as to the reliability of studies like the EPOC survey. Employee-related outcomes are the focus in the EWCS but, conversely, indicators regarding organisational performance are missing.

Managerial strategy is not addressed in most studies; where it is, the few indicators reported appear questionable. In the analysis of the EPOC data, the question concerning product innovation initiatives by management was used as an indicator for an innovation strategy.

Prevalence of forms of wage systems, work organisation and strategy

Basic or fixed pay is, by far, the most dominant wage system reported in the EWCS 2000, with modern forms of variable pay being very much the exception, at only 6%. In contrast, about every third workplace in the EPOC study reports the use of modern forms of variable pay for the largest occupational group. Considerable differences exist between countries. Unfortunately, research focusing on age and gender aspects in terms of wage systems is limited. In terms of gender, the emphasis has been mainly on examining discrimination, which can still be evidenced in lower wages for women doing the same job as men. Age is studied almost exclusively in respect of how seniority relates to higher wages.

With regard to the relationship between wage systems and employment conditions, there are few results, indicating that modern forms of variable pay seem to be more popular with full-time than with temporary or part-time workers (e.g. Baeten and Van den Berghe, 2002). Modern forms of variable pay are more prominent than other pay systems, where flexible working times are offered. Organisational or institutional factors and their relation to wage systems have rarely been studied. One of the few consistent findings is that modern forms of variable pay are more often found in the private sector than in the public sector and in larger companies; the results concerning union density, on the other hand, seem inconsistent (Godard, 2004; Pendleton et al, 2001).

System alignment and effectiveness

Existing research relating to work organisation and wage systems suffers from a lack of consistent definitions and measures of variables, such as HPWO or high performance work systems (Godard, 2004). One common result of existing studies, and of the secondary analyses of the EWCS 2000 and EPOC survey, is that aspects of HPWO are found more often with modern forms of variable pay, although correlations are rather low (e.g. Lay and Rainfurth, 1999; Pendleton et al, 2001; Poutsma, 2001). However, the strength of the relationship between work organisation and wage systems increases considerably for companies with innovation strategies. This indicates the important role of strategy for the design of wage systems and work organisation.

Relations between wage systems, work organisation and managerial strategies have seldom been studied, and results do not show consistent relationships. This may be partly due to the fact that there is often a degree of time lag between changes in strategy and congruent changes in wage systems. Another reason might be restrictions of collective bargaining, which may delay or even restrict the alignment of the pay system. The analysis of the EPOC data showed that modern forms of variable pay are found more often in companies with an innovation strategy. For UK companies, this link is well above average. This may be due to the fact that they operate in a liberal market economy, compared with, for example, the Netherlands.

The results concerning the relationship between wage systems, work organisation and organisational performance are very different between European countries, as well as between different studies within one country (e.g. Nilsson, 1990 or Eriksson, 2002). The same is true for the relation between wage systems and work satisfaction (e.g. Holman, 2002; Eriksson and Leander, 1995). In the EPOC survey, modern forms of variable pay, high intensity of group delegation and innovation strategy show positive links for two or three out of eight outcome variables, such as output increase due to group delegation.

Regarding employee-related outcomes, the EWCS 2000 data show that HPWO has much stronger positive relationships, than wage systems have, to indicators of quality of working life (e.g. job satisfaction). Combining HPWO and modern forms of variable pay does not always further improve quality of working life indicators, such as job satisfaction, but seems to have positive additional effects regarding health-related indicators, such as reducing excessive demands. However, more research is needed to corroborate these findings.

The findings concerning the EPOC data show that alignment effects exist, and that analyses should not be restricted to links between two variables: interaction effects between group delegation and modern forms of variable pay were found for at least three out of eight analysed outcomes. This means that, when companies have a high rather than low intensity of group delegation and have modern systems of variable pay, they are more likely to report reductions in costs, throughput times and management personnel, as a result of group delegation. As other studies regarding high performance work systems show inconsistent results at best (Godard, 2004), the analysis of moderating variables could help to explain these inconsistencies.

Company strategy seems to be one important moderator of the relationship between wage systems and work organisation and organisational performance. Results based on the EPOC data show that the effects of wage systems depend on strategy.

- If a company has an innovation strategy and high intensity of group delegation, the type of wage system does not matter for group delegation effects.
- If an innovation strategy is combined with low intensity of group delegation, three out of eight outcomes of group delegation are dependent on having modern forms of variable pay: these companies report management and employee reductions less often and absenteeism decreases more often.
- If a company has no innovation strategy, effects of group delegation differ for both low and high group delegation, where modern forms of variable pay are present:
  - Companies with low group delegation report less group delegation effects concerning five out of eight outcomes, i.e. less throughput time and employee reductions, less output and quality increases, and less absenteeism decreases;
  - Companies with high group delegation report more group delegation effects regarding four out of eight reported outcomes, i.e. more cost, throughput time and management reductions, as well as more output increases.

Assessing the results

Comparing the effects of work organisation and wage systems, the data indicate that characteristics of work organisation have a much stronger impact on quality of working life, such as job satisfaction and stress. Regarding performance, data were not available to measure performance outcomes directly. In the EPOC survey, only effects of direct participation were measured. Within these limits, the analyses indicate that the intensity of group delegation seems to be more important than the wage system, in achieving outcomes. This supports the notion that aspects of work organisation have stronger effects than wages systems have, both on quality of working life and on performance outcomes.

The data also support the alignment effects assumed in the theoretical model: interaction effects exist between strategy, work organisation and wage system. This means that, if these variables are aligned, they have stronger effects than when considered independently. Consequently, one should not only consider isolated variables to improve quality of working life and performance outcomes, but should align these variables based on their explicit and/or implicit steering mechanisms for employee behaviour. Examples of this could include combining work organisation, based on participation and self-regulation, with modern forms of variable pay, which reward goal attainment of the respective organisational unit.

If strategy, work organisation and wage systems imply different goals and directions for employee behaviour (e.g. combining innovation strategy, hierarchical control and modern forms of variable pay), this may result in a deterioration of performance and quality of working life. These counteracting effects can be considered as one reason for the observed low bivariate correlations between work organisation and wage systems, on the one hand, and between performance and quality of working life on the other. The relationships become much stronger when counteracting effects are controlled, and an analysis is made of the effects of work organisation with high degrees of direct participation and autonomy, combined with modern forms of wage systems, such as team bonuses and/or profit-sharing.

In summary, there is reasonably consistent evidence that the effects of wage systems on company performance and on quality of working life depend on company strategy and on characteristics of the work organisation, in particular. Thus, in order to improve efficiency, wage systems and work organisations should be aligned, e.g. by combining participative work organisations and modern forms of variable pay, while taking company strategy into account.

Consequences and perspectives for future research

In light of these results, the theory-driven approach of this study – in its secondary analysis of the EWCS 2000 and EPOC survey – seems fruitful and should be developed further in future studies. However, in interpreting these results, one should bear in mind that they rely on single source and self-reported data, which as a result leaves them open to mono-method and subjective biases. Future studies, at company level at least, should use multi-source and multi-method measurement, by including management and employees, using questionnaires and interviews, as well as analysing documentary data. They should also request objective evidence for reported interventions and pay practice, in addition to intended effects, and unintended side-effects, on performance and quality of working life. Response rates must be improved and the results should be made more representative, e.g. by telephone interviews and random sampling methods.

With respect to wage indicators, future studies should separate more clearly base pay (i.e. grading structure), from variable pay (i.e. bonus payments and financial participation). They should also specify criteria for grading, as well as components and criteria of variable pay. Furthermore, most of the studies reviewed are cross-sectional, and causal relations cannot be identified. Panel studies at company level would allow an analysis of developments to provide better clues for causal relations. Last but not least, the EPOC data, in particular, are quite old. If relevant knowledge is required – concerning managerial strategies, pay systems and practice, work organisation and their relationships to performance and to quality of working life – then more updated information should be collected. Based on the results of this project, such research would indeed be promising.

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Income and wages are an essential component of employment and quality of work. They also have implications for company strategy and performance.

The main objective of this report, Wages and working conditions in the European Union, *is to analyse the relationships between wages, work organisation and working conditions, as a result of managerial policy, and as an element of organisational performance and quality of working life, and to produce indicators accordingly.*

The research model examines the influence of various environmental factors, and produces qualitative information concerning the relationships between the pay system, union density, employee representation, working time flexibility and contract type.

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