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**Inside Out. Non-standard Work, Employment,
and Diverse Interests**

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Inside Out

Non-standard Work, Employment, and Diverse Interests

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Dissertation Dr. polit.

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ABSTRACT

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How to explain the use of non-standard work arrangements is analysed in sociologist Karen M. Olsen's dissertation. She has studied organizations in Norway and the U.S., and workers in Scandinavia, Great Britain, and the U.S.

Non-standard work arrangements are identified by an employment relationship that differs from the *norm*. Three main types of non-standard workers are analysed: temporary workers, employees of temporary help agencies, and contract company workers. These work arrangements enable organizations to adjust their workforces more easily to varying market demands. However, these arrangements are also thought to be detrimental to workers and are often opposed by unions. The dissertation presents empirical findings in five articles on the use of non-standard work arrangements, using theoretical frameworks within sociology and economics.

The dissertation demonstrates that non-standard work arrangements are prevalent in the Norwegian labour market. Using survey-data, the findings show that establishments in Norway make greater use of non-standard arrangements than the U.S. establishments. This finding can be explained in part by the greater overall restrictive labour market regulations on hiring and firing regular workers, and the greater demand for temporary labour resulting from generous access to leaves of absence, in Norway. One article illustrates the dilemma that unions find themselves in—generally opposing employment intermediaries—but also recognising the protection they give the regular workers in the firm. A case-study of three Norwegian organizations shows that non-standard workers often are integrated with the regular workers, take care of similar tasks, and are able to form pressure groups in the client-organizations.

The globalization-thesis suggests that increased globalization of markets will reduce the importance of institutional factors and national regimes. This dissertation challenges this popularized view, showing that labour market institutions, such as labour law and unionization influence how organizations structure workforce, as well as influence workers' perceptions of job security.

Karen M. Olsen is a researcher at Institute for Research in Economics and Business Administration (SNF) in Bergen.

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Preface

I have been fortunate to work with one of the leading scholars within my field. Arne Kalleberg has an extraordinary ability to see solutions. I thank him for always being willing to read my work-in-progress. His genuine interest in the field and constructive comments has helped me enjoy my work. I thank Torstein Nesheim for his precise and strong theoretical feedbacks. I thank Arne Mastekaasa for having the rare ability to make things appear easy, and for his expertise in methodological issues. The complementary skills of these three people have made this work enjoyable. I hope to be able to help other students as they have helped me. These three should not be held responsible for any of the shortcomings in this work. I have to take the blame for those.

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I am grateful to my work colleagues at SNF and *Norges Handelshøyskole*. Anita Tobiassen has joined me for numerous lunch-dates, and has been a friend to discuss small and big matters in life. I thank Kristijane Cook Bulukin for her understanding and ability to see amusement in all kinds of situations. I have enjoyed the many get-togethers with her and Inger Stensaker, discussing work and more. I thank Sverre-Åge Dahl for being a generous research director, giving me time to finish my dissertation even when other projects called for my efforts. I thank Einar Breivik for being an enthusiastic and inspiring discussion partner.

I thank my parents for teaching me to not give up and that ‘education is important’, although, taking it to this length was probably not what they had in mind.

Finally, I thank Vemund Snartland for having read and commented on my work, for his interest in language, and excellent proof reading skills. Lately, I have been in sharp competition with our daughters, Ina Modesta and Tale, and his reading of *Harry Potter* to them.

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1 Introduction

1.1 The topic

Non-standard workers are often considered to be outsiders. They are nevertheless very much on the inside of work organizations. Non-standard workers are identified by an employment relationship that differs from the *norm*. The employment relationship is of great importance to workers, employers and governments. The employment relationship defines economic and social aspects essential to the individual workers: their livelihood, daily activity, and job security. To employers the alternative work arrangements are essential in assessing costs, as well as influencing the commitment and motivation of employees. The structure of employment relations can decide who, and who does not, get a job, making employment a political issue and of main concern to governments. This dissertation examines how the institutional context influences the use of non-standard work arrangements, and what roles non-standard workers play in organizations and labour markets. I present empirical findings in five articles on the use of these arrangements.

I define non-standard work arrangements along three dimensions: duration of employment, direction of work, and involvement in triadic employment relationships. These dimensions are based on Pfeffer and Baron (1988) and Kalleberg (2000). According to this approach, three main types of non-standard workers can be identified: temporary workers (i.e. fixed-term contract), employees of temporary help agencies (THA), and contract company workers. Employees of THAs and contract companies are involved in a triadic employment relationship. They are employed by employment intermediaries and carry out work for a client-organization.

Non-regular forms of labour have been called, alternatively, flexible staffing arrangements (Houseman 2001), market-mediated work arrangements (Abraham and Taylor 1996), contingent work (Polivka and Nardone 1989), atypical employment (de Grip, Hoevenberg, and Willems 1997), and non-standard work arrangements (Felstead and Jewson 1999). All of these concepts embrace several specific forms of work arrangements and employment relations. They have in common one thing: they all aim to capture employment relations that differ from what is considered the norm, the typical, or the standard. Standard employment is often defined as having an open-ended contract, where the employee works full-time, at the premises of, and under the direction of the employer. This type of employment has been the norm in many industrial nations in the twentieth century, and has served as a basis for the framework within which labour law, collective bargaining, and social security systems have developed (Kalleberg 2000).

Presently, there is a common understanding that in the last two decades, greater uncertainty and increased market pressures have encouraged firms to organize work in new ways (Cappelli 1999; Piore and Sabel 1984; Atkinson 1984). de Grip *et al.* (1997) stated that the 'flexible workforce' in the European Union—defined as employment outside the regular full-time jobs—increased by 15 percent from 1985 to 1995. However, the nature and the extent of the change that has taken place in the

labour market are disputed. It has been argued, for instance, that a decrease in job tenure is restricted to certain groups of workers (Jacoby 1999). Still, there seems to be agreement that there has been a tendency for transferring the risk in employment relations from the employer towards the employee (Cappelli 1999; Jacoby 1999; Beck 1999; Standing 1997).

The topic of this dissertation started out with the 'Flexi-study' of Norwegian establishments in 1997 (Olsen and Torp 1998).¹ Parallel to this survey the NOS-II was conducted in the U.S. (Kalleberg, Reynolds, and Marsden 2003). These two surveys of establishments constitute the basis for the analyses in articles 1 and 2. The empirical basis for article 3 is the said survey of Norwegian establishments. Article 4 is based on qualitative interviews of three case-organizations. Lastly, the empirical basis for article 5 is the survey of workers from *The International Social Survey Programme* (ISSP) 1997².

1.2 The contribution

The main contributions of this dissertation can be laid out in three ways. First, it takes a comparative approach to examine the influence of the institutional factors on non-standard work arrangements. Cross-national comparisons are needed to examine the role of the state and cultural differences in shaping employers' labour utilisation strategies. Employers and organizations are embedded in the institutional environment. As the employer is the key actor in making decisions about employment, studies of work organizations are necessary. This dissertation is one of a few studies on non-standard work that compares *organizations* across countries. Both the literature on non-standard work and comparative research in general suffer from a shortage of studies on organizations. Article 1 and 2 try to overcome this shortcoming by comparing organizations in Norway and the U.S. The purpose is to find out how much of the variance in the use of non-standard work arrangements can be accounted for by differences in the institutional context. We find that Norwegian establishments make greater use of non-standard work arrangements than U.S. establishments. This can be explained by the more restrictive labour market regulations on hiring and firing regular workers, and the greater demand for temporary labour due to a generous access to leaves of absence, in Norway.

Second, it shows that institutions and organizations should not be treated as unified units. Both organizations, and institutions, such as trade unions consist of individuals having a variety of interests, many of which may be conflicting. In article 3 I examine how unions regard the presence of non-standard workers who work for an employment intermediary. On the one hand, workers employed by employment intermediaries may constitute competition to the regular, unionized workers in the firm. On the other hand, regular workers may benefit by having non-standard workers in the firm if the non-standard workers serve as a buffer, protecting the regular workers from lay-offs. This is the first article showing that unions do not oppose *all* uses of non-standard work, but accept certain kinds of non-standard arrangements, particularly those benefiting the insiders. Furthermore, article 4 shows that the commonly held view of the organization along a dualistic core-periphery distinction is too simplistic. The findings suggest that even though employers may intend to employ workers along a core-periphery strategy, the evidence of what they actually do, fails to support this. This can partly be

accounted for by the diverse use of non-standard workers in the organizations and the great demand for high-skilled labour at the time.

Third, I demonstrate how one can use existing theoretical frameworks to studying a ‘new’ phenomenon. A common critique towards the flexibility literature is that it is parsimonious on theory. I show how theoretical frameworks from economics and sociology can help us understand the phenomenon non-standard work. Taking a comparative approach to studying organizations, I find that institutional features, such as employment protection and the welfare state influence employment decisions (article 1 and 2). Article 3 contributes to the literature in economic sociology by showing how segmentation of regular workers (insiders) and non-standard workers (outsiders) constitutes a basis for inequality and diversity of interests. This segmentation, along with the industrial relations in Norway, has implications for how employers use employment intermediaries. (article 3). Transaction costs economics (TCE) constitutes the foundation for much of conventional wisdom about how firms use non-standard work arrangements. I show under which circumstances these conventional ideas are challenged (article 4). Combining concepts from segmentation theory with the institutional features in a country helps clarify how the marginalisation of temporary workers may take on different forms in different countries (article 5).

‘Inside out’ takes on several meanings. First, it means that something is back to front. Second, it means that something works really well. This ambiguity is found in how organizations’ use non-standard work arrangements. Some of the paradoxical findings are: The welfare state seeks job security for everyone, yet in fulfilling this goal, a vast demand for temporary jobs is produced. The trade unions generally oppose non-standard work, yet in cases where non-standard workers help out the insiders, they are more pragmatic. Non-standard workers are mainly thought to hold jobs in the periphery, yet they are also found to be integrated with regular workers and able to form pressure groups. Lastly, temporary jobs have by definition lower job security, yet in countries characterized by lenient employment protection legislation, workers’ perception of job security depends little on the employment contract.

Table 1 provides a summary of the five articles: the research questions, theoretical foundation, data, findings and factors included in explanations.

Table 1. Overview of articles: The research questions, theoretical framework, data, findings, and explanations.

Research questions	Theoretical framework	Data	Findings	Explanations
Article 1: 'Comparing Flexibility: Flexible Firms in a Cross-National Perspective' (2003) <i>Beta</i> , 17(1): 19–35.				
Do numerically and functionally flexible practices differ between Norway and the United States?	Institutional context: regulatory, public sector, and unionisation.	Surveys of establishments in Norway and the U.S. 1997	More numerically and flexible work practices in Norway. Functionally flexible work practices equally prevalent.	Labour law, and generous access to leave of absence in Norway. Content of work practices depends on context.
Article 2: 'Non-standard work in two different employment regimes: Norway and the United States' (2004) <i>Work, Employment, and Society</i> , 18(2): 321-346.				
(1) Does national context affect the NSW? (2) How do institutional factors affect the use of NSW?	Institutional context: regulatory, public sector, and unionisation.	Surveys of establishments in Norway and the U.S. 1997	The use of NSW is more widespread in Norwegian establishments than in the United States	Restrictions in labour law, and generous access to leave of absence in Norway. Escape mechanism.
Article 3: 'Unions' Dilemma When Firms Use Employment Intermediaries' (2005), <i>European Sociological Review</i> , 21 (3).				
How does employment intermediaries relate to the degree of unionisation in the establishment?	Segmentation of insiders and outsiders in economics and sociology. Industrial relations.	Survey of establishments in Norway. 1997	Unionisation positively related to NSW for staffing reasons, and negatively related for replacement reasons.	Unions face a dilemma: generally opposing NSW, but also recognising the protection. Segmentation creates diversity of interests.
Article 4: 'The role of Non-standard Workers in Client-organizations' (2005) Revise and resubmit to <i>Relationell Industrielles/Industrial Relations</i> (Canada).				
What roles do non-standard workers play in client-organizations?	Strategic management, mainly founded in transaction costs economics (TCE)	Qualitative interviews of managers in organizations in Norway. 2000	Non-standard workers are found in vital activities, integrated, managers require their loyalty, and they are able to form pressure groups.	Diverse use of NSW in client-organizations. Labour market situation: shortage of skilled labour.
Article 5: 'Job security and temporary employment in Scandinavia, Great Britain and the U.S.' Submitted to <i>Work, employment and Society</i> , June 2005.				
(1) How does national context affect job security; (2) how do institutional features influence the segmentation of temporary and regular workers on job security?	Combining concepts from segmentation theory with institutional setting	The ISSP (1997): Scandinavia, Great Britain, and the U.S.	Lowest overall job security in Great Britain and Sweden. Temporary workers experience relatively greater insecurity in Sweden and Norway.	Employment protection, welfare states, and labour market situation explain differences in job security. Mechanism of comparison to others within same context.

Note: NSW= Non-standard work arrangements

1.3 The outline

The dissertation is organized as follows. First, I present the phenomenon non-standard work; its historical background and position in the flexibility literature. Second, I present three main perspectives that enable us to better understand the phenomenon non-standard work. Third, I discuss the methodology and the data used in the five articles. Forth, I give a brief summary of each of the five articles. Fifth, I present theoretical implications and some ideas for further research. Lastly, the articles 1-5 follow.

2 The phenomenon

The phenomenon at hand is non-standard work arrangements (*explanandum*). In the wide-ranging literature on work and organizations, non-standard work can best be understood through the employment relationship. Non-standard work arrangements demonstrate, through various types of employment relationships, the many ways workers can be attached to an organization. In this section I first present some of the main concepts from Weber's theory of bureaucracy. Second, I position the concept non-standard work in the flexibility literature.

2.1 Historical background

Weber's work on authority and bureaucracy serve as a foundation for much of organization theory as well as to the concept of employment. The following overview is based on translations by Roth and Wittich (*Economy and Society*) (1978), and Gerth and Mills (1972 [1946]) (*From Max Weber: Essays in Sociology*). The 'ideal type'³ of bureaucracy is linked to Weber's wider theory of rationalization—a key characteristic of western industrial society. One of Weber's interests was in the growth of rationality in the Western civilization. It was in this context he specified characteristics of the bureaucracy. Weber distinguished between various forms of authority (traditional, rational-legal, charismatic). The rational-legal authority replaced the traditional authority in earlier times, and was in its clearest form found in the bureaucracy. 'the purest type of exercise of legal authority is that which employs a bureaucratic administrative staff' (Roth and Wittich 1978: 220).

The bureaucracy

The bureaucracy is run according to certain principles. These principles include authority being ordered in the hierarchical structure of the organization, in which the higher offices supervise the lower. The management of the office follows general rules, and knowledge of these rules has been acquired through training. In short, the bureaucracy is characterized by a division of labour based on responsibilities, rights and duties, and it is run by an impersonal mode of conduct.

Weber identified a job as a career bringing in the element of time, future promotions, and protection from arbitrary dismissals. These are elements which are essential to establishing the employment relationship. The position in the bureaucracy requires that the employee (official) receives the prescribed training. This position implies loyalty to an office and not to a person, which dominated in earlier times. As an employee in the bureaucracy, one holds the position for life and legal guarantees

protect against arbitrary dismissals. Furthermore, the official obtains tenure, which distinguishes her/him from the traditional worker, who had no job security. The official was set for 'career' within the hierarchical order, expecting to move from lower to higher positions.

The characteristics of the official were not only defined as activities *in* the organization, it also pointed to their future prospects. In particular, the characteristics 'holding a position for life', and 'guarantees protect against arbitrary dismissals' added the concept of job security to employment relationships. Consequently, the open-ended employment contract was an essential part of the bureaucratic organization.

The conditions

The economic and environmental conditions for the rise of bureaucracy included a certain stability of the environment, and an increase in the number of tasks. The money economy and a stable system of taxation were preconditions for the permanent existence of bureaucratic administration. The growing number and type of administrative tasks led to greater need for coordination and regulations of goods, which encouraged the need for bureaucratic organization. Cultural, political, and technical factors encouraged the rise of the bureaucratic administration. Some of the advantages of the bureaucratic organization were precision, speed, unambiguity, continuity, and reduction of friction.

Towards recent contributions

Weber's theory of bureaucracy is one important point of reference to what has been established as the 'normal' or the 'standard' employment relationship. How the development of employment relations has changed points to greater 'externalisation' (Pfeffer and Baron 1988) and more diversity in employment relations, such as workers involved in triadic employment relationships (Rubery 2005). Although, the nature of these changes is disputed, the *concepts* used for describing 'atypical', 'externalisation of work', or 'new ways of organizing work' typically are presented as deviations from the ideal type of bureaucratic organization.

In the ideal type of bureaucracy jobs (positions) are structured and hierarchically ordered. This way of thinking about organizations served as an inspiration to, for instance, theories of internal labour markets (ILM) (Doeringer and Piore 1971). Internal labour market theory emphasizes how the 'market' inside the firm protects the workers from the external market, providing them with job security and good opportunities for advancement as long as they stay in the organization. The research on ILMs had its prime in the 1970s and early 1980s.

The ILM systems were part of what has been labelled Fordism, a way of organizing work that expanded in the post-war period. Fordism can be simplified and characterized by internal labor market systems in large organizations, narrow jobs in hierarchical career ladders, and long-term employment relationships (Batt 2005). The conditions under which these ILMs rose are characterized by stability and expansion (Osterman and Burton 2005).

In the mid-1980s, the preconditions for stable employment relations were called into question. This led people to ask whether there was a breakdown of the ILMs (Osterman and Burton 2005). The increasing uncertainty of the environment led

to a stronger aim for firms to be flexible, in order to meet the faster changes in markets.

2.2 Clarifying the concepts

The flexibility literature

The literature on flexibility developed in part as a reaction to the literature on bureaucratic organization. It was motivated by changes in the economy towards greater instability and uncertainty. Increased market pressures, greater uncertainty, along with globalisation were regarded as so compelling that new ways of organizing work were required (Cappelli 1999; Piore and Sabel 1984).

In the mid 1980s and into the 1990s, research on work and employment started taking a great interest in how organizations could organize work to obtain greater 'flexibility'. One important inspiration was the model of 'the flexible firm' (Atkinson 1984; 1987). This model suggested that organizations increasingly tend to divide the workforce into a *core* consisting of regular, high-skilled workers with career opportunities, and a *periphery*, consisting of workers that are easily disposable, such as temporary labour or workers hired through employment intermediaries. The organizations should, in the core, aim for *functional flexibility*, which refers to the ability of employers to re-deploy their workers from one task to another. The periphery should be run by a principle of *numerical flexibility* which refers to the organization's ability to adjust the size of its workforce to fluctuations in demand. Numerical flexibility is sometimes used synonymously with external flexibility and functional flexibility with internal flexibility (Kalleberg 2003). The model of the flexible firms drew massive criticism, most brutally from Pollert (1988), who argued that the model legitimized the segmentation of the workforce.

Another important contributor in this period was Pfeffer and Barons' article (1988): *Taking the Workers Back Out: Recent Trends in the Structuring of Employment*. They described the employment relationship as a continuum, ranging from long-term attachments between workers and organizations, to arrangements in which workers are only weakly connected to the organization either in terms of physical location, administrative control or duration of employment. They suggested that there was a growing trend towards externalising the workforce. In the following years, a number of studies that aimed to explain the determinants of external labour (e.g. Davis-Blake and Uzzi 1993; Uzzi and Barsness 1998; Kalleberg *et al.* 2003).

Flexibility: means or ability?

The term flexibility refers to a virtue, implying creativity, innovation and a positive response to change. Despite the fact that flexibility' refers to *ability* (mainly from the perspective of the firm), it is often used interchangeably with *means* to increase flexibility. Numerical and functional flexibility can be acquired through various means. While organizations can obtain numerical flexibility by asking or requiring their regular, full-time employees to work overtime, such flexibility is more often accomplished by using workers who are not their regular, full-time employees such as short-term hires, temporary help agency employees, and contract company workers (Kalleberg 2003).

By contrast, functional or internal flexibility is facilitated by the use of 'high performance work systems' that empower workers to participate in decision-

making, enable them to work in teams, and enhance their ability to work in a variety of jobs (see Appelbaum and Batt 1994; Osterman 2000). Studies on functional or internal flexibility share resemblance to ILM theory in its interest in the internal organization of work. Whereas the literature on internal labour markets stressed the *vertical* movements of workers, the flexibility literature, and in particular through the concept of functional flexibility, emphasized the *horizontal* movements of workers.

In recent years we have seen a tendency for downplaying flexibility, and a reintroduction of the literature on ILM and bureaucratic organization. Recent contributions have combined the theoretical framework on ILM with the literature on non-standard work, showing that the distinction between internalisation and externalisation is blurred (e.g. Lautsch 2002; Grimshaw, Ward, Rubery, and Beynon 2001).

Fundamental changes?

The profoundness of the changes towards more flexible work organization is disputed. Cappelli (1999) argued in *The New Deal at Work* that the rise of the market in employment relationships was such a fundamental and long-term development that it was likely to generate profound changes. These changes implied in part that employees would be more loyal to their careers than to their employers. However, Jacoby (1999) showed how there was great stability in the employment (i.e. job tenure) for workers in the U.S., and that the changes mainly concerned men in managerial and professional-technical occupations (see also Osterman and Burton 2005). As to the model of the flexible firm—now, 20 years later, the model is more often viewed as a prescription rather than a description of actual trends (Rubery 2005) (see also article 1).⁴ A recent contribution reports that from 1997 to 2003 Norwegian establishments increased the use of functional work practices, such as team work and job rotation, whereas the use of numerical work practices was stable (Barth and Ringdal 2005). There is inconsistent evidence as to the extent of the changes, measured by ‘objective’ measures such as work practices and job tenure. Still, there are quite a few studies reporting that workers *perceive* their jobs to be more insecure (see Sparks, Faragher, and Cooper 2001).

There seems to be a common understanding that employers do not simply aim for greater flexibility. Nesheim (2003) argues that the use of non-standard work arrangements, such as temporary employment also reflects employers’ need for stability. Furthermore, even though the need for flexibility has increased, firms still need predictability in their organization of work (Colbjørnsen 2003).

Today, the need and trends for greater flexibility, emphasized in the mid 1980s and 1990s, are often regarded as exaggerated. As stressed by Jacoby (1999) people tend to, mistakenly believe that the present is fundamentally different from the periods that preceded it (fallacy of discontinuity). In line with this, Rubery (2005) argued that one problem in making sense of the changes in employment relations is that the perceived stability of the employment systems in the 1960s and 70s may be exaggerated.

Three specific non-standard work arrangements

I analyse three specific non-standard work arrangements: temporary employment (fixed-term contract), temporary help agencies (THAs), contract company workers. These three arrangements are thought to increase firms’ numerical or external

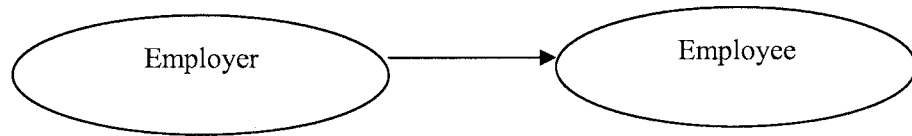
flexibility. Part-time work in Scandinavia has largely been incorporated into the standard norm, and is often *not* considered ‘non-standard’ or ‘atypical’ (Ellingsæter 1995).

Three dimensions distinguish these non-standard work arrangements: Duration of employment contract, the dyadic *versus* triadic employment relationship, and the direction of work. I base these dimensions on Pfeffer and Baron (1988) and Kalleberg (2000). According to Pfeffer and Baron (1988) these arrangements are part of an employment continuum. In line with Kalleberg (2000) I emphasise the distinctness of these non-standard work arrangements. Each of these forms of work may have specific implications for firms and workers and are differently regulated in labour law (see article 2).

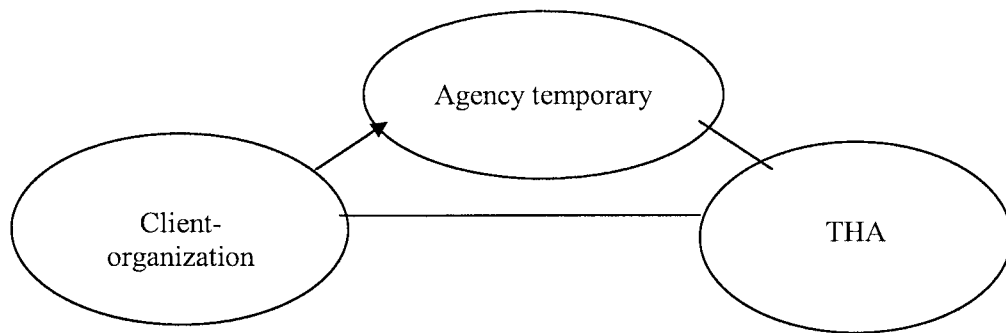
Model 1 shows how these arrangements are distinct. The arrow indicates who directs the workers—the employer or the client-organization. First, temporary workers have a fixed-term contract, in which the *duration* is predefined. This type of contract deviates from the standard, open-ended employment contract. A second distinction is between dyadic and triadic relationship. While a fixed-term employment often is a contract between two parties, the employer and the employee, employees working for a THAs or a contract company are involved in a *triadic* relationship. THAs and contract companies constitute employment intermediaries. In these triadic employment relationship, it is the employment intermediary that pays the salary (and has the employer responsibility), but the workers will often be working at the premises of a client-organization. Third, workers in THA and contract company workers differ on who *directs* their work. Agency temporaries are *directed* by the client-organization (not the employer). By contrast, contract company workers are directed by the contract company (the employer).

Model 1. Non-standard work arrangements

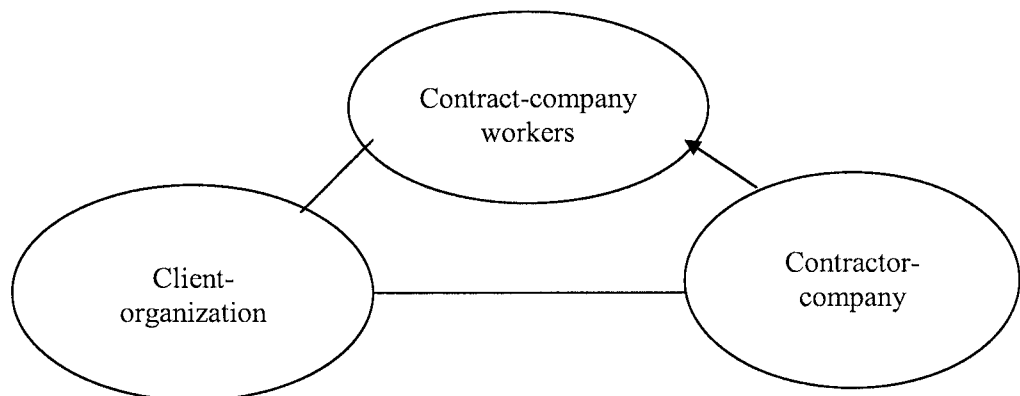
(1) Direct-hired temporary workers



(2) Workers from temporary help agencies (THA)



(3) Contract company workers



Non-standard and job security

Non-standard work arrangements are often, and particularly in the U.S. literature, referred to as ‘contingent work’ (e.g. Matusik and Hill 1998; Polivka and Nardone 1989). The term contingent means ‘uncertain’ or ‘accidental’—implying job insecurity for workers⁵. Contingent is sometimes used synonymously with bad jobs. Kalleberg (2000) uses contingent work a subgroup of non-standard employment relation, arguing that it is misleading to use the term more generally because non-standard work may differ considerably in their degree of employment security. For instance, employees of a contract company may very well have an open-ended contract. Thus, not all non-standard jobs are insecure jobs.

3 Theories, perspectives, and interpretations

In the following I present three perspectives, which serve as the main theoretical frameworks in this dissertation. The three perspectives are: (1) institutional theory, (2) transaction costs economics (TCE), and (3) segmentation theory. They all contribute to explaining the phenomenon non-standard work. These three theories have in common that they pay attention to link between the labour market and the work organization. In short, institutional theory emphasises the environment of the organizations. TCE explains why organizations sometimes employ workers (hierarchy), and in other cases rely on the market. Lastly, segmentation theory stresses the link between the workers’ position in the organization and their positions in the labour market. The theories differ, however, in the factors explaining (*explanans*) variations in non-standard work arrangements. The purpose of this presentation is twofold. First, it provides the theoretical background for the five articles and second, it shows some of the diversity in studies of organizations.

3.1 Institutional approaches

The institutionalists emphasise ‘how the set of institutional arrangements and societal structures in which an organization is located and embedded may account for and explain differences between societies’ (Rubery and Grimshaw 2003: 37). The institutional approach is likely to be especially fruitful in explaining cross-national patterns of diversity, since it points to the importance of the role of the state (labour law, regulations governing trade union influence, employment protection, etc) and of economic, social and political institutions in shaping employers’ labour utilisation strategies. Institutional theory is central in all articles, most explicitly in the cross-national analyses in articles 1, 2, and 5.

We find different version of institutional theoretical approaches. Two versions are the ‘societal effects’ approach (Maurice, Sorge, and Warner 1980) and the new-institutional theory (Powell and DiMaggio 1991)⁶. The former originate from Europe and the latter from the U.S.

The societal approach emphasises that organizations are part of the larger societal system. The societal approach is not a specific theory of organizations. It is a ‘systematic analysis of social action which emphasizes the interconnections between different social spheres such as manufacturing, industrial relations,

education and training' (Maurice, *et al.* 1980: 61). In the societal-effect approach, organizations are embedded in the societal system, which develop according to path-specific trajectories (Rubery and Grimshaw 2003).

This approach has for instance been applied to explain the development of employment systems (Fliegstein and Byrkjeflot 1996). What kind of employment system is dominating in a country depends in part on the strength of labour, cooperation, etc. Fliegstein and Byrkjeflot (1996) argued that based on the strength, and historical institutions employment systems develop specific logics. It can be followed from this argument that even when countries experience the same pressures, through for instance greater internationalisation of market, employment relations may take different paths, due to their distinct historical traditions, the logic in the employment systems, etc. Thus, similar pressures may lead to varying outcomes.

Rubery and Grimshaw (2003) criticise the societal effect approach for being too static, arguing that this school is not able to deal with the process of historical change. They aim to develop a more dynamic institutionalist perspective, less bound by the nation state. Instead 'nation states must be analysed within a world system of international political and power relations' (:45). In developing a more dynamic institutional approach, including international pressures, ideologies, governance, and competition, they attempt to moving away from the nation state as the sole unit of analysis (Rubery and Grimshaw 2003).

The second institutional approach, new-institutional theory, is concerned with how the organizations are shaped by the pressures from the environment. It is more than the societal-effect approach, explicitly a theory of organizations, perhaps best known thorough the article by DiMaggio and Powell (1991): *The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality*. Their main question is: why is the structure of organizations similar? In this article, they identify several mechanisms through which institutional isomorphism (process of homogenization) occur. One of the main arguments in new-institutional theory is that organizations employ structures to legitimate and maintain stability, as a result of the external environment, rather than from strictly efficiency concerns (Meyer and Rowan 1977). The emphasis on legitimising, rather than efficiency-concerns, was in part a critique of neo-classical economics. Institutional theory also served as a reaction to studies (behavioural studies) where collective actions were seen as aggregated sum of individual choices (Powell and DiMaggio 1991). This approach emphasizes that organizations are 'open systems' (Scott 1998) influenced by their environment, and that organizations are not only rational and efficiency based.

Some empirical contributions on non-standard work, emphasizing institutional differences are for instance Smith, Masi, van den Berg, Smucker (1995), Sels and van Hootegem (2001). All of these compare employment arrangements across countries. For instance, Smith *et al.*'s (1995) study of Canadian and Swedish industries found that policies towards external flexibility partly could be explained by the institutional structure within which firms operate in these countries. They interpreted differences in employment structures in part on differences in institutional contexts. Furthermore, Sels and van Hootegem (2001) argue that institutional frameworks in the Netherlands and Belgium have been built up along different lines, which has resulted in different use of different forms

flexibility. They interpreted differences in organization of work as a result of organizations' different ways of adapting to the institutional environment.

The societal and new-institutional approaches are similar in emphasizing the interrelations between social institutions. These approaches regard institutions in a positive light, unlike neo-classical economics, in which institutions are seen as inflicting constraints on the free market. They differ, however, in their questions they pose. Whereas, the neo-institutional theory in the U.S. version tries to explain similarities in work organizations ('why are organizations similar?'), the societal effect approach is more interested in explaining *differences* in work and employment relations between nation states.

3.2 Transaction Costs Economics (TCE)

Taking the perspective of the organization, the employment relations are forming the *boundaries of the organization*, which is a central topic in TCE. The boundary of an organization is formed by which tasks are taken care of *inside* the organization and which are left to be carried out *outside* the organization. (Williamson uses the term 'efficient boundaries' (1981), regarding which activities should be performed within the firm, and which outside.) This theoretical framework is important in establishing the 'conventional wisdom' on when to use non-standard work (see article 4). Non-standard work is illustrating the connection between the market and hierarchies. Using the framework of TCE, standard employment, in which workers are hired, located and employed on open-ended contract, is one way to organize in the hierarchy. By contrast, contract workers, employed by a contract company are market-mediated solutions.

Transaction cost economics (TCE) is concerned with one of the fundamental questions in organizational studies: the structure of organizations. The basis of TCE is the question: 'why do organizations exist?' The question was first posed by Coase (1937) and elaborated by Williamson (1975). Transaction Cost Economics (TCE) maintains that employers will choose market mechanisms (e.g., temporary work) over hierarchies (standard employment arrangements) depending on their relative efficiency and costs, which in turn vary depending on other features of the transaction (e.g., Masters and Miles 2002). The hierarchies are solutions when the costs of transactions become too high. The standard *versus* non-standard work constitutes a type of make-buy decision. Because individuals are bounded rational and transactions between people may be complicated and costly, organizations may in certain situations be advantageous to the market in accomplishing tasks.

TCE sees the organization as a setting where self-interested better can be monitored and controlled. In short, organizations arise when markets fail. TCE has been criticized for neglecting environmental factors, such as regulations in the labour market, and for neglecting the potential power of workers (Perrow 1986). Unlike neoclassical economics, in which individuals are thought to be rational, the TCE introduce the more realistic term 'bounded rationality'. TCE has been important in the studies of employment structures, particularly through the field of strategic management.

Strategies towards non-standard work

Two recent contributions that aim to explain work structures in organizations are Matusik and Hill (1998) and Lepak and Snell (2002). These derive from a strategic management position. They interpret the use of internal and external workers as a result of firms' strategy. They are concerned with how managers may best organize their workers strategically, in short: *managing people* (Lepak and Snell 2002).

Lepak and Snell (2002) argue that organizations' use of contingent (non-standard) workers should reflect the uniqueness of human capital and its strategic value. Their arguments draw partly on Transactions Cost Economics (TCE). This tradition also uses the concept of strategic value of human capital, drawing on the resourced-based view of the firm (e.g. Pfeffer and Salancik 1974).⁷ One empirical contribution is Masters and Miles (2002) (drawing on TCE), who found that a job is likely to be internalized or externalized based on to what degree the job is needed over time, whether it requires the development of firm-specific skills, and how easy it is to monitor the performance.

Viewing the organization exclusively in terms of its goals is one of the common criticisms raised towards the field of strategic management⁸. From a sociological point of view the strategic management perspective typically neglects power structures. According to Knights and Morgan (1990) strategy is used as an ideological and political function to reproduce existing power relations. Strategy is a technique, which makes managers, and workers *appear* as goal-oriented and self-disciplined. 'And once subjectivity is defined in and through strategy, the discourse and practice becomes self-legitimising and self-reproducing regardless of its effects (which nevertheless are not insubstantial) outside of power relations within the organization' (Knights and Morgan 1990:479). Hyman (1988) argues that there are great limitations to managers' possibility of even having a coherent strategy. There may be fundamental contradictions in an organization, so that a coherent strategy of flexibility is hard to obtain, even when aimed for.

In contrast to sociological approaches to organizations studies, contributions within strategic management put more emphasis on how management should organize work to be more efficient. The way organizations structure work is typically interpreted according to efficiency-motivations, and as a result of managements' intended strategies. This line of literature has little interest in division of labour in the market and segmentation of work.

3.3 Segmentation theory

Segmentation theory is more a theory of labour markets in general than specific to organizations. It has its origin in so-called critical theory, largely inspired by Marxism. This line of thinking sees the inherently conflicting interests between labour and capital as one of the driving forces in the control of workers (Edwards 1979; Gordon, Edwards, and Reich 1982). According to this perspective, organizations are an arena of antagonistic groups: the capitalist (owner) and the workers. The organization as a 'contested terrain' (Edwards 1979) sharply contrasts the neutral way of viewing the organization in for instance TCE or strategic management. Segmentation theories (Gordon *et al.* 1982; Doeringer and Piore 1971) see the labour market being divided into segments. Although, the Marxist approach is less explicit today, the marginalisation thesis applied to non-

standard work can be traced to this tradition. The marginalisation thesis is a topic in article 5.

The essence of the marginalisation thesis is that workers in secondary segments are left with dead-end jobs, due to little mobility between the segments. The 'primary' segment typically consists of jobs providing benefits, and career opportunities, etc, whereas the 'secondary' segment contains low-paid jobs, no job security and few opportunities for advancement. (Gordon *et al.* 1982 stress that division of labour may consist of more than two segments as proposed in dual-labour market analysis (Doringer and Piore (1971)). Segmentation theories emphasize the structural positions of jobs. As there is thought to be little mobility between these segments, non-standard workers are likely to be marginalized, being stuck in the 'secondary' or 'peripheral' labour market. Thus, the worker's position in the organization will reflect his or her position in the labour market (Edwards 1979). The effects of the division of labour in the labour process, Edwards argues, extend far beyond the workplace, and provide a basis for segmentations of labour markets. Both researchers discussing internal labour markets and on non-standard work have emphasized that these work structures often are a source for segmentation, for instance leaving only some workers with opportunities for advancement (Osterman 1984; Pollert 1988).

Radical theorists argue that employers *consciously* create a segmented workforce as a response to economic crisis and as a divide and rule strategy. Employers have some interests in common—they want to control the workforce in a way that makes employees work in the interest of the organization. One criticism raised towards control theories is the idea that capital always seeks and finds definite and comprehensive modes of control. They have been criticized for overestimating the control of employers (Thompson and McHugh 2002). It is easy to agree with the segmentation theorists that the labour market and organizations are segmented. It is the segmentation being only determined by the labour-capital division that is less founded. Also, segmentation theory tends to put little emphasis on the acting individuals.

More recent contributions tend to move away from the deterministic approach of capital-labour struggles as the driving force to developing employment relationships. Analyses have shown that workers, unions, and management were important forces in shaping the employment systems in organizations (Jacoby 1985). The more complex picture put out by Jacoby (1985) contrast the 'divide and conquer'-picture made by radical theorists. Today, the employment relationship is understood to emerge out of a more complex dynamic involving contingent and political-economic factors (Marchington, Grimshaw, Rubery, and Willmot 2005).

Recent empirical contributions have sought to establish whether non-standard work, such as temporary employment more often leads to regular employment or subsequent temporary jobs. This literature examine to what extent workers are 'trapped' in temporary jobs (Korpi and Levin 2001; Scherer 2004), and stresses the potential 'risks' of having these jobs (Giesecke and Gross 2003). They build on the notion of a segmented labour market, in which temporary work is associated with jobs in the secondary segment.

3.4 Comparisons of the theories to non-standard work

Table 2 compares the three theoretical approaches according to some dimension essential to studying non-standard work arrangements. Table 2 summarises the main questions addressed, the unit of analysis, main variables, interpretation, and the strengths and weaknesses of the theories as they are applied to the phenomenon non-standard work. Lastly, I discuss to what extent these perspectives may be integrated.

Main questions

The main question in institutional approaches is how external pressures, such as labour law, industrial relations, etc. influence the use of non-standard work. The nature of this question differs distinctly from questions in TCE, which emphasises the characteristics of the situation in which employers choose market solutions (e.g. temporary work) over hierarchy. The segmentation theory can be applied in two main ways to address the phenomenon non-standard work. On the one hand, non-standard work can be regarded as a means by employers in organizations to divide the workforce into segments, weakening the power of unions (control of labour). On the other hand, segmentation theory can be applied to the labour market as to analyse the implications for workers on having a non-standard job. The marginalisation thesis (see article 5) is an example of how concepts deriving from segmentation theory is useful in studying non-standard work.

The unit of analysis

In the neo-institutional approaches the main unit of analysis is the organization. In the societal effect approach, other units, such as the national employment system in a country would also be relevant as unit of analysis. The labour market or the nation state would also be a potential unit of analysis in segmentation theory. TCE is the perspective that clearly deviates from the other two, in its emphasis on the *transaction*. Applied to non-standard work, buying of labour (make-buy decision) is an economic transaction. Depending on the characteristics of this transaction, for instance the training required for a certain job, employers will choose between an open-ended contract (hierarchy) and non-standard work arrangement (market).

Explanations and interpretations

The explanations and interpretations differ across these perspectives. Determinants of non-standard work arrangements are according to TCE mainly regarded as resulting from efficiency concerns, in institutional theory from the aim for legitimacy, through external and normative pressures. In segmentation theory (most explicitly found in critical theory), employers aim towards controlling workers, by dividing them into different segments. This division derives mainly from the antagonistic relationship between capital and labour. Thus, the use of non-standard work arrangements are interpreted as a result of three main different motivations: efficiency (TCE), legitimacy (institutional theory), and control (segmentation theory).

Table 2. Comparisons of institutional theory, TCE, and segmentation theory with regard to non-standard work.

	Institutional theory	TCE	Segmentation theory
Main question addressed with regard to non-standard work	How do external pressures influence the use of non-standard work arrangements?	In which situations to use standard (hierarchy) <i>versus</i> non-standard work arrangements (market)	How is non-standard work a basis for segmentation of workers in organizations and labour market?
Unit of analysis	Organizations, societal systems (national employment system, educational system, etc).	The transaction (e.g. the buying of labour)	Labour markets and organizations
Main variables included	Societal, state, and cultural pressures	Asset specificity (e.g. firm-specific skills, training), uncertainty, frequency	Labour-capital division. Structural position of workers
Explanations for the use of non-standard work	Legitimation, external pressures	Efficiency. Minimising on transactions	Control of labour
Strengths	The emphasis on external pressures. Particularly capable for explaining differences between countries.	The choice of when to employ standard <i>versus</i> non-standard employment. The emphasis on boundaries of the organization.	Linking the structural position of the worker and the labour market. Including power and marginalisation.
Weaknesses	Little emphasis on characteristics of the situation in which organizations use non-standard work. Neglect of strategic action.	Little emphasis on external pressures, such as labour law, etc. Neglecting power relations, such as unions, and workers being able to form pressure groups.	Weak on explaining the mechanisms behind segmentation. Neglecting diverse interests between groups of workers.

Strengths

The institutional perspectives emphasize the features of the context, such as the social, cultural, and economic environment in explaining differences in employment relations. This perspective is particularly suited to explain variations *across* countries because it points to the institutional variance. By contrast, the TCE framework is capable for explaining the solutions of specific work arrangements *within* a given context. TCE is particularly useful in explaining the relative efficiency of different governance models for obtaining numerical flexibility (non-standard *versus* standard employment). Its emphasis on the boundaries of the organization is also an important contribution to the phenomenon non-standard work. The strength of segmentation theory can be observed in the links between the position of the worker in the organization and the labour market. Particularly the concept of marginalisation is useful in studying the role of non-standard workers in the labour market.

Weaknesses

TCE is not very suitable for studying variations across nations. It may, along with mainstream economics be viewed as universalists, stressing the general applicability of common models of social and economic organization (Rubery and Grimshaw 2003). In the TCE framework, characteristics of the job, such as firm-specific skills, uncertainty, etc are the main determinant of which work arrangement to use (see Masters and Miles 2002). The main reason for TCE being less able to explain cross national variation is because it builds on the neo-classical idea of the free market (although 'the transaction' and 'bounded rationality' are deviations from the neo-classical assumptions). However, the free market is an abstraction. The market is embedded by social structures (Granovetter 1985). What people do, depend on what other people do. Institutional features, such as regulations on the access to use certain non-standard work arrangements (as in Norway) influence employment decisions. Thus, the characteristics of the transaction (e.g. specificity) are not sufficient to explaining organizations' use of non-standard work in cross-national analyses.

Furthermore, a general critique towards TCE is the neglect of power (Perrow 1986). I find that unions in firms are able to influence how employers may use non-standard workers (article 3), and the non-standard workers themselves may constitute a pressure group (article 4). Thus, TCE's neglect of the power also applies to studying non-standard work.

Institutional theory is less capable of saying in which specific situations organizations use non-standard work arrangements. The characteristics jobs or type of tasks are of little interests in this framework. Institutional theory requires some institutional variance. Thus, institutional theory is less suited for studying non-standard work within a given context. Furthermore, in institutional theory (DiMaggio and Powell 1991), the ontological assumption of human nature is founded on a theory of action, which stresses the unreflective, routine, taken-for-granted nature of most human behaviour. Given this assumption, institutional approaches tend to leave out strategic action. Attempts have been made to overcome the lack of strategic action in institutional theory (Oliver 1991).

One of the main critiques towards segmentation theory is the tendency for determinism, regarding the labour-capital division as the main force in determining employment relations. This critique is relevant also to studying non-standard work. The determinants of organizations' use of non-standard work are more complex than just the labour-capital division. Also, in stressing the capital-labour division so strongly, it ignores the potential diversity of interests between groups of workers. I argue in article 3 that workers and unions should not be treated as a unified group. Both in economic frameworks (Lindbeck and Snower 1988) and sociological frameworks (Kalleberg 2003), workers may be regarded as insiders and outsiders, potentially generating a basis for diversity of interests and inequality. Like institutional theory, segmentation theory points to the structural elements in labour markets. Although, segmentation theory stresses historical development and includes institutional factors (Edwards 1979; Gordon *et al.* 1982) it does not explicitly emphasize variance in institutional context, tending to be more universalistic than the institutional approaches.

3.5 Integration of perspectives

Institutional theory and segmentation

Institutional and segmentation theory share the emphasis on structures. Segmentation theory stresses the labour-capital division, whereas the institutional theory emphasizes various institutional features, such as labour law, professions, unions, etc. In an attempt to integrate these perspectives, I examine to what extent the non-standard workers are marginalized in different institutional contexts (article 5). I argue that the structural position of workers (e.g. having a temporary job) will determine to what extent they are marginalized in terms of job security. Even though temporary workers by definition lack job security, the extent to which they perceive their jobs to be insecure may depend on the institutional context. This provides an example as to how the institutional and segmentation theory can be integrated to explain the marginalisation of temporary workers.

Strategic responses in institutional theory

We argue in article 1 and 2 that to avoid dismissals in the future, establishments may use work arrangements that are less costly to terminate so as to escape from dismissal-related regulations. This strategic response to institutional pressures is labelled an escape-mechanism, which constitutes one of a wide range of potential mechanisms developed by Oliver (1991). Avoiding the exit-costs of dismissals reflects employers' economic motivations, although it is the institutional structure, (here: labour law) that in part can explain employers' demand for non-standard work. This type of economic-motivated explanation is not the most common form of explanation in institutional explanations. However, it shows how strategic responses can be integrated in institutional processes. Oliver (1991) integrates the resource-based view of the firm with TCE. Similar arguments may be applied to combining institutional theory with TCE.

TCE and institutional theory

A possible integration between TCE and institutional theory would be to develop a framework on how regulations in the labour market may affect the characteristics of

the transaction. Is the likelihood of market *versus* hierarchy solutions different in distinct labour markets? A combination of TCEs emphasis on efficiency and institutional theory's emphasis on institutional variance constitute a basis for how the institutional environment creates costs and incentives. These ideas are not completely foreign to existing frameworks. The regulative environment is one of the pillars of institutions, and this regulative environment creates costs (Scott 1995). Also: 'the institutional environment defines the rules of the game' (Williamson: 1994:80), although how the institutional environment may take different forms in different countries are not elaborated by Williamson. The characteristics of the welfare systems may create costs for employers. For instance, the potential for organizations to reducing labour costs by using non-standard workers are less in countries which have universally based welfare systems. This shows how the incentives for employers to use non-standard labour may depend on the institutional setting, and provides a basis for elaborating on governance of contractual relations in different countries.

4 Methodology and data

The major part of the analyses in this dissertation is based on comparisons between countries and explanations are related to features of the institutional context. Institutional approaches are particularly useful in comparative research, because it points to the importance of the role of the state and of economic, social and political institutions. The 'old' institutionalism was criticized for not including the individuals in the theoretical explanations. In the following, I discuss two, related topics on how to explain social phenomena: (1) the use of institutional explanations, albeit following the principle of methodological individualism, and (2) the usefulness of social mechanism explanations in quantitative and qualitative research.

4.1 Institutions in *explanans*

In studies of organizations and employment relations, as in the social sciences in general, we use concepts referring to both structures and individuals. Two main positions in how to explain social phenomena are methodological collectivism and methodological individualism. The term methodological collectivism is rarely used in social sciences today, probably because of its close association with 'holism' (macro-to-macro-explanations) and functionalism (which is criticized extensively). Both in economics and sociology, the principle of methodological individualism is dominating. However, sociologists tend to be more eager to stress the impact of institutions in the *explanans*.

Neo-institutionalism (i.e. Powell and DiMaggio 1991; Meyer and Rowan 1977) stress the importance of constraints of structure and institutions. For instance, the factors included on the *explanans*-side, characterize relationships between organizations, or society in a broader sense (macro-phenomena), and not individuals (Powell and Dimaggio 1991). I find differences in the use of non-standard work arrangements between institutional context, and explain these differences by features of the institutional contexts, such as labour law, unionisation, public sector, etc. These sorts of explanations have been labelled

institutional explanations. Institutional explanations are those featuring institutional effects, and institutional effects are those that feature institutions as causes (Jepperson 1991). The neo-institutional approach incorporates the notion of the acting individual by stressing cognitive elements from psychology. This version of institutional theory is regarded as reconcilable with the principle of methodological individualism (Øverby 1998).⁹

Applying institutional explanations is not to deny the principle of methodological individualism, at least not in its ‘weak’ form. I define methodological individualism according to the ‘weak’ form, based on Hedström and Swedberg (1998).¹⁰ The weak version takes the same ontological assumption agrees with the strong version in assuming that all social institutions in principle can be explained by only the intended and unintended consequences of individual action. However, the weak version incorporates macro-level states. ‘By taking certain macro-level states as given and incorporating them into the explanation, the realism and the precision of the proposed explanation is greatly improved’ (Hedström and Swedberg 1998: 13).

One example of including macro-level states is the argument in articles 1 and 2, that the labour law creates incentives for employers. Labour law is treated as a macro-level factor. The argument is that this feature of the institutional setting influence employment decisions of employers. It is however, the individuals in the organizations that make the employment decisions (‘escaping’ from the employment regulations on dismissals). Another example (article 3) of including institutions into the explanation is the finding that unions accept certain forms of non-standard work in Norway. I argue that due to the industrial relations in Norway, the impact of unionization on non-standard work can be explained differently than in a less regulated market. Under certain circumstances unions are likely to accept the use of non-standard work arrangements. This interpretation builds on the notion that union members, the workers, and the managers are all embedded in social structures. Their actions depend on what the others do, which again is dependent on the social institutional setting.

As methodological individualism has such a prominent role in economics, the principle is sometimes mistaken for also including assumption of human nature, i.e. the rational choice model. However, taking a methodological individualism approach is not the same as embracing the rational choice model. Methodological individualism makes *methodological* considerations—not substantive assumptions about human nature (Elster 1986). Elster (1989) upholds a strong claim for the principle of methodological individualism at the same time as allowing *social norms* to be included in the premises of explanations (the ‘weak’ form). Social norms are behaviour that is not outcome-oriented, and different from behaviour run by rationality principles (Elster 1989).

4.2 Laws and mechanisms

The positivistic ideal was to follow the methodological rules in natural sciences. One characteristic of this ideal was the imperative to finding universal laws in explaining the relationship between phenomena. In sociology Durkheim (1981 [1897]) has been regarded as taking a positivistic approach, arguing that it was possible to find general laws conducting human behaviour. This position receives little enthusiasm in social sciences today. One problem with the covering-law

model is that it justifies ‘black box’ explanations, not stipulating the mechanism linking *explanans* and *explanandum* (Hedström and Swedberg 1998:8).

Most scholars agree that law-like explanations are an unrealistic goal. Still, to be able to acquire scientific knowledge of society, one has to believe that there exist certain regularities in the world. If everything was accidental, it would be no point in trying to explain anything. The regularities or patterns of society do not mean that we are able to form universal laws, but it does make us able to examine the generation of processes and outcomes. One task in the social sciences is to find plausible explanations to what generates change in structures or social processes.

The social mechanism explanations offer one solution to the shortcoming that universal laws face. These are explanations that ‘systematically seek to explicate the generative mechanisms that produce observed associations between events’ (Hedström and Swedberg 2001:281). The social mechanism explanations are characterized by three core features: the principle of direct causality (opening up the ‘black box’), limited scope (e.g. middle range theory), and the principle of methodological individualism (Hedström and Swedberg 2001). The purpose of mechanism-based explanations is to provide more fine-grained explanations. The social mechanism approach builds on Merton’s (1968) middle-range theories, in which the self-fulfilling prophecy serves as one of the most famous examples of all mechanism-based theories in sociology (Hedström and Swedberg 1998). Social mechanism explanations strongly uphold the principle of methodological individualism, albeit in its ‘weak form’ (see above).

It is useful to think in terms of social mechanism in quantitative research. When I examine for instance the relationship between unionisation and non-standard work arrangement (article 3), this is not a deterministic relationship, but a *probabilistic* one. When A, then sometimes B. (Elster 1998). Or, as more commonly put in quantitative sociology: if A obtain, then E more for people in category B than category X (Helland 2003). Still, it is very difficult to explain what triggered the behaviour, and which particular mechanism was at work. Several mechanisms may be involved and the influence may take opposite directions, making the net effect indeterminate (Elster 1998).

Article 5 provides an example of how to apply social mechanism explanations, and incorporate macro-level factors. The argument is that the employment protection legislation (EPL) influences perception of job security, through a mechanism of comparison. Workers compare themselves to others *within the same context*, (here: the national labour market). These constitute the reference group (Merton 1968). The Norwegian and the Swedish temporary workers are relatively more deprived compared to their co-workers in standard employment, than temporary workers in labour markets, characterized by more lenient regulations on EPL.

The social mechanism approach also provides a useful framework in case-studies. Case-studies are mainly thought of as providing thick descriptions of that is context specific. Thus, the findings from a case study will depend on the context. I argue that case studies can identify mechanisms and processes that can help develop concepts and challenge existing theory. Even if a process generating a certain outcome is context-specific to a certain case, the mechanism explaining this

relationship can be tested in a different context. Thus, an initially context-dependent mechanism can be tried, and found to have wider applicability.

One finding from article 4 was that non-standard workers were able to form a pressures group. This contradicts the conventional picture of non-standard workers, and the hypotheses derived from previous theories. The finding shows how the resistance from agency temporaries may be collective, and not always individualized. The distinct triadic employment relations that characterized the agency temporaries triggered these actions. This is an explanation that may be tried in a different setting, and develop the literature on non-standard work.

4.4 Data

Two main research questions were raised in this dissertation is: First, how does the institutional context influence the use of non-standard work arrangements? Second, what roles do non-standard workers play in organizations and labour markets? This research project, as all projects, derives from an interest of what is regarded significant. Although, it is not possible to be value neutral in the questions raised, one should aim for objectivity in finding the answers to these questions.

In discussing the data I start by defining concepts that are believed to be helpful in evaluating interpretations: validity and reliability. Basically, validity refers to *relevance*. Two main forms of validity are internal and external validity. ‘Internal validity refers to the approximate validity with which we can infer that a relationship between two variables is causal...’ (co-variation, time). Internal validity typically refers to ‘is there a causal relationship from variable A to B?’ External validity refers to the approximate validity to which we can infer that the presumed causal relationship can be generalized (Cook and Campbell 1979: 37). Furthermore, we have validity of data and validity of concepts. Validity in relation to data refers to how relevant the data are to the research question posed. The extent to which theoretical concept and operational definitions correspond establishes *operational validity*.

Reliability refers to the accurateness of the measurement. It refers to *how* the measurements are done. For instance, one has high reliability when independent measurements on the same phenomenon give (close to or) identical results acquired through independent measurements. I will describe the data and discuss the quality of these with references to generalization, validity and reliability. Data used for these articles derive from three main sources.

(1) Representative samples of establishments in Norway and the U.S.

The two surveys of establishments in the U.S. and Norway provide the empirical basis for examining how institutional features can explain variance the use of non-standard work arrangements. The survey method is particularly valuable when representativeness and generalization are central study objectives (Knoke et. al. 2002). Because organizations do not maintain records of non-standard arrangements in a standardized form, surveys are the only practical method of assembling representative information about them (Knoke et al. 2002).

Three of the articles (1,2 and 3) are based on telephone surveys of 802 establishments in the U.S. (NOS-II) and 2130 establishments in Norway (article 3 only uses data from the Norwegian survey). The purpose of the two surveys was to

be able to generalize to the population of establishments. The sampling frames in these surveys consist of lists or registers of the population of establishments. The U.S. sample was drawn from a list of establishments provided by Dun and Bradstreet Information Services, and the Norwegian sample from *Bedrifts- og foretaksregisteret* (Establishment register) provided by Statistics Norway. These samples are representative of all Norwegian establishments and U.S. establishments with more than 10 employees.¹¹ Both samples were stratified by establishment size (number of employees), since the majority of work organizations are small, in both Norway and the U.S. (see tables 2 and 3). To ensure that the samples contained a sufficient number of large organizations, the establishments were sampled with probability proportional to their size.

The definition of an establishment is the same in both countries. 'en lokalt avgrenset enhet der det foregår produksjon av varer og tjenester som i hovedsak faller innenfor én næringsgruppe' (jmf standard for næringsgruppering). The establishment is the basic organizational unit of analysis in these surveys. The establishment is the physical site—different from the 'firm' which refers to the corporate entity (Kalleberg 1994). One possible problem of using register lists is that newer founded establishments may not be registered. The Norwegian register was updated in 1995, which precludes selection of establishments founded after 1995.

The response rates of these surveys were 55 percent (United States) and 76 percent (Norway). As the response-rates are high and equally distributed according to size and industry, they serve as a good basis to generalize to the population of establishments in the two countries.

Table 3, 4, and 5 present information on the surveys of establishments in the U.S. and Norway. Table 3 presents the distribution of Norwegian establishments by industry; Table 4 shows the distribution of Norwegian establishments by size; and Table 5 the distributions of U.S. establishments by size and industry. Table 3 and 4 shows that the response-rates overall are high in all the sample segments in Norway.

Table 3. Gross- and net samples, response rates, and proportion establishments by industry. Norway

Industry	Gross sample	Net sample	Response rates	Proportion establishments (weighted)
	<i>N</i>	<i>N</i>	%	%
Agriculture	9	7	78	0,4
Fishing	9	4	44	0,2
Mining	40	33	83	0,3
Manufacturing	723	557	77	15,8
Utilities	43	38	88	1,4
Construction	178	127	71	6,0
Wholesale and retail	531	377	71	21,7
Hotel and restaurant	162	116	72	4,7
Transport and communications	214	149	70	4,8
Finance	65	46	71	1,9
Real estate	254	190	75	6,6
Public services	85	76	89	4,7
Education	144	132	92	11,8
Social services	287	237	83	17,6
Other social services	54	41	76	2,1
<i>N</i>	2798	2130	76	100

Table 4. Establishment data 1997, Norway. Number of man labour years in population, population of establishments, gross- and net samples, by establishment size and private/public sector. Response rates in parentheses.

Strata	Private				Public			
	Man labour years	<i>N</i> population	Gross sample	Response rates <i>N</i> (%)	Man labour years	<i>N</i> population	Gross sample	Response rates <i>N</i> (%)
	over 300	113.451	189	189	139 (74)	94.357	136	136
251-300	20.792	75	75	60 (80)	7.495	27	14	13 (93)
201-250	25.078	112	94	68 (72)	9.783	44	18	14 (78)
151-200	33.548	195	125	102 (82)	12.902	74	24	23 (96)
101-150	57.237	470	213	169 (79)	23.661	192	44	42 (95)
76-100	42.72	494	160	120 (75)	19.591	228	37	34 (92)
51-75	62.675	1023	233	183 (79)	29.834	491	56	49 (88)
36-50	58.961	1398	220	161 (73)	32.892	787	62	53 (85)
21-35	99.954	3772	372	265 (71)	53.928	2028	101	92 (91)
16-20	56.113	3458	209	147 (70)	27.248	1524	51	46 (90)
10-15	83.057	6517	310	200 (65)	29.406	2288	55	44 (80)
Total	653.586	17403	2200	1614 (73)	341.097	7817	598	516 (86)

Table 5 shows that the distributions of establishments in the U.S. sample by industry and size closely resemble the population distributions of establishments by these two characteristics in the year that the data were collected. With regard to industry, the percent of establishments in the (weighted) sample underrepresented by about 5 percent the population percentage of U.S. establishments in finance, insurance and real estate; with regard to size, the percent of establishments in the (weighted) sample underrepresented by about 11 percent the population percentage in the largest size category.

The surveys presented here is perhaps the most common form of organizational surveys (when the organization is the unit of analysis). It is conducted at one point in time and data are obtained from one informant in each organization. Only having one respondent may be problematic, because one relies on one individual to have the sufficient knowledge to the questions one poses. (Thus, identifying the informant is of great importance.) However, the extent of the problem depends on the items at study. The items here are mainly concerned on whether, and in what amount (i.e. number of employees) the firm use certain work practices or arrangements. The nature of the questions is not likely to be considered sensitive issues. The questions are not of a kind that concerns values or organizational culture that would be hard to accomplish information about from based on one informant. The main critique that may be raised towards these surveys is possibly whether the personnel managers have sufficient knowledge of the establishments. The potential problem of lack of knowledge may also be greater in larger than in smaller establishments.

Table 5. NOS II-data, the U.S. Representativeness of data by industry and size. Distribution of establishments.

	N establish- ments, Sample	N establish- ments, Population	% establish- ments, Population	N establish- ments, Sample (weighted)	% establish- ments, Sample (weighted)	Difference: %weighted sample- % Population
(1) Industry (1-digit siccode)						
Agriculture (0)	22	116 973	1.7	2.5	3.8	2.1
Mining and construction (1)	34	696 233	10.1	5.5	8.3	-1.9
Manufacturing (2, 3)	166	393 840	5.7	3.2	4.9	-0.9
Transport, comm., utilities (4)	65	301 628	4.4	3.0	4.5	0.1
Wholesale and retail (5)	209	2 123 259	30.9	21.8	33.0	2.1
Finance, insurance, real estate (6)	57	678 129	9.9	3.2	4.9	-5.0
Services (hotels, personal) (7)	111	1 088 491	15.9	12.1	18.3	2.5
Health, legal, edu. services (8)	338	1 465 112	21.3	14.9	22.5	1.2
Missing	0	31 204	0.5		0.0	-0.5
Total	1 002	6 894 869	100.5	66	100.2	
(2) Size groups						
0	37	721 844	10.5	8.97	13.6	3.1
1-4 employees'	95	2 642 590	38.3	27.03	41.0	2.6
5-9'	68	1 022 901	14.8	11.01	16.7	1.8
10-19	87	639 090	9.3	7.01	10.6	1.4
20-99	252	682 580	9.9	8.52	12.9	3.0
100-499	208	308 633	4.5	2.61	4.0	-0.5
500+	255	877 231	12.7	0.96	1.5	-11.3
Total	1 002	6 894 869	100.0	66.11	100.2	

Internal validity

To be able to examine the impact of institutional on non-standard work (or other employment relations) two main approaches are feasible: to compare countries that differ in regard to institutional settings, or to examine an institutional change and its effects over time. Neither of these approaches is perfect. The first approach, which I take, compares the use of non-standard work in organizations located in different labour markets. By comparing similar organizations (according to size, industry, competition, etc) in these distinct labour markets, we try to assess how much of the variation in non-standard work can be accounted for by institutional differences. Comparing organizations in Norway and the U.S. is likely to be fruitful because these countries differ in the institutional and regulatory factors that may affect employers' choices regarding employment. The idea is that given an organization in Norway and the U.S., of same size, within the same industry, and having similar demand for labour, much of the differences in their use of non-standard work can be explained by differences in the institutional setting in these countries. Of course, we can never be sure to have accounted for all the differences. Furthermore, we are not able to rigorously test whether the differences in the use of non-standard labour reflect the employment protection or the access to leave of absence.

Another institutional feature of main interest is unionisation. In article 1, 2, and 3 the impact of unionisation on non-standard work is one of the main questions. We examine how the degree of unionisation will affect the use of non-standard work. However, given the data used here, we are not able to examine this relationship over time. Having longitudinal data would increase the opportunity for assessing the direction of the causality between unionisation and non-standard work.

(2) Case study of three companies in Norway

The case study provides the empirical basis for examining the role of non-standard workers in organizations. Qualitative case studies are associated with in-dept knowledge as opposed to broad patterns. I conducted 20 semi-structured interviews with top- middle- and lower level managers and union-representatives, all during 2000 (five interviews in FINANCE-I, eleven in FINANCE-II, and four in TELECOM). The interviews lasted on average one hour. In FINANCE-I and TELECOM, I also conducted some telephone-interviews and had e-mail correspondence with persons that were unable to attend a full-length interview. At TELECOM the data collection had to stop at an earlier point than planned due to bankruptcy.

The selection of cases depends on the purpose of the study. Yin (1984) and Stake (1995) distinguish between cases that are chosen based on the characteristics of that particular case, or its strategically significance. Furthermore, Stake (1995) distinguish between *intrinsic* and *instrumental* case studies. The purpose in intrinsic cases is to increase the knowledge of one particular issue, phenomenon or process. Instrumental case studies have a broader goal – to increase the general knowledge of a phenomenon. Then, the case or the cases should represent the kind of phenomenon at study. These cases selected for this study is of the latter kind. Also, selecting more than one organization increases the diversity, while selecting organizations within the same industry controls for some

variation (see Eisenhardt 1989). One advantage of replicating the data collection in several organizations is to overcome being too focused on specific historical events or idiosyncrasies of a certain organization.

The interviews were semi-structured and the informants were managers at top- middle- and lower level, and union-representatives. The interviews were conducted during 2000. They were recorded, transcribed, and coded, using NUDIST. The coding was structured to make comparisons within and between companies. The main weakness of the case study may be the relatively few informants. As getting access to the organizations was difficult and time consuming, the data collection had to stop at an earlier point than preferred. This was particularly critical in one company that faced bankruptcy.

In case studies, the objective is not to produce statistical generalizations to a larger population. The findings are context-specific to service-sector (see article 4). However, the article provides explanations for the use of non-standard work that may be tried in a different setting, for instance the pressures for integrating non-standard workers in the daily activities in the client-firms.

The advantage of doing qualitative research is to be able to find new approaches and new research questions. Posing some of the same questions to several informants increases the validity of the data. It is also possible to use many questions to capture the concepts one aim to examine. However, the reliability may be a problem in qualitative research because it is harder to replicate a qualitative study compared to for instance a survey.

(3) Survey of workers in Scandinavia, the U.S. and U.K.

Article 5 addresses to what extent the perception of job security depends on the institutional setting. This highlights what role temporary workers play in the labour market.

Article 5 is based on the ISSP 1997 from five countries. The ISSP, module on 'work orientation', measures work attitudes, work values, and job rewards among individuals. The same questions were posed to a representative sample of the adult populations in all countries. Founded in 1984, the ISSP now consist of 39 nations (ISSP 2005). The ISSP aims to ask questions in the same way and it concentrates on developing questions that are meaningful to all countries. Table 6 presents the response rate, sample numbers, etc for the ISSP data. Measures of coding reliability were used in the surveys in all five countries.

Table 6. Information on the ISSP 1997.

	Sweden	Norway	Denmark	Great Britain	U.S.
Response rate (%)	64	63	64	62	73
<i>N</i>	1353	2199	1034	1087	1228
Date of fieldwork	1997	1997	1997	1997	1998

Note: Information is based on Harkness *et al.* (2000).

In assessing the internal validity one needs to evaluate whether there is a causal relationship between the national context and job security in these five countries. Temporary workers have by definition less job security than workers in standard employment in all these countries. One purpose in article 5 is to examine how the institutional context can explain differences in perceptions of job security between temporary and regular workers in different countries. The five countries are selected because they consist of two main groups of countries that differ on institutional features (Scandinavia and Anglo-Saxon countries). These five countries differ in regard to institutional features, such as EPL and welfare systems that are believed to shape the segmentation of workers.

One weakness in these analyses is that the indicators only include the subjective evaluations of workers' job security. (i.e. to what extent do individuals agree that 'my job is secure'). Other measures, such as the likelihood of being dismissed, or sanctions against lay-offs would make the measure of job security stronger. However, the perceptual measures seem to correspond fairly well to the labour market situation in these countries, suggesting that the measures capture the concept job security rather well.

One limitation in these analyses is that I cannot fully establish whether the institutional or the economic situation is more important to workers' job security, having data only at one point in time. The economic situation in these countries (with the exception of Sweden) shared similarities in the period, which suggests that institutional features in part can explain the differences in job security. However, having longitudinal data would enable me to make stronger assessments on this matter.

5 Summary of the articles

The articles are presented according to the time (or probable time) of publication. Article 1 examines determinants of functional and numerical flexibility in Norway and the U.S. Article 2 examines determinant of non-standard work arrangements—also in Norway and the U.S. Article 3 examines the impact of unionisation on non-standard work, in Norway. Article 4 studies how non-standard workers are used internally in the organization. Lastly, article 5 examines the role of temporary workers, in Norway, Great Britain, and the U.S.

Article 1: Kalleberg, Arne L. and Karen M. Olsen (2003) 'Comparing Flexibility: Flexible Firms in a Cross-National Perspective'. *Beta*, vol 17(1): 19–35.

Most of the research on organizational flexibility has focused on the United States, United Kingdom, and Canada. These studies have tended to be firm-centered, emphasizing employers' choices regarding how they organize work. In this article, we outline some ideas for a cross-national research agenda on organizational flexibility and its consequences for organizations and workers. We illustrate some of the issues involved in the cross-national study of flexible firms by comparing two countries that differ in institutional and regulatory factors that may affect firms' choices regarding employment: Norway and the United States.

This article examines whether establishments, in Norway and the U.S., tend to combine the two main forms of flexibility; numerical *and* functional

flexibility. Using both these forms of flexibility may suggest that firms have adopted some form of core-periphery labour utilisation strategy.

The data we use to examine these questions come from telephone surveys of managers in 802 establishments in the U.S. (NOS-II) and 2130 establishments in Norway. We use a Logit-model to test whether organizations in Norway and the U.S. combine functional and numerical work practices. In the analyses, we control for unionisation, number of employees in the establishment, and whether the establishments operate in an international market.

The findings show that the use of functional flexible work practices is equally prevalent in both countries; only the use of self-directed teams seems to be more widespread in Norway. While this may reflect a convergence between the countries, we emphasize that the content of these work practices depends on the institutional settings. Functional work practices, like autonomous work groups, were an important principle of work organization in 1960s. The experimental projects involving new principles of work organization in the manufacturing industry were very much the same principles of work organization that now are launched under different labels, such as 'high performance work organizations'.

We find more establishments in Norway to combine functional and numerical work practices, which are mainly due to Norwegian organizations' more use of non-standard work arrangements (see also article 2). The article provides suggestive evidence that a substantial percentage of establishments in both countries have adopted some form of core-periphery labour utilisation strategy.

Article 2: Olsen, Karen M. and Arne L. Kalleberg (2004) 'Non-standard work in two different employment regimes: Norway and the United States'. *Work, Employment, and Society*, 18(2): 321-346.

One way to examine the impact of institutional factors on non-standard work is to compare organizations in countries that differ regarding institutional setting. In this article we compare organizations in Norway and the United States. These countries differ in the institutional and regulatory that may affect firms' choices regarding employment. Whereas the Norwegian labour market is regulated and labour is strong, labour markets in the U.S. are relatively unregulated, leaving employers with more regarding the use of particular employment relations. This article addresses two main questions: (1) how does national context affect the use of non-standard work arrangements?; and (2) how do institutional factors such as unionisation and the public sector affect the use of non-standard arrangements in these two countries?.

The data we use are the same as in article 1. We use several methods to test our hypotheses about the establishments' use of non-standard arrangements; the Logit-model, Ordinary least square regression (OLS), the Tobit-model, the conditional fixed effect Logit-model, and fixed effect linear regression. The purpose of these analyses is to be able to examine the effects of the institutional contexts by controlling for certain dimensions of organizations.

We find that Norwegian establishments make greater use of non-standard arrangements than the U.S. establishments. We offer two main explanations. First, we argue that this is due in part to the greater overall restrictive labour market regulations on hiring and firing regular workers. To avoid dismissals in the future, establishments may use work arrangements that are less costly to terminate. This

mechanism has been labelled and an escape-mechanism (strategic version of institutional theory). The second explanations as to why organizations in Norway use more non-standard work arrangements is the greater demand for temporary labour resulting from generous access to leaves of absence, in Norway. This explanation has also a basis in institutional theory, and shows how the welfare-state in Norway produces a need for temporary labour.

We also find that certain institutional factors have a similar impact in both countries. For example, highly unionized establishments tend to have the lowest use of non-standard arrangements in both countries. We interpret this as a result of the collective groups of workers fighting against the use of non-standard arrangements, which makes it harder for management to introduce them in these establishments.

Article 3: Olsen, Karen M. (2005) 'Unions' Dilemma When Firms Use Employment Intermediaries', *European Sociological Review*, 21 (3).

Non-standard work arrangements may represent a danger to labour unions, by weakening the solidarity upon which union membership is based. In this article I examine one distinct form of non-standard work, those run by the means of employment intermediaries: workers employed by THAs or contractors. These arrangements deviate from the standard form of employment and unions generally oppose these arrangements. However, organizations may have a variety of reasons using employment intermediaries, not all being opposed by unions.

This article examines how the use of employment intermediaries relates to the degree of unionisation in the establishment. I distinguish between two main categories of reasons for using non-standard workers: (1) as a response to particular staffing needs, such as adjusting the workforce to variable labour demands, and (2) as a means to lessen the dependence on (and ultimately replace) regular workers.

Unlike article 1 and 2 this article analyses only organizations in Norway. The analyses are restricted to private sector establishments, because employment intermediaries are less often used in the public sector. I use a multinomial logit model to test whether the degree of unionisations affect reasons for using employment intermediaries. The four clusters of reasons (outcomes) are staffing needs, recruitment, special expertise, and avoid regular workers. The explanatory variables are unionisation, establishment size, and industry.

Two main findings are reported. First, the degree of unionisation is positively related to the use of employment intermediaries for staffing needs. Second, highly unionized establishments tend to have the lowest use of THAs and contractors for reasons that may replace regular workers. I interpret the findings in relation to how workers may be insiders or outsider, suggesting that groups of workers contain varying degrees of power and interests. The article illustrates the dilemma that unions find themselves in—generally opposing employment intermediaries—but also recognising the protection they give the regular workers in the firm.

Article 4: Olsen, Karen M. (2005) 'The role of Non-standard Workers in Client-organizations'. To be revised and resubmitted to *Relationell Industrielles/Industrial Relations* (Canada).

The article explores how client-organizations use non-standard workers (agency temporaries and contract workers). Previous research on non-standard work typically conceptualizes organizations and labour markets in terms of a core-periphery division. The core-periphery model is grounded in the assumption that certain tasks or activities in an organization are more vital than others. This article analyses workers, that are hired by employment intermediaries, but unlike article 3 the focus is on how the client-organizations use these workers internally.

In this article, I use qualitative case study data. The cases include two organizations within the financial sector and one within telecommunications. I conducted 20 semi-structured interviews with top- middle- and lower level managers and union-representatives, all during 2000.

This article challenges conventional wisdom of how firms use non-standard workers. Contrary to what is assumed in the literature on non-standard work, I find that agency temporaries and contract workers are often used in vital activities, they are largely integrated with regular workers that managers require loyalty of non-standard workers, and that non-standard workers are able to develop pressure groups in client-organizations.

The conditions under which this dependence is created can partly be explained by the shortage of skilled labour, and partly by having let non-standard workers share the tasks of regular workers. First, the demand for contract workers in the information technology industry was great at the time of the study. This enabled contract workers to pick and choose the more interesting and well-paid jobs, making regular employment at the client-organizations less attractive. The second factor that creates this dependency is related to *how* the client-organizations often use agency temporaries and contract workers: in critical positions, on a long-term basis, and integrated with regular workers.

Article 5: 'Job security and Temporary Employment in Scandinavia, Great Britain and the U.S.' Submitted to *Work, employment and Society*, June 2005.

This article takes the perspective of the individual workers. I pose two main questions: (1) How does national context affect job security of workers; and (2) how do institutional features, such as labour law influence the segmentation of temporary and regular workers with regard to job security? Temporary jobs are surrounded by distinct regulatory and institutional settings in Scandinavia and the Anglo-Saxon countries. The aim is to explain differences in job security *between* countries and between groups of workers *within* countries. Besides the labour market situation being important to job security, two institutional features are of main interests in explaining differences in job security: (1) the welfare systems, and (2) labour law, by its definition of temporary work and the employment protection legislation (EPL).

Data consists of a cross-national data set, the 1997 *International Social Survey Program (ISSP)* module on 'work orientations'. I use information about workers in Scandinavia, the U.K and the U.S. from the ISSP data, 1997 (total 4157 workers). I use a logistic regression model to examine differences in job security between countries. In order to examine the differences in job security between temporary and regular workers, I use an ordered logit model, conducted separately for each country.

I report two main findings. First, workers in Great Britain and Sweden experience the lowest job security, which can partly be explained by the labour market situation and partly by the welfare system in these countries. Second, temporary workers experience lower job security than workers in regular (open-ended) employment, and worry more about losing their jobs in Sweden and Norway, whereas there are small differences in perceptions of job security between temporary and regular workers in the Anglo-Saxon countries and Denmark. This finding is interpreted in relation to the argument that employment categories are social contracts (Nesheim 2002). The meaning and content of holding a temporary contract will depend on the institutional setting, such as how these contracts are regulated in labour law. In countries characterized by lenient employment protection legislation, the workers' perception of job security depends little on the employment contract. This can be explained by workers comparing themselves to others *within the same context* (here: the national labour market). In this case it is temporary workers that compare themselves to regular workers within the same context. Even though a temporary contract ends at a predefined point in time, both in Scandinavia and the Anglo-Saxon countries, the relatively stricter employment protection in Norway and Sweden makes the gap in perceptions of job security greater than in the other countries.

6 Implications

6.1 Further research

Labour law and welfare state

We find, by comparing two distinct labour markets, Norway and the U.S., that institutional features are important in shaping employment relations in organizations. The two main arguments from article 1 and 2, says that a relatively strict legislation in terminating open-ended contracts, coexisting with a generous benefit schemes produce a certain demand for non-standard work. In order to assess which of these two factors are more important to employment, further research should be conducted. A study of countries that differ in the access to leave of absence while the labour market is equally regulated is needed to disentangle the relative effects of these factors.

One proposal for further research would be to include organizations in more countries, such as Spain, Italy, or France, which also are characterized by strict labour legislation (OECD 2004), but differ in type of welfare regime compared to the Scandinavian countries. One other interesting example would be including organizations in Denmark, which is characterized by more lenient regulations on termination open-ended contracts, but shares strong similarities social democratic welfare-regimes as Norway.

Convergence?

We find similarities in the use of work practices aimed to increase functional flexibility in Norway and the U.S. (article 1), whereas Norwegian establishments have more use of non-standard work arrangements aimed at increasing numerical

flexibility (article 1 and 2). Our data do not permit us to test rigorously whether the distinctly different national institutions and cultures in Norway and the United States lead to a divergence in their use of non-standard work arrangements or whether uncertain and highly competitive market and environments will promote a convergence toward a common institutional order of the economy (Form 1979).

The globalization-thesis suggests that increased globalization of markets will reduce the importance of institutional factors and national regimes. This dissertation challenges this popularized view, showing that labour market institutions, such as labour law and unionization influence how organizations structure workforce. However, even though we find great differences in the use of non-standard forms of labour in these countries, the trends may be similar in both countries, which subsequently may be followed by a convergence. Adjudicating between such alternative hypotheses too requires longitudinal data on organizations in these countries. Thus, analysing data over time would enable us to establish whether there is convergence in these countries.

Comparative perspective on the quality of jobs

Much of the literature on non-standard work originates from the Anglo-Saxon countries, where the welfare states are less developed and universal benefits are fewer. This may explain why aspects of welfare states have been more or less absent from the literature on non-standard work. However, recent research on non-standard jobs (Kalleberg *et al.* 2000; McGovern *et al.* 2003) has drawn the attention to benefits and non-standard jobs, raising an interest in how the quality of (non-standard) jobs may depend on the institutional setting.

Esping-Andersen's de-commodification is useful concept in studying the quality of work, namely to what extent benefits are linked to employment. This concept relates to how the state serves as a buffer between labour and capital (Esping-Andersen 1998). The concept is particularly useful in studies of non-standard work, because it points to what is the basis for benefits: employment or citizenship. Due to non-standard workers often precarious position in the labour market, they are at higher risk for being excluded from benefits. This risk may, however, depend on the welfare regimes. In countries with high degree of de-commodification, such as the Scandinavian countries all workers (and sometimes all citizens) are guaranteed an income, also when they are not working because of illness, accidents, and unemployment. By contrast, in countries, such as the U.S., and to some degree UK, benefits are fewer and to a lesser extent provided on a universal basis. These institutional differences call for more comparative research on the quality of non-standard jobs.

6.2 Theoretical implications

Institutions, structures and incentives

This dissertation presents findings that show the importance of including institutions and structures into examining the use of non-standard work arrangements. Institutional theory provides a basis for explaining why there are great variations across nations. It provides an antidote to the economic models, which assume rational actors in free markets, the main motivation being the aim of efficiency. By contrast, TCE tries to develop a framework to prevent including

analyses of social structures and institutions, showing how the rise of institutions can be explained by efficient solutions (Granovetter 1985).

In institutional theory legitimating motivations and normative pressures are vital in explaining how work is organized. I argue that integrating institutional theory and TCE provide a basis to developing a framework for how institutions produce incentives. The welfare systems and employment protection legislation in a country can influence employment decisions by enforcing legitimating, as assumed in institutional theory. However, the same institutional features may also produce incentives for organizations. Thus, economic motivations and institutional explanations can be integrated.

Challenges to core-periphery

Conventional wisdom says that non-standard workers are located in the periphery of the organization, that they are easily disposable, segregated, and perform tasks that are not firm specific. The findings from the case study suggested that the labour market situation has a strong influence on firms' use of non-standard workers, particularly for those workers whose skills are in great demand. On the one hand, the findings in this article seem to contradict some of the predictions based on existing theory (one important basis being TCE), by showing that firms use non-standard workers even when human capital is high, and firm-specificity is required. On the other hand, the findings give some support to the same theoretical frameworks pointing to various unfortunate consequences of non-standard workers being hired for situations when internal employment would be preferable.

One lesson to be learned from this study is that even though the client-firms examined all had seemingly clear policies towards the use of non-standard workers, labour market shortfalls made for policy deviations in the use of non-standard workers. The findings suggests that even though employers may intend to employ workers according to a certain policy, such as a core-periphery strategy, the evidence of what they actually do, fails to support this. This suggests that the concepts of 'core' and 'periphery' may not be as useful as its dominance in literature on organizations and labour markets suggests.

Segmentation in economic sociology

In economic theory, the division of workers into insiders and outsiders provides a basis for diversity of interests and uneven market power. The concepts of insiders and outsiders can be applied to distinctive pairs of groups, such as regular *versus* non-standard workers, or union-members *versus* non-union members. In sociology such pairs of distinction is regarded as a source of inequality. For instance, the division of workers in organizations may create a polarization of workers into 'good' and 'bad' jobs. I apply the concepts of insiders and outsider to show how there may be diversity of interests between groups of workers. These diversities may again influence the power of unions and unions' ability to influence employment decisions in organizations. Combining the structural aspects from sociology with the diversity of interests in economics illustrates the potential for further developments in integrating perspectives from sociology and economics.

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Endnotes:

¹ Torp (2005), using establishment data from 2003, is partly a follow-up of the 1997-study.

² The data from *The International Social Survey Programme* (ISSP) 1997 are provided by *Norwegian Social Science Data Services* (NSD). The ISSP and NSD are not responsible for the analyses of the data or the interpretations offered.

³ 'Ideal types' are "pure constructs of relationships" (Ringer 1997). They are valuable as cognitive means, to the extent that they lead to knowledge of "concrete cultural phenomena in their interconnections, their causes, and their significance" (Ringer 1997 quoting from *Objektivitet*).

⁴ The model of the 'flexible firm' (Atkinson 1984) revitalized the concepts of core and periphery. The core-periphery idea is grounded in the assumption that certain tasks or activities in an organization are more vital than others. However, the concepts have roots in other classical works within organizational theory, such as Thompson (1967).

⁵ The term contingent was first used by Audrey Freedman referring to work arrangements that were conditional on employers' needs for labor, thus lacked an attachment between employer and workers (see Kalleberg 2000).

⁶ The term 'new' reflects that this tradition derives, yet deviates from its founders—the 'old' institutional thinking (e.g. Durkheim, studying 'social facts as things'). This 'old' version of institutional theory has been largely criticized, mainly for their tendency to use holistic explanations, not including the acting individual, and disregarding social change.

⁷ The resource based perspective stresses power and internal interdependence in organizations. It does not explicitly discuss employment relations or non-standard work.

⁸ As defined by Bracker (1980): 'entails the analysis of internal and external environments of a firm to maximize the utilisation of *resources* in relation to *objectives*'.

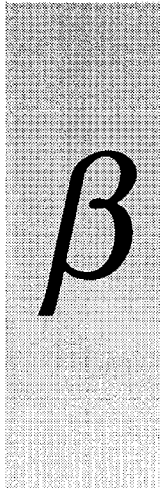
⁹ The methodological individualism, as used in sociology, differs from how it normally is used in psychology and economics. 'The action being analyzed is always action by individuals that is oriented to the behaviour of others' (Hedström and Swedberg 1998: 13).

¹⁰ The strong version only accepts explanations that include no reference to aggregate social phenomena in *explanans* (Hedström and Swedberg 1998: 12). It is hard to see how this strong version can be incorporated into institutional explanations.

¹¹ The U.S. sample included establishments with less than ten employees, which we excluded here to make the samples more comparable. This leaves us with 802 U.S. establishments instead of the original 1002.

Comparing Flexibility: Flexible Firms in a Cross-National Perspective

Arne L. Kalleberg and Karen M. Olsen



This paper illustrates the usefulness of applying a cross-national perspective in HRM research, here exemplified by a study of organizational flexibility. We compare numerical and functional flexible work practices in the United States and Norway. We explain the greater use of numerical flexible work practices in Norway by the stricter regulations on employers' access to terminate regular contracts, and the substantial use of leave of absences. The use of functional flexible work practices is equally prevalent in both countries; only the use of self-directed teams seems to be more widespread in Norway. While this may reflect a convergence between the countries, we emphasize that the content of these work practices depends on the institutional settings. Furthermore, we suggest that the implications of flexible work practices may differ in these countries. Because fringe benefits, such as health insurance, are provided to people based on their residency in Norway, not their employment status, holding a temporary job may have less unfortunate implications in that country.

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Introduction

Social and economic changes in all industrial societies during the past quarter century (such as the increase in women's labor force participation and greater diversity in labor markets, growth in international and price competition in product markets, rapid developments in technology, and corporate financial restructuring in capital markets) have underscored the need for organizations to have greater flexibility in their human resource management (HRM) practices and employee relations systems.

Employers and societies have responded to these changes by seeking two main kinds of flexibility. First, functional or internal flexibility refers to the ability of employers to re-deploy their workers from one task to another.

This is facilitated by the use of "high performance work systems" that empower workers to participate in decision-making, enable them to work in teams, and enhance their ability to work in a variety of jobs (see Appelbaum and Batt 1994; Osterman 2000; Gittleman 1999; Wood 1999). Second, numerical or external flexibility refers to the organization's ability to adjust the size of its workforce to fluctuations in demand. While organizations can obtain numerical flexibility by asking or requiring their regular, full-time employees to work overtime, such flexibility is more often accomplished by using workers who are not their regular, full-time employees such as short-term hires, temporary help agency employees and contract company workers. These are often labeled nonstandard workers and may include both high skilled (e.g., consultants and inde-

pendent professionals) and low skilled (e.g., clericals, food service) workers.

Greater flexibility has frequently resulted in benefits for employers. Organizations adopting high performance work practices have often reported that they experienced improvements in productivity and performance (Appelbaum, Bailey, Berg and Kalleberg 2000; Huselid 1995.) Some organizations have also been able to save on labor costs by using temporary and part-time workers, and subcontracting and outsourcing non-essential functions have enabled some organizations to concentrate more on their core competences and thereby to utilize their resources more efficiently.

Most of the research on organizational flexibility has focused on the United States, United Kingdom, and Canada. These studies have tended to be firm-centered, emphasizing employers' choices regarding how they organize work. This reflects the highly deregulated labor markets and employment relations that characterize these countries, in which state regulations and institutions play relatively small roles in employers' decisions to adopt one or the other form of flexibility. Illustrating this, Smith, Masi, van den Berg, and Smucker (1995: 705) found that there was much less uniformity across industries in the use of external (numerical) flexibility in Canada than in Sweden.

Studies of the consequences of working in flexible employment relations have also tended to center on Anglo-Saxon countries. Some research has shown that efforts to increase functional flexibility in the United States have led to benefits for some organizations and for certain workers who have obtained greater opportunities for autonomy and higher wages (see Appelbaum *et al.* 2000). For other workers, it is argued that there is often a "dark side" to employers' search for flexibility: the flip side of flexibility is insecurity and there has been a general increase in job insecurity in the work-

force (e.g., Harrison 1994; Standing 1997). In these cases, employers' attempts to achieve flexibility have led to increased segmentation of their workforces into "core" and "periphery" components, creating a division between organizational "insiders" and "outsiders".

A cross-national perspective is essential for appreciating the variability in causes and consequences of flexible employment relations. Organizations in all industrial countries need to be flexible in order to respond to competition, technological changes, and diversity in labor force composition. The types of flexible labor utilization strategies that organizations are likely to adopt, however, depend on their country's institutional context. In addition, the impacts on individuals of outcomes that are often associated with flexibility—such as insecurity and inequality—are also likely to be shaped considerably by the institutional circumstances that differ among countries.

In this paper, we outline some ideas for a cross-national research agenda on organizational flexibility and its consequences for organizations and workers. This is a particularly apt topic for attempts to integrate rational economic and institutional perspectives on HRM. We illustrate some of the issues involved in the cross-national study of flexible firms by comparing two countries that differ in institutional and regulatory factors that may affect firms' choices regarding employment: Norway and the United States. Norway is often labeled a corporatist country (Goldthorpe 1984; Høgsnes 1994; Western 1994), in which labor is strong and collective bargaining is widespread (the proportion of unionized employees in the Norwegian labor market is 60 percent—Stokke 1998). Moreover, Norwegian labor law places relatively strict limits on employers' choices regarding employment arrangements. By contrast, labor markets in the United States are relatively deregulated, leaving employers with more choices as to what employment

arrangements to use. Labor in the U.S. is relatively weak (unions' share of the workforce in the U.S. is less than 14 percent—Bronfenbrenner *et al.* 1998), individual contracts dominate, and employers tend to use dualist strategies that offer good jobs to some workers and bad jobs to others (Goldthorpe 1984).

We first describe the two main ways in which employers have sought to implement flexible HRM practices and summarize briefly some evidence on employers' use of these strategies in Europe and the United States. We then illustrate how the use of numerically and functionally flexible practices differs between establishments in Norway and the United States. We finally discuss some implications of organizational flexibility for employees in these two countries.

Flexible HRM Practices

Much attention has been paid in recent years to forms of work organization and human resource management practices that are designed to enhance functional flexibility. These practices seek to provide employees with skills, incentives, information, and decision-making responsibility that improve business performance and facilitate innovation. The pervasiveness of these studies has led some to suggest that a focus on such new work and human resource management practices constitutes a "new paradigm" that is replacing unions and collective bargaining as the core innovative force in industrial relations research (Godard and Delaney 2000). These new practices have been called, alternatively: high performance work organizations (Appelbaum *et al.* 2000; Osterman 2000), transformed work organizations (Osterman 1994), flexible or alternative workplace practices (Gittleman, Horrigan and Joyce 1998), employee involvement systems (Cotton 1993), flexible production systems (MacDuffie 1995), progressive

human resource management practices (Delaney and Huselid 1996), high-commitment systems (Walton 1985), and high-involvement management (Lawler 1988; Wood 1999).

A second, distinct, strand of research on organizational flexibility centers on employers' attempts to obtain numerical flexibility and otherwise reduce costs by using workers who are not their regular, full-time employees. Forms of externalized labor have been called, alternatively, flexible staffing arrangements (Houseman 2001), market-mediated work arrangements (Abraham and Taylor 1996), contingent work (Polivka and Nardone 1989), and non-standard work arrangements (Felstead and Jewson 1999). A growing literature has sought to document and explain the growth of organizations' use of flexible staffing arrangements (e.g., Houseman 2001; Kalleberg, Reynolds and Marsden 2003).

While most studies of organizational flexibility have emphasized either functional or numerical flexibility, some have sought to explain how organizations are able to obtain simultaneously these seemingly contradictory forms of flexibility (see the review in Kalleberg 2001).

An influential conceptualization of the way organizations in Anglo-Saxon countries combine these two forms of flexible labor utilization strategies is the dualist "core-periphery" model popularized by John Atkinson (1984; 1987) in the United Kingdom. This mode has been called, alternately, the "core/ring" configuration (e.g., Olmsted and Smith 1989), "shamrock" organization (Handy 1990), two-tier organization (Christensen 1991), and the "attachment-detachment" model (Mangum, Mayall and Nelson 1985). This model suggested to managers that they internalize part of their workforces (the "core," regular, permanent workers who are highly trained, skilled and committed to the organization, attributes

that are thought to be needed for functional flexibility) at the same time as they externalize other activities and/or persons by means of transactional contracts. Segmenting the organization's workforce into fixed and variable components is assumed to achieve cost effectiveness, as the numerically flexible, nonstandard, "peripheral" workers are used to buffer or protect the regular, "core" labor force from fluctuations in demand, thereby avoiding the morale problems engendered by laying off regular employees and the disequilibria (and illegalities in some countries) associated with treating regular workers differently.

The evidence in support of this core-periphery model is mixed, though this depends to some extent on how it is defined. A number of studies have found a negative or no relationship between functional and numerical flexibility within establishments, suggesting that there are conflicts and other problems that make the two kinds of flexibility incompatible (Osterman 1999; Davis-Blake and Uzzi 1993; Gittleman 1999; Cappelli 1995). By contrast, other studies have found that patterns of internalization and externalization may co-exist within the same organization (Morishima 1995; Lautsch 1996; Grenier, Giles, and Bélanger 1997).

There are other ways besides the core-periphery model to conceptualize how organizations use functional and numerical flexibility practices simultaneously. For example, organizations might be seen as utilizing various combinations of labor utilization systems, or types of human resource "portfolios," that are chosen from a "menu" of possible such arrangements (e.g., Way 1992; Tsui *et al.* 1995). Organizations can also combine functional and numerical flexibility by establishing network relations with other organizations. They can achieve functional flexibility by developing collaborative relations among specialized suppliers and producers and may obtain numerical

flexibility by outsourcing functions such as production, maintenance, repair, clerical and other "non-core" activities, and by hiring workers from temporary help agencies.

Cross-National Differences in Flexible HRM

Theoretical perspectives

Organizations in different countries are likely to vary in their use of particular HRM practices. Two major theoretical perspectives are especially useful in helping to understand country differences (and similarities) in these patterns: rational-economic and cultural/institutional theories (see Fenton-O'Creevy 2003, and Gooderham, Nordhaug and Ringdal 1999, for elaborations).

Rational-economic theories emphasize the role of efficiency in explaining why employers use flexible HRM practices. Economists generally argue that organizations use flexible staffing arrangements to maximize efficiency and reduce costs. For example, Transaction Cost Economics (TCE) maintains that employers will choose market mechanisms (e.g., temporary work) over hierarchies (standard employment arrangements) depending on their relative efficiency and costs, which in turn vary depending on other features of the transaction (e.g., Williamson 1985; Masters and Miles 2002). TCE is particularly useful in explaining the relative efficiency of different governance models for obtaining numerical flexibility (e.g., use of regular employees as opposed to contracting for non-regular workers).

By contrast, institutional theories often argue that organizational patterns are adopted to decrease uncertainty or to increase organizational legitimacy, as managers respond to institutional as well as economic uncertainties. Thus, the increase in the number of temporary help agencies and contract companies, along

with the promotion of quality standards for the labor they supply, have increased both the number of options available to employers and their confidence in these sources. This makes the use of flexible staffing arrangements more legitimate and reliable in the eyes of many managers, whether or not they actually increase efficiency or lower costs. The institutional approach is likely to be especially fruitful in explaining cross-national patterns of diversity, since it points to the importance of the role of the state—via laws and regulations governing trade union influence, employment protection, and the operation of temporary help agencies—and of economic, social and political institutions in shaping employers' labor utilization strategies.

A key issue raised by cross-national research is whether there is a convergence or divergence among countries in use of functionally and numerically flexible human resource management practices. As discussed by the other papers in this issue of *Beta*, the convergence thesis predicts that organizations faced with similar competitive pressures will adopt similar HRM practices. Such convergence is encouraged by removal of barriers to international competition and the existence of international agreements and legislation (such as those enacted by the European Union). On the other hand, there are also good reasons to expect that organizations in different countries will differ in their use of flexible labor utilization strategies, since HRM practices are particularly sensitive to nationally idiosyncratic institutional pressures (Gooderham, Nordhaug and Ringdal, 1999).

Institutional settings and flexibility strategies

Whether organizations are likely to utilize numerical flexibility strategies depends on their country's regulatory regime, such as the amount of protection given to regular, perma-

nent workers and the existence of laws that limit the use of temporary help agencies to certain kinds of work. North American firms, in which employment protections and restrictions on temporary help agencies are relatively low, have been argued to rely more than European and Japanese firms on external flexibility strategies (Clarke 1992: 239-240). Thus, Smith *et al.* (1995: 705-707, 712) found that managers in the telecommunications industry were more likely to adopt numerical flexibility strategies as a response to economic pressures in countries (e.g., Canada) where national institutions involve few restrictions on managerial decisions regarding the level of employment. In Spain, the liberalization of regulations regarding fixed-term contracts in the mid-1980s has been cited as a major reason for the rapid expansion in such contracts (Toharia and Malo 2000: 312-313). The restrictions placed on terminating permanent employees in Spain have also made the use of fixed-term temporary contracts a useful way of lowering unemployment in that country.

In Germany, the strength of unions, dominance of occupational markets and strong systems of vocational training combined to provide less scope for the development of peripheral labor forces within firms in the 1980s (Lane 1989: 286-8) and so the emphasis was on "new production concepts" that facilitated functional flexibility (e.g., Kern and Schumann 1987: 159-167). Flood, Gannon and Paauwe (1995) illustrate these differences by showing the greater use of contingent workers in the American as compared to German facility of a major U.S. multinational corporation in the consumer products business. They attribute the fact that the German plant uses fewer contingent workers (and uses them differently) than the U.S. plant, despite having a greater need for numerical flexibility, as due to: "...partly differences between the U.S. and German labor laws, partly differences in labor

markets, and partly differences in management preferences driven by differences in national culture" (p: 283). The rigidity of the German labor market has increased the attractiveness of outsourcing as an option by which employers may avoid laws that make temporary workers permanent employees after a year.

The likelihood that organizations will adopt functionally flexible labor utilization strategies depends also on the existence of institutions that help employers spread the risk of long-term training, development and innovation in work design, as well as on a high level of trust between managers and workers. Germany and Japan had high trust relations in the 1980s and 1990s, and so were better able to achieve functional flexibility than Britain and France, which had relatively poor trust relations in this same period (Lorenz 1992: 457).

In the following analyses we examine how distinct institutional settings in the United States and Norway affect establishments' combination of work practices. Our analysis addresses the question of whether there is a convergence of functional and numerical work practices in the United States and Norway. As we discussed above, Norwegian labor markets are more heavily regulated than those in the United States, and Norwegian labor law places stricter limits on employers' choices regarding employment arrangements. In addition, Norwegian labor unions are more powerful than are unions in the United States. Based on the different traditions of worker participation and degree of regulations in the United States and Norway, we suspect that the use of functional and numerical work practices in these countries may follow independent trajectories. We also speculate on the consequences of functional and numerical work practices for workers. Considering the social democratic welfare system in Norway, the implication for workers holding "peripheral" jobs are likely to be different than for workers in the United States.

Data

The data we use to examine establishments' use of functionally and numerically flexible HRM practices in these two countries come from telephone surveys of managers in 802 establishments in the U.S. (NOS-II) and 2130 establishments in Norway. The U.S. sample was drawn from a list of establishments provided by Dun and Bradstreet Information Services, and the Norwegian sample from *Bedrifts- og foretaksregisteret* provided by Statistics Norway. These samples are representative of all Norwegian establishments and U.S. establishments with more than 10 employees.¹ Both samples were stratified by establishment size (number of employees), since the majority of work organizations are small, in both Norway and the United States. To ensure that the samples contained a sufficient number of large organizations, the establishments were sampled with probability proportional to their size. In our samples, the distribution of establishments according to size differs somewhat: 31.5 percent of U.S. establishments have more than 500 employees, while only 8.5 percent of the Norwegian establishments belong to this category.

The U.S. survey was carried out in 1996-1997 and the Norwegian one in February/March 1997. The U.S. survey had a completion rate of 55 percent, and the Norwegian survey of 76 percent. More information on these data sets can be found in Olsen and Torp (1998) (for the Norwegian data) and in Kalleberg *et al.* (2003) (for the U.S. data).

Flexible Firms in the United States and Norway: Results

Table 1 presents descriptive information on measures of functional and numerical flexibility for the United States and Norway. Our measures of functional flexibility include whether the organization has: (1) self-directed

teams; (2) cross-training; (3) job rotation; and (4) job autonomy. Our indicators of numerical flexibility measure whether organizations: (1) hire short-term temporaries directly; (2) use temporary help agency employees; and (3) utilize employees of contract companies.

Table 1 indicates that the use of numerical flexibility is more widespread in Norwegian

establishments than in the United States. About twenty-five percent of U.S. establishments directly hire fixed-term temporaries as well as use workers from Temporary Help Agencies (THA), and about a third utilize contract company employees. By contrast, 60 percent of the Norwegian establishments use direct-hire temporary workers, 30 percent use

Table 1. Proportion of Establishments Using Numerically and Functionally Flexible Work Practices in the United States and Norway (Percentages^a)

Flexibility Measure	United States	Norway	Country Difference ^b
Functional Work Practices			
Self-directed teams	39	52	**
Cross-training	72	74	
Job rotation	35	34	
Job autonomy	47	49	
Numerical Work Practices			
Direct-hired temporaries	24	60	**
Temporary Help Agency (THA)	25	30	**
Contractor	35	71	**
N	723	2099	

a Percentages are weighted by the inverse of the establishment's probability of being selected.

b**p<0.001 (based on unweighted numbers).

Measures of Functionally Flexible Work Practices:

Self-directed teams: Do teams (in core occupation) make decisions about task assignments or work methods? (yes=1, no=0)

Cross-training: Are core workers cross-trained, that is, trained in skills for more than one job? (yes=1, no=0)

Job rotation: Are core workers involved in job rotation? (yes=1, no=0)

Job autonomy: How much choice do core workers have concerning the best way to accomplish their assignments? (complete or great choice=1; moderate, little, or no choice=0)

Measures of Numerically Flexible Work Practices:

Direct-hired temporaries: The establishment uses workers that are employed for a fixed period of time.

THA: The establishment uses someone to do the work who is on the payroll of a temporary help agency; the establishment directs the temporary employee's work.

Contractor: The establishment uses someone to do the work who is on the payroll of another company; the other company directs the employee's work.

workers from THA, and 71 percent use contractor companies. Only 8 percent of Norwegian establishments use none of these arrangements, while the corresponding percentage for U.S. establishments is 45 (see Table 2).

The greater use of non-standard work arrangements in Norway can be explained by two main reasons (see Olsen and Kalleberg 2003, for an elaboration). First, labor law is more restrictive in Norway, which encourages employers to use nonstandard arrangements to achieve flexibility. Even though employers' access to the use of temporary workers is limited, this is outweighed by the stricter regulations on dismissals of employees in standard employment relations. Norwegian employers can avoid the costs of terminating regular, open-ended contracts by using nonstandard arrangements (Oliver 1991). Second, the substantial use of leave of absences in Norway creates situations where a relatively large number of temporary workers are needed. Norwegian establishments face many situations where they have to fill in for persons who are on leave, which makes the use of temporaries an attractive option, particularly for fixed-term contracts and THAs. By contrast, U.S. establishments may have less need to employ workers on time-limited contracts since leaves of absences (for instance for childcare) are less common. In addition, employment contracts are more easily terminated in the United States; thus, the distinction between fixed-term and open-ended contracts is more blurred (Nesheim 2002).

We do not find much difference between countries in organizations' use of functionally flexible practices: Table 1 indicates that only the use of self-directed teams differs significantly by country (their use is greater in Norwegian establishments). At first glance, this might reflect a convergence between these two countries: organizations in both countries face similar pressures toward becoming efficient

and competitive, and thus these functionally flexible work practices are likely to be adopted in each country. This similarity could also reflect diffusion of HRM practices from one country to the other, though the direction of this diffusion is unclear. It could be, for example, that this reflects the adoption of American management practices in Norway. On the other hand, it might be that American organizations have adopted elements of "Scandinavian" management (see Appelbaum and Batt 1994) (though of course there are differences between the Scandinavian countries regarding forms of management). In any event, we are unable to disentangle the nature of this "convergence" (if indeed this is what it is) with these data.

We suspect that the similarity in organizations' use of functional flexibility may well reflect different and independent trajectories. Functional work practices, like autonomous work groups, were an important principle of work organization in *Samarbeidsprosjektet* (the Co-operation project) between the Norwegian Confederation of Trade Unions (LO) and the Main Organization of Trade unions (NHO) in the 1960s² (Gulbrandsen 1998). The experimental projects involving new principles of work organization in the manufacturing industry (see Thorsrud and Emery 1969) were very much the same principles of work organization that now are launched under different labels, such as "high performance work organizations" (HPWO) (Gulbrandsen 1998). The idea behind *Samarbeidsprosjektet* was to make jobs more interesting and increase worker democracy, which resulted in § 12 (*Tilrettelegging av arbeidet*) in the *Work Environment Act* (Gulbrandsen 1998; Bosch 1997), securing working conditions and autonomy. This is an example of the interrelations between union-employer co-operation and the legal environment.

The idea of worker participation is essential in high performance work practices. This kind

Table 2. Proportion of Establishments Combining Functionally and Numerically Flexible Work Practices in the United States and Norway (Percentages^a)

	# Functionally Flexible Work Practices ^b					
United States	0	1	2	3	4	Total
# Numerically Flexible Work Practices						
Only full- and part-time employees	6	11	11	11	6	45
At least one numerically flexible work practice	6	6	22	17	6	57
All establishments	12	17	33	28	12	102 ^c
	# Functionally Flexible Work Practices ^b					
Norway	0	1	2	3	4	Total
# Numerically Flexible Work Practices						
Only full- and part-time employees	1	2	2	3	0	8
At least one numerically flexible work practice	6	20	34	26	7	93
All establishments	7	22	36	29	7	101

a Percentages are weighted by the inverse of the establishment's probability of being selected.

b The establishments within the dotted line are equivalent to the definition of the flexible firm in Table 3.

c Percentages may not add to 100 due to rounding

of participation is related to ones' job and is in the human resource management tradition often labeled "empowerment" (Falkum 1999). Another form of worker participation is related to democracy in the workplace, which describes workers' participation more broadly. In Norway, worker participation, both in terms of job autonomy and participation in the more general sense, is institutionalized in labor law and tariff agreements. For instance, board-level participation was established under the *Joint Stock Company Act of 1973*, and extended in the *Work Environment Act of 1977* (Dølvik, Bråten, Longva, and Steen 1997).

Whether work practices like HPWO actually increase workers' influence in the job, or whether they serve as tools to give the impression of shared values and restructuring the

division of labor workers is not clear (see Thompson and McHugh 2002). Dobbin and Boychuk (1999) find that similar jobs carry very different levels of autonomy depending on the institutional setting. Workers in Nordic countries have greater discretion than workers in the United States, which Dobbin and Boychuk explain in terms of differences in the institutional contexts. This shows that although functional work practices are equally prevalent in Norway and the United States, the content of the jobs may differ. Data at the individual level are needed to explore this possibility further.

Table 2 cross-classifies establishments by their use of these two flexibility strategies. We measure the number of functionally flexible work practices used by the establishment (0-4).

For numerical flexibility, we differentiate between organizations that use only full- and part-time workers, on the one hand, and those that also use either direct hire temporaries (short term hires) or some sort of employment intermediaries (temporary help agency employees, contract company workers), or both.

Table 2 indicates that in Norway, two thirds of establishments used some combination of numerically flexible strategies such as direct hire temporaries, temporary help agencies, or contract companies along with two or more functionally flexible practices (establishments within the dotted line). By contrast, 45 percent of establishments in the United States used this combination of numerical and functional flexibility. These data provide suggestive evidence that a substantial percentage of establishments in both countries have adopted some form of core-periphery labor utilization strategy. These results also suggest that Norwegian establishments are more likely to use these combinations than establishments in the United States, which is mainly due to the greater use of numerically flexible practices in Norway.

Table 3 suggests how institutional factors may help to account for these country differences in the use of numerically and functionally flexible work practices. Here we examine how establishments' use of these flexible work practices is related to several major institutional factors that differ between the United States and Norway: (1) proportion unionized in the establishment; (2) location in the public sector; and (3) establishment size. We also look at whether the establishment participates in international product markets, to assess the hypothesis that organizations exposed to international markets are more likely to adopt global, "international" HRM practices related to flexibility. The model also checks for interaction effects between each explanatory variable and country.

Country Difference

Establishments in Norway are more likely to use a combination of flexible work practices (as defined in this paper) than U.S. establishments, even after we control for unionization, public-private sector location, establishment size and participation in international markets. There is a negative effect of country (U.S.), and the probability for a U.S. establishment to use a combination of numerical and functional work practices is .36, while the probability for a Norwegian establishment is .62 (probabilities are computed based on the reference category in Table 3)³. This result reflects the more pervasive use of *numerically* flexible practices among Norwegian establishments. There is no significant country difference between the use of functionally flexible work practices when controlling for size, unionization, public-private sector location and participation in international markets⁴.

These results are only suggestive: they need to be studied more intensively, utilizing more precise data. Nevertheless, they are indicative of the operation of institutional factors within countries, which work against convergence or diffusion of work practices from one country to the other. These findings underscore the importance of institutional structures that may operate as barriers to convergence and diffusion of HRM practices.

Nagelkerke R^2 is presented in Table 3 and gives information on the quality of the fit of the model. This measure is fairly low (although not exceptionally low) which indicates that there also may be other determinants, not included in our model, that explain the use of numerical and functional work practices.

Unionization

Unionized establishments in Norway are more likely to use a combination of functionally and numerically flexible work practices, while unionized establishments in the United States

Table 3. Results from Logistic Regressions of the Determinants of Establishments' Use of Both Functionally and Numerically Flexible Work Practices in the United States and Norway

Flexible Firm ^a				
Explanatory variables	Coef. ^b		Std. Err.	
US	-1,083	**	(0,187)	
Union proportion	0,470	**	(0,149)	
Union proportion X ^e US	-1,008	**	(0,299)	
Ln(size)	0,031		(0,040)	
Ln(size) X US	0,047		(0,059)	
Public sector	0,276	*	(0,132)	
Public sector X US	-0,286		(0,235)	
International market	0,634	**	(0,157)	
International market X US	-0,439		(0,274)	
Intercept ^c	0,501	**	(0,069)	
Nagelkerke R ²	0,075			
N	2614			

Descriptive statistics (weighted ^d)	United States		Norway	
	Mean	SD	Mean	SD
Union proportion	0,09	0,3	0,58	0,4
Number of employees (size)	243	1476	65	299,0
Public sector	0,17	0,4	0,35	0,5
International market	0,05	0,2	0,08	0,3
N	723		1891	

a Dependent variable is whether (=1) or not (=0) establishment uses at least one numerically flexible work practice and two or more functionally flexible work practices (which is our definition of the flexible firm. See also Table 2).

b**p<0.001, * p<0.05

c Reference category is: Norway, ln(size) (65 employees), union proportion (0.58), private establishment, and national market.

d Percentages are weighted by the inverse of the establishment's probability of being selected.

e X = interaction between two variables.

are less likely to do this. The interaction term (between country and unionization) indicates that the effect of unionization differ in the two countries. In Norway, the greater likelihood that unionized establishments use a combination of flexible work practices is due to unions being more apt to be associated with function-

al flexibility (results not presented). This is consistent with the view that unions in Norway are more likely to be "partners" with management, and to encourage the adoption of functionally flexible work organization practices.

In the United States, the lower likelihood

that unionized establishments use a combination of flexible practices is due to unions being negatively associated with numerical flexibility. Among the core activities of unions in the United States are heightening job quality and protecting the job security of members (Freeman and Medoff, 1984). This suggests that unions will seek to resist the use of externalized workers, who might constitute competitors to unionized workers. Kalleberg *et al.*'s (2003) analysis of the U.S. data—which controls for a variety of determinants of nonstandard work arrangements—is consistent with the argument that unionization limits the use of flexible staffing arrangements in the United States because such arrangements threaten the job security or compensation packages of regular full-time employees. Unions in Norway are also skeptical about non-standard arrangements, which may explain why high-unionized establishments tend to have the least use of numerical flexible work practices (see Olsen and Kalleberg 2003).

With regard to functional flexibility, union-management rules governing work organization in the United States may constitute a source of inertia that limits the introduction of teams and other functionally flexible practices, compared to otherwise similar establishments in which unions are absent.

Establishment size

We find no effect of size (number of employees in the establishment) in Norway, nor in the United States, on whether the establishment uses a combination of numerical and functional flexibility practices (Table 3). However, establishment size matters when numerical and functional flexible work practices are studied separately. In the United States, larger establishments are more likely to use numerical work practices, which is consistent with a number of previous studies (Mangum *et al.* 1985; Houseman 2001; Davis-Blake and Uzzi

1993). Larger organizations generally have bigger and more diverse pools of jobs than smaller ones, and therefore have more opportunities to make some use of flexible arrangements. Larger organizations may also have a harder time discharging standard workers, and are likely to have more costly benefit structures, which would make the use of nonstandard arrangements particularly attractive to them (Mangum *et al.* 1985). In Norway, there is also evidence that larger organizations take greater use of workers from Temporary Help Agencies, temporary workers, and contractor companies (Olsen 1998). On the other hand, size appears to be unrelated to functional flexibility both in the United States and Norway (results not presented).

Public versus private sector

Public sector establishments in Norway are more likely than private sector establishments to use a combination of flexible work practices, but public and private sector establishments in the United States do not differ in their use of this combination of flexible work practices. The public-private sector difference in Norway is due mainly to the greater use of functional flexibility, which may be a feature of the “new public administration” in this country (Hillestad 2003).

International markets

Whether an establishment operates in an international market is positively related to the use of a combination of flexible work practices only in Norway. Again, the difference in the relationship between international markets and being a “flexible firm” (i.e., the interaction effect between country and participation in an international market) is not statistically significant between the United States and Norway. The effect in Norway is due to Norwegian organizations operating in international markets being more likely to use functionally flex-

ible forms of work organization. This may, in turn, reflect the desire of these companies to compete more effectively by adopting "international" forms of work organization; establishments exposed to international markets may learn more quickly than others about alternative work practices (Osterman 1994).

Is there a "Dark Side" of Flexibility in Norway?

Nonstandard employment relations are attractive to employers because they may often reduce employment costs in addition to enhancing flexibility. However, there may be a "dark side" to the emphasis on flexibility. For many nonstandard workers, any gains in flexibility that employers obtain may come at a high price: the growth of nonstandard work arrangements may exacerbate insecurity and socioeconomic inequality if qualified workers who seek regular full-time jobs must settle for less desirable alternatives. A possible drawback for society of the core-periphery model, then, is that it may perpetuate a polarization of inequality between core and periphery workers that is based on wages and, increasingly, on hours worked and stability of employment (Pfeffer and Baron 1988).

Unfortunately, relatively little hard data exist on the inequalities associated with membership in core and periphery parts of organizations. While there is growing evidence that working in nonstandard jobs such as part-time and temporary positions are associated with "bad" jobs that pay less and do not provide fringe benefits in the United States, studies have only begun to examine this issue systematically (e.g., Kalleberg, Reskin and Hudson 2000) and there has been very little cross-national research on this topic. Studies are particularly needed of inequalities within as well as between firms, of patterns of mobility between core and periphery sectors, and of dif-

ferences among temporary help agency workers, independent contractors, and other categories of nonstandard workers (see the review in Kalleberg 2000).

We argue that the consequences of flexible firms differ between countries, depending on their institutional contexts. In particular, the use of numerical flexibility in Norway does not necessarily constitute a "dark side" of flexibility for workers. This is because in Norway, unlike the United States, fringe benefits such as health insurance are provided to people based on their residency and not their employment status; thus, nonstandard as well as standard workers in Norway receive health insurance. Norway is ranked among the most generous states in the OECD area with regard to employee social benefits (Dølvik *et al.* 1997). The universal state social security system covers medical support, sick leave pay, unemployment benefits, occupational rehabilitation, disablements benefits and old age pensions. All employees are in principle entitled to pay during sickness, and the sick pay scheme is regarded the most generous in the world, providing 100 percent salary (up to a certain ceiling) (Dølvik *et al.* 1997). The parental leave is 52 weeks (with 80 percent pay), which makes Norway a pioneer in this respect. This is an example of the equality politics of the welfare state in Norway (see Brandth and Kvande 2001).

Dølvik *et al.* (1997) conclude: "... there can be no doubt that Norwegian labor markets are surrounded by an extensive web of regulations, employment protection and social welfare schemes that, in an international perspective, grant Norwegian employees a high level of job security" (pp. 70-71). At the same time, the perceived job insecurity of holding a temporary job may be of importance to workers both in Norway and the United States.

An important consideration in evaluating whether there is a "dark side" of flexibility is whether temporary jobs provide a route into

more secure jobs later in a person's career. Temporary workers are more likely to be "marginalized" if they are trapped in such jobs and cannot obtain permanent employment. Skollerud (1997) argues that there is little evidence that temporary workers are marginalized in the Norwegian labor market, since more than 50 percent had regular employment after a four-year period. Although the majority of temporary workers in Norway would prefer to have regular employment (Nergaard and Stokke 1996; Nergaard 2002), the transition from temporary to regular employment is higher in Norway compared to other OECD countries (OECD 2002; Nergaard 2002; Longva 2002). A recent study, conducted in a period of low unemployment, concludes that in Norway it is the main rule that fixed-term contracts leads to regular employment (Longva 2002). Also, evidence from a survey of employees of Temporary Help Agencies, conducted in a period of low unemployment, showed that a large majority was satisfied with their working hours (Torp *et al* 1998). While the evidence on this issue is relatively scarce, and the opportunities of transfer from a temporary to regular job is likely to be affected by the general economically situation, there seems to be some basis for the conclusion that temporary workers are not highly marginalized in Norway. This is in line with Ellingsæters' (1995) findings on part-time work in Norway.

Conclusions

The increasing pressures on organizations to achieve flexibility in their HRM practices, and the possible mixed consequences of these flexible practices for organizations and (especially) employees, make it important to understand how and why organizations use functionally and numerically flexible employment systems, as well as their effects on organizations and workers.

Enhancing our understanding of human resource practices requires that we consider explicitly the role of the institutional context (e.g., laws and regulations governing trade union influence, which in turn reflect in part the values, norms and beliefs of society) in shaping patterns of organizational flexibility (e.g., Gooderham and Nordhaug 1997). For example, some institutional environments stress technical and economic demands that reward organizations for efficient behavior, while others are dominated by social demands emphasizing the importance of legitimacy. Much of the research on organizational flexibility has tended to be firm-centered, which may reflect the very deregulated labor markets and employment relations characteristic of the United States and United Kingdom, where most studies have been carried out.

In this article we have illustrated the utility of a cross-national perspective on employment relations by comparing establishments' use of HRM practices in the United States and Norway. We have explained the higher use of numerically flexible work practices in Norway by the relatively strict regulations on employers' choices in terminating regular contracts, and the substantial use of leave of absences in this country. The use of functionally flexible work practices is equally prevalent in both countries; only the use of self-directed teams seems to be more widespread in Norway. Whether this reflects a convergence between these two countries (organizations in both countries face similar pressures), a diffusion of HRM practices from one country to another, or different and independent trajectories should be a topic for further research.

Based on the distinct institutional settings in the United States and Norway, we suggest that the implications of flexible work practices for workers may differ in these countries. The regulatory framework in Norway may encourage employers to use numerical flexible work

practices, leading to relatively higher use of these practices in this country. However, holding a temporary job in Norway has less unfortunate implications, because fringe benefits such as health insurance are provided to people based on their residency not their employment status. Also, there is evidence that temporary jobs often provide a route to more secure jobs in Norway. Unfortunately, we were not able to examine directly the consequences of flexibility for employees in the two countries, since our data pertain to organizations and not to individual employees.

Explaining the use of flexible human resource practices should draw upon rational-economic theories (both Transaction Cost Economics and the Resource Based View) as well as institutional theories. Much more work on these issues needs to be done. For example, we need to understand better the conditions under which competitive forces are more important, and those under which institutional factors are more salient, in the use of flexible HRM practices. An understanding of these important questions requires cross-national research on the nature of work organization and employment relations.

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Notes

- 1 The U.S. sample included establishments with less than ten employees, which we excluded here to make the samples more comparable. Our analysis is thus based on 802 U.S. establishments instead of the original 1002.
- 2 NHO was called NAF until 1989.
- 3 Probabilities are computed based on the Logit-model: $P(y=1|L)=\exp(L)/1+\exp(L)$.
- 4 We have examined how unionization, size, public sector, and international market affect functionally and numerically flexible work practices separately. These results are not presented.



Non-standard work in two different employment regimes: Norway and the United States

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ABSTRACT

This article examines organizations' use of non-standard work arrangements – fixed-term employees hired directly by the organization, workers from temporary help agencies (THA), and contractors – in the United States and Norway. Our analysis is based on information obtained from surveys of 802 establishments in the US and 2130 in Norway. We find that Norwegian establishments make greater use of non-standard arrangements than the US establishments; we argue that this is due in part to the greater overall restrictive labour market regulations on hiring and firing regular workers, and greater demand for temporary labour resulting from generous access to leaves of absence, in Norway. We also find that certain institutional factors have a similar impact in both countries. First, establishments in the public sector are more likely to use direct-hired temporary workers and less apt to use contractors and THAs; this pattern is particularly striking in Norway, but is also evident in the United States. Second, highly unionized establishments tend to have the lowest use of non-standard arrangements in both countries.

KEY WORDS

comparative research / employment / labour law / labour markets / non-standard work / organizations / temporary work / unionization

Introduction

A prominent theme in recent research on employment relations has been employers' attempts to obtain numerical flexibility and otherwise reduce costs by using workers who are not their regular, full-time employees. These non-regular forms of labour have been called flexible staffing arrangements (Houseman, 2001), market-mediated work arrangements (Abraham and Taylor, 1996), contingent work (Polivka and Nardone, 1989), atypical employment (De Grip et al., 1997), and non-standard work arrangements (Felstead and Jewson, 1999). A growing literature has sought to document and explain the increase in organizations' use of non-standard work arrangements in industrial nations (e.g. Abraham, 1990; Abraham and Taylor, 1996; Davis-Blake and Uzzi, 1993; Harrison and Kelley, 1993; Houseman, 2001; Kalleberg et al., 2003; Pfeffer and Baron, 1988; Uzzi and Barsness, 1998). In this article we focus on three types of non-standard work arrangements: temporary workers hired directly by the organization, employees of temporary help agencies (THAs), and contract company workers. We do not include part-time work as a non-standard work arrangement.

Organizations' use of non-standard work arrangements has significant consequences for organizations and individuals. Both positive and negative effects have been observed. Non-standard work arrangements provide numerical flexibility, enabling firms to adjust their workforces more easily to uncertain market demands. Some organizations have saved on labour costs by using temporary workers, and subcontracting and outsourcing non-essential functions have reportedly enabled some organizations to concentrate on their core competences, thus utilizing their resources more efficiently. Other organizations have experienced adverse consequences due to their use of non-standard workers, such as increases in turnover (Grimshaw et al., 2001), and lower employee trust (Pearce, 1993). Moreover, while the opportunity to work on a temporary basis has satisfied some people's desires for more flexible work arrangements, many non-standard workers in the United States report that their job security, pay and fringe benefits are worse than regular full-time employees (Kalleberg et al., 2000; Rogers, 1995).

Despite the growing amount of research on determinants of organizations' use of non-standard work arrangements, relatively few studies take an explicitly comparative approach to studying their correlates and consequences. This is unfortunate, as cross-national comparisons are needed to examine the role of the state and cultural differences in shaping employers' labour utilization strategies. While a growing number of comparative studies examine national differences in employment systems and non-standard work arrangements (Bergström and Storrie, 2003; O'Reilly and Fagan, 1998; Rodgers and Rodgers, 1989; Schömann, et al., 1998; Sels and Van Hootegeem, 2001), there are relatively few comparative studies that focus on organizations as the unit of analysis. Yet organizational-level comparisons are needed because the employer is the key actor who chooses which types of work arrangements to use. Scanning back

issues of *Work, Employment and Society* from 1991 to 2003, for example, we find that about three percent (12 articles) of the 348 articles take a cross-national approach to studying labour utilization strategies. Among these, only two articles compare organizations (Smith et al., 1995; Walsh, 1997). Moreover, the few explicitly comparative studies of organizations' use of non-standard work arrangements that have been published in *WES* and elsewhere are limited with regard to their coverage of establishment size or industrial sector: for example, Gooderham and Nordhaug (1997) only study establishments with more than 200 employees, whereas Walsh (1997), O'Reilly (1992) and Smith et al. (1995) only include certain industries.

Comparing organizations' use of non-standard work arrangements in Norway and the United States is likely to be fruitful because these countries differ in the institutional and regulatory factors that may affect firms' choices regarding employment, as well as the nature of labour markets. First, Norwegian labour law places relatively strict limits on which employment arrangements employers may choose (Dølvik et al., 1997; Emerson, 1988; OECD, 1999). By contrast, labour markets in the United States are relatively unregulated, leaving employers with more choices regarding the use of particular employment arrangements (McGlashan et al., 2003; OECD, 1999). Second, Norway is often labelled a corporatist country (Goldthorpe, 1984; Høgsnes, 1994), in which labour is strong and collective bargaining is widespread. On the other hand, labour in the US is relatively weak, individual contracts dominate, and employers tend to use dualist strategies that offer good jobs to some workers and bad jobs to others (Goldthorpe, 1984). Despite the differing traditions of labour relations in these countries, unions in both Norway and the US generally oppose the use of non-standard work arrangements, making a comparative organizational study of these two countries potentially very useful for understanding the impact of unionization.

Third, institutional and cultural features of Norwegian society, stemming from the egalitarian spirit of this social democratic country, suggest that non-standard work arrangements – which are often assumed to give rise to divisions between workers – may be less consequential in this country than in individualistic, market-driven countries such as the US. The welfare system in Norway provides all workers with generous social benefits and access to leave of absence (Dølvik et al., 1997). The parental leave is 52 weeks, for example, which makes Norway a pioneer in this respect (Brandth and Kvande, 2001). Moreover, the equality politics in the Norwegian welfare system give parents the right to keep a long-term employment relationship, combined with taking care of children. Paradoxically, the generous benefit-schemes and access to leave of absence are likely to produce a demand for non-standard arrangements, such as temporary workers to fill in for regular workers that are on leave.

We address two main questions in this article: (1) how does national context affect the use of non-standard work arrangements?; and (2) how do institutional factors such as unionization and the public sector affect the use of non-standard arrangements in these two countries? We first discuss some of the

key features that are likely to differentiate organizations' use of the three types of non-standard work in the US and Norway, noting differences within as well as between countries. We then describe our data and variables, and discuss the results of our analyses. We finally consider some of the implications of our findings for theory and research on non-standard work arrangements.

Differences in non-standard work arrangements in the United States and Norway: Hypotheses

We focus on three types of non-standard work arrangements: (1) temporary employees who are hired directly by the organization, and who differ from regular workers in that their contracts are limited in time; (2) workers from temporary help agencies (THA), who are employed by the THA but supervised by the client organization; and (3) contract company workers, who are both employed and directed by the contract company.

All three types of non-standard work arrangements may consist of full-time or part-time workers, and the groups are heterogeneous in terms of the profile of the workers holding these jobs. Women and young people are over-represented among temporary workers in most European countries, including Norway (OECD, 2002; Rodgers and Rodgers, 1989; Schömann et al., 1998), as well as in the US (McGlashan et al., 2003; Polivka, 1996). Workers employed by contract companies may vary by skills and educational background, as these companies provide a wide range of services (see Table 1). Particularly contract company workers may enjoy long-term employment, which implies that these groups differ in their degree of job insecurity. This again underscores the importance of studying these arrangements separately.

Previous studies (e.g. Davis-Blake and Uzzi, 1993; Houseman, 2001; Kalleberg et al., 2003; Pfeffer and Baron, 1988) have found that the use of non-standard work arrangements is related to employer characteristics. In addition, there are many sources of cross-national diversity in employment relations: culture, political and institutional factors (including policy and legislation), and industrial relations, education and training systems (Kalleberg, 1988). We argue that two factors are particularly important in explaining differences in the use of non-standard work arrangements between the US and Norway: the regulatory environment governing employment and the substantial use of leave of absence in Norway. Two additional major institutional and legal differences between these two countries are the size and role of the public sector and unionization.

Regulatory environment

Labour law and other regulatory factors matter in whether organizations use non-standard arrangements. Gooderham and Nordhaug (1997) found that a representative sample of establishments in Norway was less likely to have

changed their use of temporary work and subcontractors than establishments in the UK. They argue that the drive towards numerical flexibility is stronger among organizations in the UK than in Norway, due to differences in regulatory and institutional contexts. O'Reilly (1992) found that the motivations to use part-time work were different in Britain and France, partly due to different legislation governing this kind of employment. Smith et al.'s (1995) study of external flexibility (contractors, downsizing and temporary workers) and the degree of job security in the paper, steel and telecom industries in Canada and Sweden found that Swedish firms have strong incentives to use early retirement instead of layoffs to ease out older workers and circumvent the seniority-based layoff legislation. Walsh (1997) found that banking and postal services in Britain and Australia share similar developments in part-time work, despite the different labour market institutions in the two countries. However, divergent patterns in structure of pay suggest that regulatory frameworks are influential in the restructuring of employment systems.

Three regulatory features may help explain differences in the use of non-standard work arrangements between the US and Norway: (1) legal restrictions on termination of standard, open-ended employment contracts; (2) legal restrictions on access to the use of non-standard arrangements; and (3) social rights, including benefit schemes and access to leaves of absence.

First, strict regulations on the right to terminate open-ended contracts create exit costs that the firm may try to circumvent. A recent OECD study of 26 countries ranked the US as having the fewest regulations protecting dismissals, while Norway ranked number 15 (OECD, 1999; see also Nesheim, 2002). Laws designed to protect workers from dismissals are believed to encourage employers to use non-standard work arrangements (Bergström and Storrie, 2003; Emerson, 1988; Polivka and Nardone, 1989). To avoid dismissals in the future, establishments may use work arrangements that are less costly to terminate so as to escape from dismissal-related regulations (Oliver, 1991). Companies in the US face milder restrictions on hiring and firing; since they have a source of flexibility already, they may have less need for non-standard staffing arrangements. Nevertheless, even in the United States, an increasing body of case law that effectively limits 'at will' employment encourages employers to use non-standard arrangements (Autor, 2003).

Second, the legislation as to the specific situations in which organizations are allowed to use particular kinds of non-standard arrangements (see Table A1) may affect which employment alternatives the establishments choose to use. The use of fixed-term contracts and THA is relatively strictly regulated in Norway, while it is unregulated in the US. These legal constraints might lead organizations to choose the kind of contract that is the *least* regulated, which in Norway is the use of contractors. Schömann et al. (1998) report that the impact of regulating changes regarding fixed-term contracts varies greatly between countries. For example, the deregulation of fixed-term contracts in Spain led to an increase in the use of these contracts in all sectors, whereas

similar changes in Germany were followed by a moderate increase in some sectors (Schömann et al., 1998).

Third, Norway has a national sickness benefit scheme, unlike the US. Norwegian employers are required to pay the employee a wage during the first 16 days of absence. Beyond this time period, absence is covered by the public health insurance system (up to a certain ceiling). All employees are in principle entitled to receive pay during sickness. The access to leave of absence in Norway is also generous; for example, the parental leave is 52 weeks (with 80% pay). The generous benefit scheme and substantial access to leave of absence produce a considerable need for fill-in persons in Norway. On the one hand, the welfare system encourages long-term employment relationships that benefit some workers, while on the other hand it creates a demand for non-standard work arrangements. By contrast to most other industrialized countries, workers in the US do not have rights to paid vacation leave, sick leave, or parental leave. Based on these arguments we hypothesize that:

H1: Establishments in Norway use more non-standard arrangements than establishments in the United States.

Public sector

The Norwegian labour market is characterized by a large public sector, which accounts for about 33 percent of all employees. In Norway, educational and medical industries, for example, are mainly public (Statistics Norway, 2002). By contrast, the public sector in the United States is smaller, consisting of about 16 percent of the labour force (Bureau of Labor Statistics, 2002). The size and role of the public sector in Norway are likely to affect the use of non-standard arrangements, though in potentially different ways.

First, Norwegian labour law allows greater access to direct-hired temporary workers in parts of the public sector (see Table A1). Second, half of the female labour force is employed in the public sector (Statistics Norway, 2002), and given the generous parental leave policies (most of which is taken by women – Brandth and Kvande, 2001), we believe this sector has a considerable need for temporary workers to cover for regular workers on leave. Third, custom and practices in the public sector allow for greater use of all kinds of leaves of absence. For example, employees in the public sector are allowed to take leave of absence for at least one year when taking a position with a different employer, and public sector establishments often give more generous possibilities for leave of absence than the minimum stated in the Work Environment Act (*Statens personalhåndbok 2002: Personal- og arbeidsreglement for Bergen kommune 2001*).

There are also good reasons to expect that organizations in the public sector in the United States are more likely than private sector organizations to hire fixed-term temporary employees. US public sector organizations are likely to be subject to relatively severe budget constraints and resource limitations, and so

could arguably be more likely than profit-oriented organizations to be under pressure to economize. Public sector organizations in the US may be particularly apt to try to save on costs by using direct-hire temporary workers, who do not generally receive fringe benefits and do not involve employment intermediaries that might increase costs. Even though the public sector in the US is relatively small compared with that of Norway, the proportion of female employees is high (56% – Bureau of Labor Statistics, 2002), as in Norway. Therefore, we hypothesize that:

H2a: In Norway and the United States, public sector organizations use more direct-hired temporary workers than private establishments.

However, Norwegian labour law is more restrictive on the use of contractors in core activities (see Table A1). There is also likely to be more opposition to subcontracting work and hiring temporary agency workers in the public sector than in the for-profit sector in Norway: the public sector is more likely to be characterized by a social democratic ideology, and thus employers may be more reluctant to use non-standard arrangements. Some employers in the public sector have an explicit policy that work should mainly be taken care of by regular employees (Gunnes and Steen, 2002). The existence of stronger norms against using workers employed outside public sector organizations is likely to characterize the US as well as Norway; in both countries, using non-standard workers is generally less socially accepted, and public sector organizations led by elected persons may be particularly concerned with how they appear to citizens in the local communities. Nevertheless, while there may be a similar tendency in the US for public sector organizations to be less likely to use employment intermediaries, there is less reason to think that the gap between public and profit-oriented organizations is as substantial as in Norway, and we hypothesize that:

H2b: Public sector organizations are less likely than profit-oriented organizations to use contractors and temporary help agency employees in both the United States and Norway, though the gap between public and private sectors in the use of these kinds of non-standard work arrangements is likely to be greater in Norway.

Unionization

Unions in both the United States and Norway are sceptical about non-standard arrangements and generally believe that two-party, open-ended contracts should continue to be the dominant type of work arrangement. Generally, unions are more powerful in Norway than in the United States. There is a higher degree of union density in Norway; the proportion of unionized employees in the Norwegian labour market is 57 percent (Nergaard, 1998), while unions' share of the workforce in the US is about 13 percent (Bureau of Labour Statistics, 2002). In Scandinavia, national unions and union confederations in general play a more important role than in most other countries, both regarding labour market relations and in economic policy implementation (Høgsnes, 1994).

Gooderham and Nordhaug (1997) found that firms that perceive unions as being powerful are less prone to implement strategies for numerical flexibility, both in the UK and Norway. This is consistent with Smith et al.'s (1995) finding that the use of subcontractors was subject to major controversy and a common source of tension in labour relations, both in Sweden and in Canada.

Most previous studies in the US agree that unionization is correlated with the use of flexible staffing arrangements, but there is less agreement as to the direction of this relationship. Among the core activities of unions are increasing job quality and protecting the job security of members, particularly more senior members (Freeman and Medoff, 1984). In general, this suggests that unions will seek to resist the use of externalized workers, who would constitute competitors to unionized workers. This logic would lead to the negative associations between unionization and the use of temporary workers reported by Abraham (1990) and Houseman (2001).

On the other hand, in some cases unions might support the use of non-standard work arrangements, if they serve to heighten job protection for permanent, unionized workers; this might lead to a positive relationship between unionization and flexible staffing, as found for temporary workers by Davis-Blake and Uzzi (1993) and contractors by Abraham (1990). Some studies in the US have also found no relationship between unions and non-standard work arrangements (Abraham and Taylor, 1996; Davis-Blake and Uzzi, 1993; Houseman, 2001). We nevertheless anticipate that the protection of job security will be a dominant emphasis of unions in both the United States and Norway. Moreover, even though the standing of unions differs in these two countries, previous research indicates that unions in quite distinct labour markets have similar impacts on work organization in them. We hypothesize that:

H3a: There is a negative relationship between the degree of unionization and non-standard work arrangements in both Norway and the United States.

We might also speculate that there is a non-linear relationship between unionization and contracting, as some previous studies have shown (Harrison and Kelley, 1993), though the nature of these non-linearities may differ between the US and Norway. In relatively *highly* unionized organizations there will be *little* use of non-standard arrangements in both the US and in Norway. In these establishments management will meet too much resistance from workers if they try to introduce non-standard arrangements. Creating contingent jobs or converting standard to non-standard jobs is likely to cause labour unrest, particularly in a climate of cooperative employer-employee relations such as in Norway. In these cases, management is likely to try to increase employment flexibility through other means that are less likely to cause a conflict (Uzzi and Barsness, 1998).

In the US, establishments with relatively *low* unionization may have *little* use of non-standard arrangements, since there is little incentive for management to hire contingent workers to reduce union power. By contrast, in Norway, we believe establishments with *low* unionization will have *high* use of non-standard arrangements. Given the strict regulations on employment law it is

easier for firms to introduce these arrangements in a low-unionized environment. Escaping from the legal environment (Oliver, 1991) may be easier in a low-unionized environment, where there is less control from the collective group of employees.

In the US *medium-unionized* establishments may use *more* non-standard arrangements than in establishments with either high or low levels of unionization, because management will try to limit unionization. In establishments with a medium level of unionization, the union's position is more tenuous, which may result in management imposing flexible arrangements without fear of union opposition (as Uzzi and Barsness, 1998 argue for the UK). Unionized workers may resist this use, but they have too little power to put up a real fight. Hence, we hypothesize additionally that:¹

H3b: In the US, there is an inverted U-shaped relationship between the degree of unionization and non-standard work arrangements.

Data, variables and models

The data we use to test these hypotheses come from telephone surveys of managers in 802 establishments in the US (NOS-II) and 2130 establishments in Norway. The US sample was drawn from a list of establishments provided by Dun and Bradstreet Information Services, and the Norwegian sample from *Bedrifts- og foretaksregisteret* provided by Statistics Norway. These samples are representative of all Norwegian establishments and US establishments with more than ten employees.² Both samples were stratified by establishment size (number of employees), since the majority of work organizations are small, in both Norway and the US. To ensure that the samples contained a sufficient number of large organizations, the establishments were sampled with probability proportional to their size.

The US survey was carried out in 1996–1997 and the Norwegian one in February/March 1997 – a time when unemployment rates were quite low in both countries (Bureau of Labor Statistics, 2001; Statistics Norway, 2003). The response rates of these surveys were 55 percent (United States)³ and 76 percent (Norway). More information on these data sets can be found in Olsen and Torp (1998) and in Kalleberg et al. (2003). Since the time these data were collected, there has been one important regulatory change (in 2000) in Norway, liberalizing employers' ability to lease workers from temporary help agencies (see Table A1). This change was followed by a moderate increase in the overall use of workers from THAs (Nergaard and Nicolaisen, 2002).

Measures of dependent variables

Our measures of *incidence* of use of non-standard work arrangements are dichotomous variables indicating whether or not the establishment reports using direct-hired temporary workers, temporary help agencies (THA), or contractors (1 = use, 0 = no use).

We measured the *intensity* of use of the various kinds of non-standard arrangements in different ways. Direct-hired temporary workers are on the establishments' payroll, and so it is possible to measure intensity as *proportion of all employees* in the establishment that were direct-hired temporary workers, which we calculated as the number of direct-hired temporary workers divided by the number of all employees in the establishment (full-time, part-time and direct-hire temporaries) (see Kritzer, 1990, and Firebaugh, 1988, for a discussion of the appropriateness and utility of using ratio variables).

Workers hired from THAs and contractor firms are not on the establishment's payroll, and in some cases they will not be physically located at the establishment either. Since the establishment will not always know how many workers from THAs or contractors it utilizes, we measure intensity of use as the *proportion of functions* THAs and contractors perform (see Table 1), divided by the number of functions that we measure (nine in the US, ten in Norway).

Explanatory variables

In addition to measures of public sector and unionization, our equations also control for the following potential sources of differences in each country: establishment size (number of employees), whether the establishment is part of a larger organization, manager's perception of whether the organization faces a labour shortage and whether there has been an increase in product market competition, as well as the geographical scope of the establishment's main market and industry.

It would be useful to have had information on the proportion of women in each establishment, since women are over-represented in temporary work. Unfortunately, a measure of the proportion of women in the establishment is only available in the US data, precluding country comparisons. However, introducing *proportion women* in the analyses for the US does not change the results presented, nor does it have a significant effect in the analyses. Also, considering that the labour market, particularly in Norway, is highly segregated by gender (Hansen, 1997), we control for the effect of the proportion of women to some degree by including variables representing industry membership.

We measure unionization as the proportion of unionized workers in the establishment. We also include a measure of the proportion of union members squared, in order to test the hypothesis of non-linearity (Hypothesis 3b).

Models

We use several models to test our hypotheses about the establishments' use of non-standard arrangements; the Logit-model, Ordinary least square regression (OLS), the Tobit-model, the conditional fixed effect Logit-model, and fixed effect linear regression.⁴ Using several models allows us to check how sensitive the results are to different approaches. We study incidence and intensity of non-standard work arrangements both separately and in combination. One may

argue that incidence and intensity result from different decision processes. An establishment will first have to make the decision of whether it is to use non-standard arrangements *at all*. If it decides to do so, the next decision will be in what amount. First, we use a Logit model to study whether the establishment uses a given non-standard arrangement (= 1) or not (= 0).

Our Logit function is:

$$P(y = 1|L) = \exp(L) / (1 + \exp(L))$$

$$\text{LOGIT}(L) = \text{INTERCEPT} + b_1(\text{PUBLIC}) + b_2(\text{PROP UNIONIZED}) + b_3(\text{PROP UNIONIZED}^2) + b_4(\text{LN}(\text{SIZE})) + b_5(\text{PART OF LARGER ORG}) + b_6(\text{LABOUR SHORTAGE}) + b_7(\text{COMP INCREASE}) + b_8(\text{INTERNATIONAL MARKET})$$

Second, we use an OLS model to estimate the intensity of direct-hired temporary workers, THA and contractors. In the OLS model we only include the establishments that use temporary workers, THAs, or contractors (incidence = 1). The independent variables are the same as in the Logit-function presented above.

Third, we use a Tobit model, which allows us to analyse incidence and intensity in combination. The Tobit-model assumes that the decision processes on whether to use non-standard arrangements, and in what amount, are the same.

For the Tobit model, the structural equation is:

$$y_i^* = x_i\beta + e_i$$

In the Tobit model y^* is a latent variable that is observed for values greater than τ (in our model $\tau = 0$), and is censored for values less than or equal to τ (see Long, 1997). Unlike the analysis of intensity in the OLS model, the Tobit model uses information on the whole sample, including information about the censoring (see Long, 1997). In the Tobit model we use the same explanatory variables as in the Logit model (see above).

More formally, with censoring our model becomes:

$$y_i = \begin{cases} y_i^* = x_i\beta + \varepsilon_i & \text{if } y_i^* > \tau \\ \tau_y & \text{if } y_i^* \leq \tau \end{cases}$$

Finally, we use the conditional fixed effect Logit-model and fixed effect linear regression to study the impact of unionization in the two countries separately. The great advantage of using fixed effect analysis is the ability to control for detailed industry codes (here we use industry codes at three-digit level).⁵ Due to variations in industry codes in the two countries, we are unable to estimate a fixed-effect model when the data are pooled across countries.

Results

Table 1 presents information on the incidence and intensity of direct-hire temporary workers, temporary help agencies and contractors in the US and

Norwegian establishments. The percentages are weighted by the inverse of the establishments' probability of selection and can be interpreted as representative of the distribution of establishments in the two countries respectively.

Country differences

Table 1 indicates that Norwegian establishments are more likely to use non-standard work arrangements: they have significantly higher incidence and intensity of both THAs and contractors, and higher incidence of direct-hired temporary workers. When we look at the combinations of all three arrangements only 7.6 percent of establishments in the Norwegian sample use none of the three non-standard arrangements, compared to 41.4 percent of the US establishments.

Our conclusion that Norwegian establishments are more likely to use non-standard work arrangements is unchanged when we control for differences between the US and Norway in public sector membership, unionization and the other explanatory variables discussed above. Table 2 shows that there is a significant negative effect of national context on all the non-standard work arrangements in all the models except for intensity of direct-hired temporary workers, in which the difference is not significant. We have tested all explanatory variables using interaction effects by country, and we find that in most of

Table 1 Descriptive statistics of incidence and intensity of direct-hired temporary workers, temporary help agencies (THA), and contractors (weighted numbers)^a

	US %	Norway %	
Incidence			
Direct-hired temporary workers	23.7	60.0	**
THA	25.0	30.4	**
Contractors	35.3	71.8	**
Intensity^b			
Direct-hired temporary workers	16.4	12.7	
Functions by THA/Contractors	22.9	25.9	**
Combinations of incidence			
No arrangements	41.4	7.6	**
One arrangement	35.9	38.3	**
Two arrangements	18.5	38.5	**
Three arrangements	4.2	15.6	**

**p < 0.01

^a Numbers are weighted by the inverse of the establishments' probability of being drawn.

^b Incidence = 1.

Note: Functions by THA/contractors in US and Norway: clerical work, ICT, accounting, marketing/sales, security, janitorial, repairs.

Functions only in US: R&D and core product. Only in Norway: strategy, logistics and catering.

models the differences between the countries persist.⁶ This analysis provides strong support for our first hypothesis.

Public sector

Public-sector establishments are more likely to use direct-hire temporaries in both countries (Table 2), supporting Hypothesis 2a. The incidence of use appears to be greater in Norway than in the United States, though there appears to be no difference in the intensity of use of direct-hire temporaries between public and private establishments in either country (see Table A2).

We computed probabilities (using the logit function described earlier) in order to get a better sense of the sizes of these effects. The probability that a public establishment in Norway employs direct-hired temporaries is 0.88, while the probability that a private establishment in Norway does so is 0.67. The corresponding probabilities for US establishments are 0.49 (public) and 0.34 (private).⁷ We interpret the greater use of direct-hire temporaries in Norway as due in part to the more lenient regulations on fixed-term contracts, and partly by the substantial use of leave of absence. In both countries, public establishments are especially likely to obtain numerical flexibility and to solve problems of being understaffed (at least on a short-term basis) by using direct-hired temporaries. Greater use of temporary workers in public sector organizations (particularly within health and educational services in Norway) is consistent with findings from other northern European countries (Schömann et al., 1998).

By contrast, public establishments are less likely than private establishments to use THA and contractors, which generally supports Hypothesis 2b: Table 2 shows that the effect of public sector is negative and significant for both incidence and intensity of use of both types of employment intermediaries. We find that the effect of public sector is generally negative in both countries (see Table A2), though the coefficient of public sector appears to be larger in Norway than the US. In particular, the use of contractors appears to be much greater in the private sector in Norway, which is consistent with the greater restrictions placed on the use of contractors (compared to THA) in the public sector in Norway. The probability that an establishment in Norway uses contractors is 0.88 (private) and 0.64 (public).⁸ The probability that a US establishment uses contractors is 0.33.⁹

Unionization

Table 3 presents results of the conditional fixed-effect analyses separately for the US and Norway. This analysis addresses the question of the degree to which unionization affects work arrangements in each country, when controlling for detailed industry codes. In general, unionization appears to be negatively related to the use of non-standard work arrangements in both the US and

Table 2 Determinants of non-standard arrangements

	Direct-hired temporary workers			THA			Contractor			THA/Contractor		
	Incidence ^a b(se)	Intensity ^b b(se)	Incidence and intensity ^c b(se)	Incidence ^a b(se)	Intensity ^b b(se)	Incidence and intensity ^c b(se)	Incidence ^a b(se)	Intensity ^b b(se)	Incidence and intensity ^c b(se)	Incidence ^a b(se)	Intensity ^b b(se)	Incidence and intensity ^c b(se)
US	-1.896 ** (0.129)	-0.001 (0.012)	-0.140 ** (0.012)	-1.120 ** (0.123)	-0.107 ** (0.011)	-0.188 ** (0.014)	-2.509 ** (0.137)	-0.149 ** (0.046)	-0.159 ** (0.057)	-1.544 ** (0.577)	-0.149 ** (0.046)	-0.159 ** (0.057)
Public	0.970 ** (0.132)	-0.002 (0.011)	0.064 ** (0.012)	-0.627 ** (0.129)	-0.032 * (0.012)	-0.129 ** (0.015)	-1.040 ** (0.141)	0.015 + (0.008)	0.036 ** (0.010)	0.161 ** (0.035)	0.040 ** (0.003)	0.055 ** (0.004)
Proportion unionized	0.090 (0.129)	-0.071 ** (0.012)	-0.028 * (0.013)	-0.301 * (0.128)	-0.080 ** (0.016)	-0.107 ** (0.020)	-0.591 ** (0.208)	0.021 ** (0.008)	0.022 * (0.009)	-1.544 ** (0.577)	-0.149 ** (0.046)	-0.159 ** (0.057)
Proportion unionized ^b												
Ln(size)	0.351 ** (0.033)	-0.017 ** (0.003)	0.012 ** (0.003)	0.415 ** (0.032)	0.012 ** (0.003)	0.012 ** (0.003)	0.161 ** (0.035)	0.040 ** (0.003)	0.055 ** (0.004)	0.161 ** (0.035)	0.040 ** (0.003)	0.055 ** (0.004)
Part of organization	-0.154 (0.093)	-0.012 (0.009)	-0.016 + (0.009)	0.245 ** (0.092)	-0.016 + (0.009)	-0.016 + (0.009)	0.149 (0.111)	0.015 + (0.008)	0.036 ** (0.010)	0.149 (0.111)	0.015 + (0.008)	0.036 ** (0.010)
Labour shortage	-0.245 ** (0.087)	-0.003 (0.007)	-0.019 * (0.008)	0.186 * (0.084)	-0.019 * (0.008)	0.022 * (0.009)	0.132 (0.097)	0.021 ** (0.008)	0.022 * (0.009)	0.132 (0.097)	0.021 ** (0.008)	0.022 * (0.009)
Competition increased	-0.096 (0.095)	-0.023 * (0.008)	-0.016 + (0.009)	-0.162+ (0.093)	-0.023 * (0.008)	-0.016 + (0.009)	-0.004 (0.108)	0.017 * (0.008)	0.019+ (0.010)	-0.004 (0.108)	0.017 * (0.008)	0.019+ (0.010)
International market	-0.037 (0.120)	-0.010 (0.010)	-0.002 (0.011)	0.316 ** (0.116)	-0.010 (0.010)	-0.002 (0.011)	0.038 (0.147)	0.016 (0.010)	0.018 (0.013)	0.038 (0.147)	0.016 (0.010)	0.018 (0.013)

Intercept	0.745 ** (0.117)	0.139 ** (0.010)	0.028 * (0.011)	-0.268 * (0.114)	1.844 ** (0.156)	0.293 ** (0.012)	0.195 ** (0.015)
N	2742	1463	2712	2747	2747	1922	2752
Censored			1249				830
Log likelihood	-1616.5		-358.45	-1693	-1360.71		-712.50
Chi ²	529.45		239.89	332.5	738.81		590.57
Adj R ²		0.065				0.149	

Descriptive statistics

	US Mean (sd)	Norway Mean (sd)
Public	0.23(0.4)	0.22(0.4)
Proportion unionized	0.17(0.3)	0.59(0.3)
Ln(size)	5.26(1.9)	4.28(1.2)
Dummy-variables:		
Part of organization	0.35(0.5)	0.48(0.5)
Labour shortage	0.48(0.5)	0.55(0.4)
Competition increased	0.52(0.5)	0.59(0.4)
International market	0.14(0.4)	0.16(0.3)

**p < 0.01, *p < 0.05, + p < 0.1 ^a Logistic, ^b OLS, ^c Tobit

Note: Reference category: Norway, average ln(size) (200 employees), unionization (0.59), not part of organization, no labour shortage, competition unchanged, and national market.

Coding
 1 = part of larger organization
 1 = not easy to hire core employees with necessary skills
 1 = competition increased last two years
 1 = main market international

Table 3 Determinants of non-standard arrangements: fixed-effect models, controlling for 3-digit industry codes

	Direct-hired temporary workers		THA		Contractor		THA/Contractor	
	Incidence ^a b(se)	Intensity ^b b(se)	Incidence ^a b(se)	Intensity ^b b(se)	Incidence ^a b(se)	Intensity ^b b(se)	Incidence ^a b(se)	Intensity ^b b(se)
US								
Proportion unionized	-1.983 ** (0.701)	-0.033 (0.053)	-1.203 + (0.715)		-0.947 ** (0.368)		-0.053 + (0.030)	
Proportion unionized ^b	-5.963 ** (1.712)	-	-2.007 (1.747)		-		-	
Ln(size)	0.138 * (0.060)	-0.013 + (0.009)	0.168 ** (0.060)		0.062 (0.059)		0.015 ** (0.005)	
Part of organization	-0.005 (0.204)	0.052 (0.033)	0.319 (0.199)		-0.056 (0.210)		0.008 (0.018)	
Labour shortage	-0.063 (0.104)	-0.018 (0.030)	-0.191 (0.187)		0.016 (0.193)		-0.017 (0.017)	
Competition increased	-0.284 (0.200)	0.039 (0.033)	-0.026 (0.194)		-0.198 (0.206)		0.014 (0.017)	
International market	0.469 (0.302)	0.049 (0.048)	0.093 (0.292)		-0.192 (0.321)		0.076 ** (0.027)	
Intercept	-	0.085 * (0.056)	-		-		0.187 ** (0.022)	
Log likelihood	-257.6		-265.1		-252.5			
Chi ²	25.8		16.1		8.2			
Adj R ²		0.074						0.151
N	579	220	613		580			437

Norway						
Proportion unionized	-0.091 (0.202)	-0.046 ** (0.014)	-0.934 ** (0.239)	-0.677 * (0.265)	-0.085 ** (0.019)	
Proportion unionized ^b	-	-	-1.418 * (0.651)	-2.373 ** (0.769)	-0.129 * (0.051)	
Ln(size)	0.673 ** (0.060)	-0.006 + (0.003)	0.636 ** (0.057)	0.391 ** (0.068)	0.057 ** (0.004)	
Part of organization	-0.230 + (0.133)	0.001 (0.009)	0.116 (0.131)	0.204 (0.162)	0.019 + (0.010)	
Labour shortage	-0.024 (0.120)	0.004 (0.008)	0.282 * (0.116)	0.312 * (0.134)	0.027 ** (0.009)	
Competition increased	-0.217 (0.135)	-0.013 (0.009)	-0.129 (0.135)	0.033 (0.165)	0.016 (0.010)	
International market	-0.139 (0.204)	0.003 (0.015)	0.485 * (0.214)	0.335 (0.293)	-0.001 (0.015)	
Intercept	-	0.118 ** (0.008)	-	-	0.282 ** (0.012)	
Log likelihood	-820.4		-864.0	-671.7		
Chi ²	152.5		191.4	69.2		
Adj R ²		0.262			0.295	
N	1902	1259	1886	1690	1502	

**p < 0.01, *p < 0.05, + p < 0.1 a Conditional fixed effect Logit-model, b Fixed effect linear regression
 Note: See Table 2.

Norway, despite the different roles unions play in these two countries, which is consistent with Hypothesis 3a.

For the US establishments, Table 3 shows that unionization has a non-linear effect only on the incidence of use of direct-hired temporaries,¹⁰ which provides some support for Hypothesis 3b. This result is consistent with Uzzi and Barsness' (1998) findings for establishments in the United Kingdom. In establishments with a medium level of unionization, the position of unions is more tenuous, and management may see the potential to reduce the number of unionized workers by introducing non-standard arrangements.

In Norway, we find that unionization has non-linear effects on the incidence of contractors, incidence of THAs, and proportion of functions in which establishments use THAs/contractors.¹¹ The most consistent finding here is that highly unionized establishments have lower use of non-standard arrangements.

Conclusions

Our analyses suggest three main conclusions. First, the use of non-standard work arrangements is more widespread in Norwegian establishments than in the US. The country differences persist (in most models) even after controlling for characteristics of the establishment: Norwegian establishments are more likely to use all the non-standard work arrangements than the US establishments, with the exception of intensity of direct-hired temporary workers in which the difference is not significant.

We suggest that the greater use of non-standard work arrangements in Norway is due to two main reasons. First, labour law is more restrictive in Norway, which encourages employers to use non-standard arrangements to achieve flexibility. Even though employers' access to the use of temporary workers is limited, this is outweighed by the regulations on dismissals of employees in standard employment relations. Norwegian employers can avoid the costs of terminating regular, open-ended contracts by using non-standard arrangements (Oliver, 1991). Other studies of the Norwegian labour market report similar findings (e.g. Dahl and Nesheim, 1998).

The second reason is that the substantial use of leave of absences in Norway creates a greater demand for temporary work. Establishments face many situations where they have to fill in for persons that are on leave, which makes the use of temporaries an attractive option, particularly for fixed-term contracts and THAs. By contrast, US establishments may have less need to employ workers on time-limited contracts since employment contracts are more easily terminated. Employment contracts are social categories and the difference between being on a regular contract or on a time limited one is greater in Norway than in the US (Nesheim, 2002).

Our second conclusion is that public establishments in both countries are more likely than private establishments to hire temporary employees directly,

and less apt to use THAs and contractors, particularly in Norway. Public sector establishments in Norway are especially heavy users of direct-hired temporary workers. We have interpreted this as reflecting relatively liberal legislation regarding the use of direct-hired temporaries (in part of the public sector) and the demand for employers in the public sector to fill in for workers (many of which are women) who take leaves of absence, which are especially common in the public sector.

The lower use of THAs and contractors by public sector establishments in both countries may reflect the stronger norms in the public sector against using workers from other firms. In Norway, there are also certain restrictions as to when public sector employees are able to use contractors, encouraging Norwegian employers to use other non-standard arrangements such as direct-hire temporaries. Leasing of medical and nursing workers from THAs, for example, was banned until recently in Norway. It remains to be seen what the impact will be of the easing of the ban (in 2000) on leasing these kinds of workers in Norway. On the one hand, organizations in these service sectors in Norway may have become accustomed to hiring workers directly, due to the previous restrictions on leasing. Public sector organizations (health and education) in the UK also seem to rely more on fixed-term contracts than workers from THAs (Cam et al., 2003). On the other hand, since 2000 several THAs in Norway have started providing hospitals with health personnel (particularly nurses), suggesting that public sector organizations may increasingly rely on such agencies to recruit workers. The experience of both the US (McGlashan et al., 2003) and the United Kingdom (Grimshaw et al., 2001) suggests that there is nothing intrinsic against using agencies to place professionally accredited workers in these sectors.

Our third conclusion is that unionization generally has a negative impact on establishments' use of non-standard arrangements in both countries. Highly unionized establishments appear to be the least likely to use non-standard arrangements, particularly in Norway, but also to some extent in the United States. The findings suggest that even though the power of labour is relatively stronger in Norway than in the US, highly unionized establishments limit the use of non-standard work arrangements in both countries. These results persist even after controlling for detailed industries. One explanation for this is that unions fight against the use of non-standard arrangements, which makes it harder for management to introduce them in these establishments. Longitudinal data are needed to examine this hypothesis more systematically.

Our findings, then, provide at least indirect evidence that national context affects work organization and that institutional settings such as the regulatory environment affect firms' choices and strategies in how they organize their workers (see also Gooderham and Nordhaug, 1997; O'Reilly, 1992; Smith et al., 1995). The relatively high use of contractors in Norway (particularly in the private sector) is consistent with our argument about the importance of the overall regulations on hiring and firing and the limited access to fixed-term contracts. The use of contractors is probably the least viable option for employers

when filling in for persons on leave. A study of countries that differ in the access to leave of absence while the labour market is equally regulated is needed to disentangle the relative effects of these factors.

Our data do not permit us to test rigorously whether the distinctly different national institutions and cultures in Norway and the US lead to a divergence in their use of non-standard work arrangements or whether uncertain and highly competitive market environments will promote a convergence toward a common institutional order of the economy (Form, 1979). Adjudicating between such alternative hypotheses also requires longitudinal data on organizations in these countries.

Even if it could be established that the use of non-standard work arrangements is 'converging' in the US and Norway, however, it is important to realize that the consequences of these arrangements for individuals may be quite different. In particular, the degree to which these non-standard jobs are 'precarious' in Norway is arguable. For instance, holding a temporary job may have less adverse implications for workers in Norway, partly because temporary work is more likely to provide a route into more secure jobs later in a person's career in Norway than the US (Houseman, 2001; Longva, 2002; OECD, 2002), and partly because fringe benefits such as health insurance are provided to people based on their residency and not their employment status in Norway. The fact that temporary employment is often used to recruit for regular positions suggests that the transition from temporary to regular employment is relatively high in Norway, and that temporary jobs need not necessarily be bad jobs. This underscores the dependence of the nature and quality of non-standard work arrangements on the institutional context, a consideration that needs to be kept in mind when examining whether countries are 'converging' toward a common labour utilization system.

Our findings also have important implications for public policy. We find support for a relationship between the ease of terminating regular contracts and the demand for non-standard arrangements. In a regulated labour market such as Norway, a milder restriction on open-ended contracts may be followed by decline in the use of non-standard arrangements. The OECD (1999) reports that stricter employment protection legislation is associated with higher rates of self-employment. Furthermore, introducing stricter regulations on one kind of non-standard arrangement may increase the use of other arrangements. However, in addition to regulations related to employment law, the *need* for these work arrangements should also be considered. In the case of Norway, even if regular contracts were to be easier to terminate, the need for fill-in persons would still exist, given the benefit schemes and system of leave of absence.

Studying the nature and consequences of different systems of labour utilization provides a fruitful focus for understanding how macro-level social and economic forces affect the experiences of individuals. The possible impact of globalization on organizations' competitive contexts renders comparative research essential, and will take on added importance in the future, as the use of non-standard work arrangements is likely to increase.

Table A1 Legislation governing employment in the US and Norway. Restrictions on termination of contracts and access to use of non-standard arrangements

	US	Norway
Hiring/firing system	Unregulated by public law.	Regulated by law.
Termination of contract/dismissal	No general legislation. Terminate contracts 'at will'. Recently require that dismissals be justified on reasonable grounds (Emerson, 1988). The US is the country that has the least regulations on dismissals (McGlashan et al., 2003; OECD, 1999).	The general rule is that a dismissal is not lawful unless it has 'just cause' in circumstances connected with the employees or the organization (see Evju, 2003). The obstacles to terminate employment contracts are regarded as serious (Emerson, 1988).
THA	Unregulated*	Hiring-in and hiring-out workers was banned (until 2000), with two main exceptions: (1) THAs are permitted to hire out workers in the 'office sector' (mainly clerical work) and (2) firms may hire-out employees through an exemption permit granted by the labour market authorities. For content of liberalization, see Evju (2003). As our data were collected in 1997, the rules before the liberalization apply.
Contractors	Unregulated	Private sector: no restrictions. Public sector: certain tasks are restricted by law to be performed by government employees only. (see Bugge and Advokatfirma, 1999).
Direct-hired temporary work	Unregulated	Private sector and the municipalities: fixed-term contracts are lawful to the extent that hiring for a fixed term 'is warranted by the nature of the work' and the work concerned 'differs from that which is ordinarily performed in the enterprise' (Work Environment Act, §58A). An exception applies for the hiring of substitute workers (absentees). State sector: fixed-term contracts are lawful when work task is limited in time (Law of civil servants)

* The only effective restrictions on temporary work come from collective bargains where trade unions may negotiate a commitment from the firm that they abstain from this market (Emerson, 1988: 795). See also McGlashan et al. (2003) for a recent update.

Table A2 Regressions of non-standard arrangements on public sector (controlling for all explanatory variables), separately by country

	Direct-hired temporary workers			THA			Contractor			THA/Contractor		
	Incidence ^a b(se)	Intensity ^b b(se)	Incidence and intensity ^c b(se)	Incidence ^a b(se)	Intensity ^b b(se)	Incidence and intensity ^c b(se)	Incidence ^a b(se)	Intensity ^b b(se)	Incidence and intensity ^c b(se)	Incidence ^a b(se)	Intensity ^b b(se)	Incidence and intensity ^c b(se)
US												
Public	0.644 ** (0.211)	-0.018 (0.028)	0.073 * (0.030)	-0.630 ** (0.225)	0.002 (0.021)	-0.074 ** (0.027)	-0.298 (0.219)	0.002 (0.021)	-0.144 ** (0.018)	-0.298 (0.219)	0.002 (0.021)	-0.074 ** (0.027)
Intercept	-0.651 ** (0.286)	0.153 ** (0.030)	-0.116 ** (0.041)	-0.922 ** (0.222)	0.234 ** (0.028)	0.042 (0.028)	-0.708 ** (0.220)	0.234 ** (0.028)	0.195 ** (0.017)	-0.708 ** (0.220)	0.234 ** (0.028)	0.042 (0.028)
N	735	220	735	740	437	745	740	437	2007	2007	437	745
Censored			515			308						308
Norway												
Public	1.324 ** (0.186)	0.004 (0.013)	0.062 ** (0.014)	-0.592 ** (0.169)	-0.041 ** (0.016)	-0.144 ** (0.018)	-1.420 ** (0.196)	-0.041 ** (0.016)	-0.144 ** (0.018)	-1.420 ** (0.196)	-0.041 ** (0.016)	-0.144 ** (0.018)
Intercept	0.730 ** (0.142)	0.142 ** (0.011)	0.034 (0.012)	-0.233 * (0.153)	0.284 ** (0.013)	0.195 ** (0.017)	2.010 ** (0.201)	0.284 ** (0.013)	0.195 ** (0.017)	2.010 ** (0.201)	0.284 ** (0.013)	0.195 ** (0.017)
N	2007	1243	1977	2007	1485	2007	2007	1485	2007	2007	1485	2007
Censored			734			522						522

**p < 0.01, *p < 0.05 a Logistic, b OLS, c Tobit

Note: See Table 2 for explanatory variables that are included in the models, but not presented in this table. The complete table is available from authors upon request.

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Notes

- 1 Unfortunately, the data only provide information on the proportion of *all* workers in the establishment who belong to unions. In Norway 35 percent of temporary employees are unionized, compared to 61 percent of regular employees (Nergaard, 1998). In the US, about 9 percent of contingent workers and 16 percent of non-contingent workers are members of a union (Polivka, 1996).
- 2 The US sample included establishments with less than ten employees, which we excluded here to make the samples more comparable. This leaves us with 802 US establishments instead of the original 1002.
- 3 The distributions of establishments in the US sample by industry and employee size closely resemble the population distributions of establishments by these two characteristics in the year that the data were collected. With regard to industry, the percentage of establishments in the (weighted) sample underrepresented by about 5 percent the population percentage of US establishments in finance, insurance and real estate; with regard to size, the percentage of establishments in the (weighted) sample underrepresented by about 11 percent the population percentage in the largest size category.
- 4 Due to invalid values on some variables, *N* varies somewhat across the tables.
- 5 Unionization and industry are correlated in both the US and Norway. However, there are variations within the industries that allow us to study the impact of unionization. In the fixed effect analysis, we excluded industries with only *one* establishment, accounting for 57 US establishments and 31 Norwegian establishments. We also excluded establishments within the same industry having no variation in proportion unionized, accounting for 139 US establishments (all of these are non-unionized) and two Norwegian establishments (also non-unionized).
- 6 When introducing interaction effects of all the variables and using average level of unionization and size as in the US (unionization 0.17 and size 1220) the effect of national context is significant in six of the seven models, which is the same result as presented in Table 2. When using averages in Norway (unionization 0.59 and establishments size 200) the effect of national context is not significant for intensity of direct-hired temporary workers (as Table 2), incidence of THA, and intensity of THA/contractors (OLS model). The effect of national context stays the same when controlling for ten industry codes (two-digit level).
- 7 When using average numbers for the US (size = 1220, unionization = 0.17) the probabilities are slightly higher. For Norway the probabilities for incidence of direct-hired temporary workers are 0.92 (public) and 0.77 (private); for the US they are 0.53 (public) and 0.37 (private).

- 8 Size = 200, unionization = 0.59. When using US average numbers the probabilities are 0.90 (private) and 0.70 (public).
- 9 Size = 200, unionization = 0.59. When using US average numbers the probability is 0.37 (size = 1220, unionization = 0.17).
- 10 When using averages for the US in the reference category (size 1220) and unionization (0.17) the variable for *proportion unionized* is positive, which indicates that the curve continues to increase before it decreases. The curve has an inverted U-shape in these analyses too.
- 11 The linear model (with a negative effect) is also significant at 1 percent level for incidence of THAs and incidence and intensity of THAs/contractors in Norway.

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Unions' Dilemma When Firms Use Employment Intermediaries

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This article examines how labour unions influence the use of employment intermediaries. Employment intermediaries, such as temporary help agencies (THAs) and contract companies, are commonly believed to undermine the power of labour unions, by fracturing the collectivism that characterises unions. However, these arrangements may also serve as a buffer in the workplace – protecting the regular workers from fluctuations in labour demand. The analyses are based on 1629 private sector establishments. Two main findings are reported. First, there is a positive relationship between unionisation and the use of employment intermediaries for staffing reasons. Second, highly unionised establishments tend to have the lowest use of THAs and contractors for reasons that may replace regular workers, suggesting that unions are able to influence how employers use employment intermediaries. The findings are discussed in relation to the regulated labour market in Norway.

Introduction

In the last decade the use of non-standard work arrangements, such as temporary labour and employment intermediaries, has increased in many industrial nations (De Grip *et al.*, 1997; Carnoy *et al.*, 1997; Lee, 1996; Kalleberg *et al.*, 2003). In the same period many countries have experienced a decline in union membership (Ebbinghaus and Visser, 1999; Checci and Lucifora, 2002). These trends encourage one to speculate how these two phenomena interact. For workers, non-standard work arrangements typically imply greater job insecurity and unions generally oppose these arrangements. The use of non-standard work arrangements, such as employment intermediaries may, however, create a dilemma for unions. On the one hand, workers employed by employment intermediaries may constitute competitors to the regular, unionised workers in the firm. On the other hand, regular workers may benefit by having non-standard workers in the firm if the non-standard workers serve as a buffer, protecting the regular workers from

lay-offs. This article analyses the relationship between unionisation and one distinct type of non-standard workers – those employed by means of employment intermediaries. Two main types of employment intermediaries are examined: employees of temporary help agencies (THAs), and contract company workers. I do not include direct-hired temporary and part-time work as non-standard work arrangements.

Norway has been labelled a corporatist country (Høgsnes, 1994), where labour is strong and collective bargaining widespread. Unions in Norway are sceptical about non-standard arrangements and generally assert that two-party open-ended contracts should continue to be the dominant type of work arrangement (LO, 2004). Fifty-seven per cent of workers are union members (Nergaard, 1998), and the percentage has been stable throughout the post-war period (Checci and Lucifora, 2002). Despite the relatively strong position of unions in Norway, temporary employment and subcontracting are widespread (Nergaard, 1998; OECD, 2002; Olsen and Kalleberg, 2004). In the representative sample of private

sector establishments studied in this article, 37 per cent of the establishments use workers from THAs and 80 per cent use contract company workers. The coexistence of high union density along with extensive use of non-standard work arrangements, make Norway particularly appropriate for studying the relationship between unionisation and the use of employment intermediaries in the workplace.

Previous research provides inconsistent evidence as to the effect of unionisation on the use of non-standard work arrangements.¹ Some studies report that unionisation has a negative effect on the use of temporary workers (Houseman, 2001; Abraham, 1990), as unions resist the use of non-standard workers, who would be competitors to unionised workers. Interestingly, there is also evidence that highly unionised establishments have a greater use of subcontractors (Abraham, 1990), and temporary workers (Davis-Blake and Uzzi, 1993). Lastly, Uzzi and Barsness (1998) found a non-linear relationship between unionisation and the use of fixed-term contractors, suggesting that in establishments with a medium level of unionisation, the union's position is more tenuous, which may enable management to impose non-standard work arrangements without fear of union opposition. However, this research was restricted to the United States or the United Kingdom where there are few labour market regulations and labour unions generally are weaker.

This article examines how the use of employment intermediaries relates to the degree of unionisation in the establishment. I distinguish between two main types of reasons for using non-standard workers: (1) as a response to particular staffing needs, such as adjusting the workforce to varying labour demands, and (2) as a means to lessen the dependence on (and ultimately replace) regular workers. Two forms of non-standard work arrangements which help firms to meet these needs are studied here: (1) workers from THAs who are employed by the THA and supervised by the client organisation, and (2) contract company workers who are both employed and directed by the contract company. The analyses are based on information about 1629 private sector establishments in Norway. First, theoretical framework and hypotheses are presented. Then, a description of the data follows. Lastly, the results of the analyses and their implications for further research are discussed.

Non-standard Workers: a Challenge to Unions?

According to conventional wisdom unions view the use of non-standard work arrangements as a threat to their

very existence. Non-standard arrangements typically lead to segmentation of workers: they separate workers by physical location, duration of employment, and administrative control (Pfeffer and Baron, 1988). This structuring of the employment relations makes it difficult to uphold the idea of a collective group of workers, and may lead to a fracturing of the collectivism that characterises unions (Bacon and Storey, 1996). A fracturing of the collective spirit may weaken the position of unions. Also, non-standard work arrangements usually imply little job security, and unions therefore oppose these arrangements. Regular workers may, however, benefit by having some non-standard co-workers as a buffer to lay-offs when times are bad.

In the literature researchers have emphasised that it is too simplistic to regard unions' objectives as unified. The goals of unions and preferences of union members are not easily sorted out, and are often conflicting (Freeman and Medoff, 1984; Booth, 1995; Turnbull, 2003). For example, an increase in wages of unionised workers may reduce available jobs in the union sector (Booth, 1995). A structural aspect is that unions often consist of large, complex organisations, and the objectives of the union leaders may conflict with the objectives of their members (Bild *et al.*, 1998). Furthermore, the views and interests of local union divisions may not always be consistent with the strategy of the unions at the national level.

One distinction between non-standard and regular workers is their different propensity to be member of a union. Table 1 shows that union membership is generally lower for temporary workers than workers with open-ended contracts in many European countries (with the exception of Great Britain).² Table 1 shows only the numbers for temporary workers in general, and not for employees of employment intermediaries (such data have apparently not yet been compiled). For temporary workers employed by THAs, union membership is as low as 14 per cent in Norway (Torp *et al.*, 1998), suggesting that unionisation among employees of intermediaries is considerably lower than for temporary workers in general.

Previous theoretical frameworks distinguish between unionised and non-unionised workers, emphasising their diverse interests. Freeman and Medoff (1984) argue that the core tasks of unions are improving job quality and job security of *their members*. Workers that hold non-standard jobs are viewed as outsiders (or entrants) having jobs with low job security, whereas the insiders are regular employees with continuous employment. The insiders are protected by significant

Table 1 Union membership for temporary workers and workers on open-ended contracts. European countries

	Temporary workers		Workers on open-ended contracts	
	%	N	%	N
Norway	41	(182)	59	(1209)
Sweden	78	(68)	88	(574)
Denmark	76	(75)	85	(521)
France	8	(79)	18	(533)
Germany (West)	13	(60)	27	(540)
Great Britain	38	(71)	34	(360)
Spain	8	(98)	22	(201)

Note: Numbers are based on International Social Survey Program, 1997. The numbers from the following countries are weighted: Sweden, Denmark, France and Great Britain. Workers with no written contract are not included.

labour turnover costs – it is costly for the employer to fire workers in whom they have invested training (Lindbeck and Snower, 1988). The insiders may, however, benefit from some use of non-standard workers ('outsiders'), such as those that serve as a buffer for fluctuations in demand. This use of employment intermediaries may increase the employment protection for regular workers.

The conceptualisation of workers as insiders and outsiders is most explicitly stated in Lindbeck and Snower's (1988) theoretical framework, emphasising the uneven market power of different groups. Yet, the concepts are traceable also in other theoretical approaches. The model of the 'flexible firm' (Atkinson, 1984), suggested that organisations should divide the workforce into a core consisting of regular, high-skilled workers with career opportunities, and a periphery, consisting of workers that are easily disposable, such as temporary labour or workers hired through employment intermediaries. This model has received extensive criticism, most brutally from Pollert (1988), who argues that the model legitimised the segmentation of the workforce. For employers, segmenting the organisation's workforce into fixed and variable components is assumed to achieve cost effectiveness, as the non-standard workers can buffer or protect the core labour force from fluctuations in demand (Kalleberg, 2003). By using non-standard work arrangements, such as employment intermediaries, employers reduce the risk of having to lay-off their regular workers. For workers, and in particular for non-standard workers, this division has raised concern for reduced job security (Standing, 1997). Thus, employers' search for flexibility has led to a polarisation between

organisational insiders and organisational outsiders (Kalleberg, 2003).

A common ground in these frameworks is that workers are divided into opposing categories of jobs, leaving them with uneven market power, different prospects, and thus conflicting interests. I argue that regular workers with open-ended contracts may benefit from having non-standard co-workers, as long as they do not represent a threat to their own jobs. When employees of intermediaries protect the regular workers from lay-offs, a positive relationship between unionisation and employment intermediaries is created. How these relationships act out in the corporate field will depend on the industrial relations in the country.

Norway: Industrial Relations and Labour Law

In Scandinavia, nation-wide unions play a more important role than elsewhere, both in labour market relations and in economic policy implementation (Høgsnes, 1994). Compared to Europe as a whole, union membership in Norway is high, albeit lower than in the other Scandinavian countries (Table 1). In Norway, co-operation between employers and unions is highly regulated, and employees have the legal right to representation at the corporate board in organisations with more than 30 employees.³ The Main Agreement (§ 9) regulates the co-operation between the establishment and the union (union representative), mandating disclosure by management; that is, requiring management to give the union early notice on issues concerning changes in the workforce (Engelstad *et al.*, 2003).

The labour market in Norway is embedded in a number of regulations governing employment relations. There are many obstacles to terminating open-ended contracts, which are believed to induce employers with a preference for fixed-term contracts or employment intermediaries that are less costly to terminate (OECD, 1999). However, as health insurance is socialised in Norway, the cost-saving potential for firms on fringe benefits is limited.

The extent to which firms can to use employees of THAs is regulated in Norwegian labour law, which is common in the European context (Bergström and Storrie, 2003). There is no equivalent legislation regulating the use of contractor companies. In 2000, the restrictions on firms' use of THAs were relaxed in Norway. Hiring-out of manpower is now permitted in Norway, although only to the extent that fixed-term contracts are

lawful (see Table A1 for details of regulations). The liberalisation was followed by a moderate increase in the overall use of workers from THAs (Nergaard and Nicolaisen, 2002). The legislative change only concerned THAs and not contract companies. As the survey data used in this article were collected in 1997, the rules before the liberalisation apply. Torp (2005) presents data on establishments (from 2003) after the legislative change. However, as these data did not include the reasons given for using employment intermediaries, they cannot directly shed light on the topics discussed in this article.

Hypotheses

This article examines the relationship between unionisation and employment intermediaries and distinguishes between different reasons given for using employment intermediaries. The hypotheses are inspired by two conjectures: (1) the use of employment intermediaries protects unionised workers from fluctuations in labour demand, and (2) the institutional setting via the labour law influences the use of employment intermediaries.

Previous research on the influence of unionisation has distinguished between various types of non-standard work arrangements. Inconsistent evidence is reported from the Anglo-Saxon countries. Negative effects of unionisation were found on the use of agency temporaries, short-term hires (Houseman, 2001) and temporary workers (Abraham, 1990), while positive effects were found on subcontractors and contracting out (Abraham, 1990) and temporary workers (Davis-Blake and Uzzi, 1993). A non-linear relationship was found with the use of fixed-term contractors (Uzzi and Barsness, 1998). Also, a few contributions found no systematic associations between unionisation and contracting out (Abraham and Taylor, 1996) and independent contractors (Davis-Blake and Uzzi, 1993). This research measured whether organisations used non-standard work arrangements (incidence) and in what amount (intensity) they used such work arrangements.

This article takes a slightly different angle by distinguishing between the different reasons given for using employment intermediaries. The purpose of distinguishing between reasons given is because unions may approve of employment intermediaries for certain reasons and not others. Preferably we would like to distinguish both between reasons given and types of employment intermediaries. Unfortunately, the data do

not enable us to distinguish between reasons given for using THAs *versus* contract company workers when establishments use both types of employment intermediaries. However, the reasons for using THAs and contract work may overlap, as workers employed by THAs increasingly are highly skilled, e.g. computer programmers and nurses (Kalleberg, 2003). The data indirectly enable us to test this. Among establishments that only use contractors, 24 per cent did so to acquire special expertise. Compared to the sample of establishments only using THAs, as many as 17 per cent said they did so to acquire special expertise.

Employers have been known to use non-standard work to weaken unions in the workplace (Pfeffer and Baron, 1988; Uzzi and Barsness, 1998). This motivation is highly controversial in the cooperative context of Norway. Although evidence from Anglo-Saxon countries shows that non-standard work arrangements have been used to limit union participation (Benson and Ieronimo, 1996; Geary, 1992), such anti-union activities are unlikely to win acceptance in Norway. An analysis of industrial disputes in the 1990s gave no evidence of 'union busting' or similar actions in Norway (Nergaard and Stokke, 1999).

An alternative interpretation of why highly unionised establishment use employment intermediaries may be offered: if non-standard workers serve to heighten job security for permanent workers we should find more extensive use of employment intermediaries in highly unionised organisations. In the hotel sector in Norway, Gjelsvik (1998) found that highly unionised establishments had greater use of temporary workers. Gjelsvik interpreted this as a reflection of employers having a core-periphery strategy, core workers enjoying job security and temporary workers 'buffering' for the core workers.

The most commonly cited reason given for using employment intermediaries is to adjust for workload fluctuations and staff absence (Houseman, 2001; Nesheim, 2003). This reason is likely to meet with approval by unions. First, the Norwegian welfare state gives workers the right to maintain a long-term employment relationship, while taking leave of absence to engage in other activities (taking care of children, additional education, etc). To use non-standard workers to fill-in for regular workers on leave is explicitly approved by unions (see LO, 2004). Second, non-standard workers may create a buffer for regular workers. As a response to market fluctuations, firms may use employment intermediaries to avoid future lay-offs of regular workers, and non-standard workers may serve

as a protection for the regular workers (insiders). There is some evidence that Norwegian firms have a core-periphery strategy (Kalleberg and Olsen, 2003). Based on these arguments one may hypothesise that the use of employment intermediaries is positively related to unionisation.

Hypothesis 1: The degree of unionisation is positively related to the use of employment intermediaries for staffing needs.

Unions are likely to be more sceptical about using employment intermediaries when it is perceived to aim at replacing the regular workers with agency temporaries or contract company workers. Employment intermediaries have also been found used as a means of screening workers for regular positions, of acquiring special expertise (Houseman, 2001), of saving on labour costs, and in some countries of saving on fringe benefits (Kalleberg *et al.*, 2000). Unions may regard all of these situations as giving jobs to 'outsiders'. For instance, using employment intermediaries to acquire special expertise may be considered as a way of avoiding having to provide training for the regular workers.

Furthermore, using employment intermediaries for recruitment purposes is restricted in labour law. The recruitment of workers through employment intermediaries is a way to 'try and hire' workers. In Norway, 'try and hire' is regulated as a public task,⁴ and not legally accepted as a legitimate reason for using agency temporaries (NOU, 1998). Despite this regulation, agency temporaries often achieve regular employment through their assignments (Torp *et al.*, 1998), suggesting that 'try and hire' is common. There may, however, be stronger norms against screening agency temporaries for regular positions in highly unionised establishments. (Screening for recruitment is mainly relevant for THAs.) To sum up, the use of employment intermediaries for these reasons represent a means of replacing regular workers. Thus, one may hypothesise:

Hypothesis 2: There is a negative relationship between the degree of unionisation and the use of employment intermediaries for replacement reasons, such as recruiting for regular positions, acquire special expertise, and keeping the number of regular workers down.

Methodology

The results presented derive from a telephone survey of a representative sample of 1629 private sector establish-

ments conducted in 1997. The sample was drawn from *Bedrifts- og foretaksregisteret* (Register of Establishments) provided by Statistics Norway. The population was all Norwegian establishments with more than 10 employees.⁵ To ensure that the sample contained many large organisations, the establishments were sampled with probability proportional to their size. The response rate in this survey was 76 per cent. A further description and discussion of results from this survey can be found in Olsen and Torp (1998) and Olsen and Kalleberg (2004).

Model and variables

To be able to disentangle the relationship between unionisation and non-standard work, I distinguish between establishments' different stated reasons for using these arrangements. The alternative reasons for using employment intermediaries were not mutually exclusive, allowing for several reasons to be reported. To assess how these reasons correlate, a factor analysis was conducted (see Table A2). The factor analysis differentiates between three dimensions. Recruitment purposes sort under the same dimension as staffing needs, although the loading of this factor is weaker than the other items. The reason for keeping this as a separate category is that 'try and hire' was not considered legitimate according to labour law at the time of the survey, and we therefore expect this to be differently related to unionisation. (See Jarvis *et al.*, 2003 for using antecedents as criteria for establishing indicators.) The internal reliability tests show that Cronbach's Alphas are acceptable (see Table 4). Only category (4) gives low internal reliability. However, weak internal correlations are less of a problem in formative measurements models, such as the one used here (Jarvis *et al.*, 2003).

The dependent variable is measured as four discrete outcomes, based on four main reasons for using non-standard workers: (1) particular staffing needs (absence, seasonal, or peak), (2) screening for recruitment, (3) time-limited projects or special expertise, and (4) to avoid regular workers or fringe benefits. Reasons (2), (3), and (4) are thought to potentially replace regular workers (see Table 3 for categorisation of the specific reasons). The four categories indicate whether the establishment reports to have used THAs or contractors for any of these reasons (= 1) or not (= 0). The reasons are categorised in the following way: establishments that have used employment intermediaries for staffing needs but *not* for any of the replacement reasons, and

establishments that have used employment intermediaries for recruitment or special expertise/projects but *not* to avoid regular employees/fringe benefits. Establishments that report the reason to avoid regular employees/fringe benefits may have also reported other reasons. (Very few only report avoid regular/fringe benefits.)

Explanatory variables included in the model are: (1) unionisation, (2) establishment size, and (3) industry. Unionisation is measured as the proportion of unionised workers in the establishment. Establishment size is included as a control variable. On the one hand, larger organisations may be less likely to use employment intermediaries because they can have flexibility in the number of employees with their existing workforce (Davis-Blake and Uzzi, 1993). On the other hand, larger firms are also engaged in more and diverse activities that require skills that may be retrieved from other companies, such as employment intermediaries (Davis-Blake and Uzzi, 1993).

In order to analyse how unionisation affects the different reasons for using employment intermediaries, a multinomial logit model (MNL) was used. The MNL is an extension of the binary logit model, allowing for more than two outcomes on the dependent variable (Long, 1997). The multinomial model is appropriate, because there are a limited number of categories (four outcomes), and the categories cannot be ordered.

The MNL can be presented in the following way (Long, 1997):

$$\Pr(y_i = 1|x_i) = \frac{1}{1 + \sum_{j=2}^J \exp(x_i\beta_j)}$$

$$\Pr(y_i = m|x_i) = \frac{\exp(x_i\beta_m)}{1 + \sum_{j=2}^J \exp(x_i\beta_j)} \text{ for } (m > 1)$$

where y is the dependent variable with J nominal outcomes. The effects (β), of the independent variables (x), are allowed to differ for each outcome (Long, 1997), which enables us to examine whether unionisation affects the outcomes differently. The outcomes, presented as m , can take four values: 1, 2, 3, and 4. Each of the outcomes presents a cluster of reasons for using employment intermediaries. The sum of the probabilities for the four outcomes is 1. The results from the multinomial analyses are presented in Table 4 and the corresponding probabilities in Table 5.

Results and Discussion

Unions and the Reasons for Using Employment Intermediaries

Table 2 presents information on the incidence and intensity of THAs and contractors for establishments in: the private sector, service industries⁶ and manufacturing. The numbers can be interpreted as representative (weighted) of the distribution of establishments. Table 2 shows that establishments in the manufacturing industry have slightly higher use of THAs and contractors than the service industry. Overall, Table 2 shows that the use of employment intermediaries is widespread in the Norwegian labour market.

Table 3 shows the reported reasons for using THAs and contractors by industry.⁷ The reasons are classified into two main categories: particular staffing reasons that

Table 2 Descriptive statistics of incidence and intensity of temporary help agencies (THAs) and contractors, for all private sector establishments, service industries, and manufacturing. Weighted numbers¹

	All establishments	Service industries	Manufacturing
<i>Incidence</i>			
THA	37.2	36.6	39.2
Contractors	80.7	77.1	84.9
<i>Intensity²</i>			
Functions by THA/contractors	27.1	25.7	28.5

¹Numbers are weighted at the inverse of the establishments' probability of being drawn.

²Incidence = 1.

Note: Incidence is measured as dichotomous variables indicating whether or not the establishment reports using THAs or contractors (1 = use, 0 = no use). Intensity is measured as the proportion of functions in the establishment performed by THAs or contractors. The following functions were included: clerical work, ICT, accounting, marketing/sales, security, janitorial, repairs, strategy, logistics, and catering.

Table 3 Reasons for using agency temporaries and contractors by industry. Per cent establishments. Weighted numbers

	All establishments	Service industries	Manufacturing
<i>Reasons related to staffing needs</i>			
Absence among regular employees	22	24	21
Seasonal changes	18	16	21
Peak periods	23	19	27
<i>Reasons potentially replacing regular workers</i>			
Screening for recruitment	8	8	8
Time-limited projects	19	14	27
Provide special expertise	21	18	25
Avoiding having too many regular workers	10	8	13
Lowers costs because no fringe benefits	1	1	1
<i>N</i>	1629	796	826

Note: The respondents were asked for what reasons they used THAs or contractors, in which they responded with 'yes' or 'no'. The alternatives are not mutually exclusive, allowing for several reasons to be reported.

unions are likely to accept and replacement-reasons that may challenge the role of unions in the workplace. The dilemma that employment intermediaries may create is that, on the one hand, employees of intermediaries may constitute competitors to regular workers in the workplace. On the other hand, the regular worker may benefit by non-standard workers serving as a buffer for fluctuations in labour demand and to ease work pressure. Overall, the use of THAs and contractors to cover for particular staffing needs and to provide special expertise are most common. Table 3 shows that the use of THAs/contractors for these reasons is more common in manufacturing industries than in the service industries. Table 3 also shows that only one per cent of establishments report that they used agency temporaries or contractors to save fringe benefits. This makes sense in Norway, since there are not really many benefits to save. (In Norway, health insurance is not related to employment, while supplementary pensions and job-related fringe benefits are linked to one's job.)

Table 4 presents the results from the MNLM measuring how the degree of unionisation affects the use of THAs and contractors for different reasons given, controlling for establishment size and industry.⁸ The analysis in Table 4 is restricted to establishments that have used employment intermediaries for one of the four clusters of reasons: (1) staffing needs, (2) recruitment, (3) special expertise, and (4) to avoid regular/fringe benefits. These four clusters correspond to the four outcomes in the MNLM. The reference category consists of establishment using employment intermediaries only for staffing needs (outcome 1).

Table 4 shows that the effect of unionisation is negative for all the three outcomes that may be potentially

replacing regular workers: recruitment purposes, special expertise, and avoiding regular workers/fringe benefits. The higher the unionisation the less likely establishments are to use employment intermediaries for these reasons, compared to establishments that only use employment intermediaries for staffing needs (reference category). Table 4 shows, for the most part, a positive effect of size. Other studies have also found that larger organisations are more likely to use independent contractors (Davis-Blake and Uzzi, 1993) and agency temporaries (Houseman, 2001; Mangum *et al.*, 1985). The analyses also control for the industry (see note, Table 4). (How unionisation affected incidence and intensity of THAs and contractors were analysed by Olsen and Kalleberg (2004). The main results from these analyses were that highly unionised establishments had the lowest use of THAs and contractors.)

Probabilities were computed, using the program CLARIFY (Tomz *et al.*, 2000), for MNLMs in order to get a better sense of the substantive meaning of these effects (King *et al.*, 2000). Table 5 presents the predicted probabilities, comparing establishments containing no union members with those characterised by complete unionisation (given average establishment's size). Table 5 also presents the change in probability for each outcome.

Table 5 shows that highly unionised establishments are more likely to use THAs and contractors for staffing needs exclusively. The probability for a non-unionised establishment (average size) to use employment intermediaries for staffing needs is 0.26, whereas the probability for an establishment where all workers are unionised is 0.38 (an increase of 46 per cent). We hypothesised that unionisation would be positively related to the use of employment intermediaries for staffing needs

Table 4 Multinomial logistic regression. The reasons for using employment intermediaries on unionisation and size (control for industry)

	Potential replacement reasons								
	(2) Recruitment purposes		(3) Projects or special expertise		(4) Avoid regular workers or fringe benefits				
	b	s.e.	b	s.e.	b	s.e.			
Union proportion	-2.331	**	0.584	-0.447	+	0.252	-0.585	+	0.310
Ln (size)	0.222		0.146	0.201	**	0.067	0.256	+	0.081
Intercept	-2.927	**	1.062	0.388		0.392	-0.524		0.489
<i>N</i>	44		512		208				
<i>N</i> (including reference category)	1022								
Pseudo R ²	0.082								
-2 Log likelihood	2114.6								
<i>Descriptive statistics</i>	<i>Mean %</i>			<i>Cronbach's alpha</i>					
Staffing needs	25.2			0.62					
Recruitment	4.3								
Projects/special expertise	50.1			0.58					
Avoid regular/fringe benefits	20.4			0.12					
Union proportion	54.0								
Ln (number of employees)	4.5								

* $P < 0.05$, ** $P < 0.01$ + $P < 0.1$

Note: Reference category: staffing needs (outcome 1), average ln (size), and average unionisation. The model controls for the following industry codes: agricultural, manufacturing, communications, trade, finance, medical, education, hotel industry, and other services.

Table 5 Predicted probabilities. Reasons for using employment intermediaries

	No workers unionised	All workers unionised	Change in probabilities
(1) Staffing needs	0.26	0.38	0.12
<i>Potential replacement reasons</i>			
(2) Recruitment purposes	0.05	0.01	-0.04
(3) Time-limited projects/special expertise	0.48	0.44	-0.04
(4) Avoid regular workers/fringe benefits	0.21	0.17	-0.04
	1	1	

Note: Probabilities are predicted based on multinomial logit regression (Table 4), given average size of the establishment.

(hypothesis 1), which is supported. One explanation may be that unions recognise the benefits of having non-standard workers in the organisation, such as saving regular workers from future lay-offs and extra work pressure. Non-standard workers may in fact increase the employment protection for the regular workers by serving as a buffer from fluctuations in demand.

Table 5 illustrates the opposite effect of unionisation on staffing needs *versus* potential replacement reasons. The probabilities for the three replacement reasons decrease with greater unionisation (as shown in Table 4).

(The probabilities add up to 1.) The greater the unionisation the less likely the establishments are to use employment intermediaries for all of the replacement reasons, which supports hypothesis 2. The probability that a non-unionised establishment uses employment intermediaries to recruit workers from THAs is 0.05, whereas the probability for an establishment where all workers are unionised is 0.01. The lower probability for recruiting non-standard workers in high-unionised establishments may result from unionised workers regarding these as outsiders, potentially threatening the

regular workers' (insiders) positions. Also, labour law put restrictions on the access to 'try and hire' (NOU, 1998). Although agency temporaries are quite often offered regular employment (Torp *et al.*, 1998), there may be stronger norms against this use in highly unionised organisations.⁹

Similarly, the probability that a non-unionised establishment uses employment intermediaries to save costs by avoiding regular employees/fringe benefits is 0.21, whereas the probability for an establishment where all workers are unionised is 0.17. The changes in probabilities (Table 5) are relatively small; however, the direction of the effects is consistent. Overall, the analyses provide evidence that highly unionised establishments have the lowest use of employment intermediaries for reasons that may replace the regular workers, such as screening for recruitment, special expertise, and for cost saving purposes, such as avoid too many regular employees.

Conclusions

The analyses suggest two main conclusions. First, unionisation is positively related to the use of THAs or contractors for staffing reasons, such as covering for absence among regular workers, seasonal changes, and peak periods. This finding suggests that unions accept and may even find it beneficial to have some non-standard co-workers. The finding supports the notion that unions do not oppose *all* use of non-standard work, and accept certain kinds of non-standard arrangements, particularly those benefiting the 'insiders'. A positive effect of unionisation on the use of employment intermediaries is also found for other countries, and has been interpreted as a way to control unions (Davis-Blake and Uzzi, 1993). This article offers an alternative interpretation of the positive effect of unionisation, linked to the corporate setting of the Norwegian labour market. When non-standard workers serve to heighten job protections for permanent workers, unions may find this tolerable and even beneficial to some of their members. Thus, despite unions generally opposing non-standard work arrangements, the findings suggest that at workplace level, union actors may be more pragmatic.

Second, I find that unionisation is negatively related to the use of non-standard workers for reasons that may potentially replace regular workers (recruitment purposes, special expertise/limited projects, and avoiding regular employees/save on fringe benefits). Highly unionised organisations are less likely to use non-standard work arrangement for these reasons. It should be noted that

very few establishments say they use employment intermediaries to avoid fringe benefits, indicating that the potential for saving on fringe benefits by using non-standard workers is limited in Norway. Overall, the findings suggest that highly unionised establishments limit certain kinds of employment intermediaries – those that may constitute competitors to the regular workers and potentially replace them. I argue that unions will fight against the use of employment intermediaries for these reasons, which makes it harder for management to introduce such arrangements. The findings indicate that unions are able to influence the employment policies in the workplace.

This article differentiates the stereotyped picture of unions being against all kinds of non-standard work arrangements. In order to explore the strategic action of unions more closely, further research should investigate the relationship between union confederations and unions in the workplace. Furthermore, the analyses in this article are based on the labour market in Norway, characterised by strong labour, and many regulations on firms' access to employment arrangements. Analyses of a less regulated labour market would further the theoretical arguments proposed in this article.

One limitation is that the data do not allow us to distinguish between reasons for using THAs *versus* contract companies. Although there is some indication of these overlapping, further research should improve the measures of reasons and link them to different forms of non-standard work. Other types of non-standard work arrangements, such as temporary workers directly hired by the firm and part-time workers, may serve some of the same purposes as employment intermediaries. To link both different forms of non-standard work arrangements along with employers' reasons for using these should be a topic for further research.

The greater emphasis in European labour legislation on establishing agreements between the union and the employer raises new questions about the effect of unions on employment arrangements as well as implications for management–labour relations. Also, the possible impact of globalisation on national labour regimes accentuates the need to know more about how unions can influence work organisation in the firm. Thus, unions' views on non-standard work will take on added importance in the future.

Notes

1. Overall, there are few studies examining the relationship between unionisation and employment intermediaries. I also refer to some studies on temporary

workers, who may be directly hired by the firm and not through an employment intermediary.

2. Table 1 is based on data from *The International Social Survey Programme* (ISSP) 1997, provided by *Norwegian Social Science Data Services* (NSD). The ISSP and NSD are not responsible for the analyses of the data or the interpretations offered.
3. Board-level participation was established under the *Joint Stock Company Act* of 1973. The *Work Environment Act* of 1977 extended existing schemes of employee-participation through the working environment committees and safety delegates (Dølvik *et al.*, 1997).
4. ‘Try and hire’ was liberated in 2000 (NOU, 2004).
5. Because public sector establishments rely heavily on direct-hired temporary workers, and less on THAs and contractors (Olsen and Kalleberg, 2004), the sample here is restricted to private sector establishments. This leaves us with 1629 establishments, instead of the original 2130.
6. Distinguishing between service and manufacturing industries is based on one question in the survey: ‘Does your establishment provide a service, manufacture a product or both?’ Service-industry in Table 2 and 3 include those establishments that say they provide a service. The rest are categorized as manufacturing.
7. To be able to see how prevalent these reasons are for the representative sample of establishments, Table 3 includes all establishments, also those not having used employment intermediaries.
8. The analyses in Table 4 is restricted to those establishments using employment intermediaries and having valid values on all variables included in the model.
9. Recruitment for regular employment is mainly specific to THAs and establishments only using workers from contract companies did not receive this alternative.

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Appendix

Table A1 Legislation governing employment in Norway. Restrictions on termination of contracts and use of employment intermediaries and temporary labour

Termination of contract/dismissal	The general rule is that a dismissal is not lawful unless it has 'just cause' in circumstances connected with the employee or the organisation (see Evju, 2003). In a recent index of employment protection legislation strictness, Norway is ranked as one of the stricter countries (number 14 of 19 European countries) (OECD, 2004).
THA	Hiring-in and out of workers was banned (until 2000), with two main exceptions: 1) THAs are permitted to hire-out workers in the 'office sector' (mainly clerical work). 2) Firms may hire-out employees through an exemption permit granted by the labor market authorities. For content of liberalisation, see Evju (2003). As the data were collected in 1997, the rules before the liberalisation apply.
Contractors	Private sector: no restrictions.
Direct-hired temporary work	Private sector and the municipalities: Fixed-term contracts are lawful to the extent that hiring for a fixed term 'is warranted by the nature of the work' and the work concerned 'differs from that which is ordinarily performed in the enterprise' (<i>Work Environment Act</i> , §58A). An exception applies for the hiring of substitute workers (absentees).

Table A2 Factor analysis

	1	2	3
<i>Factor analysis. Principal Component Analysis, rotation Varimax</i>			
Absence	0.705	0.007	0.042
Seasonal changes	0.665	0.200	-0.036
Peak period	0.684	0.394	-0.005
Recruitment	0.574	-0.029	0.208
Time limited projects	0.332	0.742	-0.016
Special expertise	-0.056	0.854	0.073
Avoid regular workers	0.353	0.316	0.513
Avoid fringe benefits	-0.034	-0.063	0.905

The Role of Nonstandard Workers in Client-Organizations

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Abstract

Conventional wisdom says that nonstandard workers are located in the periphery of the organization, that they are easily disposable, segregated, and perform tasks that are not firm specific. In this paper, two types of nonstandard workers are studied: workers from Temporary Help Agencies (THA) and contract workers. Data consists of interviews of managers in three service-sector companies in Norway. The findings challenge conventional wisdom in four respects; we find that (1) nonstandard workers do the same work as regular workers; (2) they are not segregated from the employees of the client-organization; (3) managers in client-organizations require loyalty of nonstandard workers; and (4) nonstandard workers are able to form pressure groups. The findings are related to the regulated labor market in Norway, in a period of shortage of labor.

Introduction

Previous research on nonstandard work typically conceptualizes organizations and labor markets in terms of a core-periphery division (Magnum, Mayoll, and Nelson 1985; Pfeffer 1994; Lepak and Snell 2002; Matusik and Hill 1998). The core-periphery model is grounded in the assumption that certain tasks or activities in an organization are more vital than others. It is assumed to be advantageous for organizations that core functions are undertaken by regular workers who enjoy continuous employment, while peripheral activities may be performed by workers who are loosely connected to the organization, such as nonstandard workers. This paper investigates these assumptions, differentiating the roles that agency temporaries and contract workers play in client-organizations. The study is conducted in a regulated labor market, which provides a new context to the existing literature of nonstandard work.

During the last decade the use of nonstandard work, such as Temporary Help Agencies (THA) and contract work, has increased in many industrial nations (De Grip, Hoevenberg and Willems 1997; Carnoy, Castells and Benner 1997; Lee 1996; Kalleberg, Reynolds and Marsden 2003). Many THAs have expanded their range of services, increasingly providing subcontracting-services that were previously dominated by contract companies. The increase of professionals in THAs has lessened the stigmatization of these workers and increased their social status (Barker and Christensen 1998). In the service industry, in particular, the large increase in the use of subcontracting and agency temporaries (Clinton 1997; Olsen 1997) has made this sector particularly appropriate for studying nonstandard workers.

Previous research focused on factors causing organizations to use nonstandard work (e.g., Pfeffer and Baron 1988; Davis-Blake and Uzzi 1993; Houseman 2001; Kalleberg, Reynolds, and Marsden 2003), and there is a growing body of research examining the implications for workers (Rogers 1995, 2000; Barnett and Miner 1992; Pearce 1993; Geary 1992; Davis-Blake, Broschak, and George 2003; Nollen 1996). However, there are few contributions dealing with the use of nonstandard workers in client-organizations. Some exceptions are Smith (2001), Ang and Soon (2001), Lautsch (2002), Rubery, Cooke, Earnshaw, and Marchington (2003). However, this research was restricted to the United Kingdom or the United States within the distinct institutional setting of Anglo-Saxon culture

where there are few labor market regulations and greater freedom for employers to choose employment arrangements.

In this paper, I use qualitative interviews from three case companies to demonstrate that firms use nonstandard workers also in ways which are opposed to the conventional literature: in vital activities, integrated with regular workers, that managers question the loyalty of nonstandard workers, and the latent power of nonstandard workers. Before presenting the findings, I give a brief description of the institutional setting of Norway. Then, I summarize some of the main literature on organizations' use of nonstandard work and present the method and the cases. Finally, I discuss some implications for further research.

Institutional setting

Organizations' use of nonstandard work depends, in part, on institutional factors, such as labor law, regulations governing trade union influence, employment protection, and the operation of temporary help agencies. Employment protection for workers in Norway is higher than in less regulated labor markets, particularly compared to the U.S. but also Canada (OECD 1999; Smith et al 1995). There are many obstacles to terminating open-ended contracts, which are believed to make employers prefer fixed-term contracts that are less costly to terminate (OECD 1999; Lee 1996).

Furthermore, as all residents receive health insurance in Norway, the potential to save on fringe benefits by using nonstandard workers is of less importance than in many other countries. (Employers pay prorated benefits at the rate of 13.2 percent of the wages paid to any worker, but not some fixed fee for health and other insurances). The welfare system in Norway provides all workers with generous social benefits (Dølvik *et al.* 1997). For instance, Norway has a national sickness benefit scheme, and all employees—including employees of Temporary Help Agencies and contract workers employed by a contract company—are in entitled to pay during sickness. Consequently, workers employed by these employment intermediaries, have in principle the same rights as other employees¹.

Norway is often labeled a corporatist country (Høgsnes 1994), in which labor is strong and collective bargaining is widespread. 57 percent of workers are union members (Nergaard 1998), and unions in Norway generally oppose to the use of nonstandard work. Despite the relatively strong position of unions in Norway, temporary employment and subcontracting are widespread (Nergaard 1998; OECD 2002). About 10 percent are temporary workers (SSB 2004a). 37 percent of the establishments in Norway use workers from Temporary Help Agencies and 80 percent use contract company workers (predominantly in the private sector) (Olsen and Kalleberg 2004).

Unlike Canada, but like many other European countries, the temporary help industry in Norway is regulated (Vosko 1998; Evju 2003). Hiring-out of manpower is permitted, although there are certain restrictions on the user enterprise (Evju 2003). Nevertheless, the operation of THAs and contract companies in Norway is, as in many other countries, dominated by a few, large, international companies.

Theory and research on nonstandard work

Defining nonstandard work. As emphasized by Zeytinoglu et al (2000), there is no clear definition of nonstandard work in the academic literature. The lack of a consistent definition makes it essential to be clear about what kind of workers one studies. In this paper I examine a certain type of nonstandard workers, those employed by means of employment intermediaries: (1) Workers from Temporary Help Agencies (THA), who are employed by the THA² but supervised by the client-organization, and (2) contract workers who are both employed and directed by the contract company. Unlike regular (standard) workers, these workers are involved in a triadic relationship, having their employer outside the client-organization (Kalleberg 2000). The reasons for selecting these two forms of nonstandard work are due to these being dominating in the private sector in Norway (Olsen and Kalleberg 2004), and because of the complex, triadic employment relationship in which these workers are involved.

Both of these groups of workers may consist of full-time or part-time workers, and they are heterogeneous in terms of profile. Women and young people are over-represented among agency temporaries in Scandinavian countries, including Norway, as well as in Canada (OECD 2002). In this study, the contract workers consist of highly educated, technical experts (see Table 2), whereas agency temporaries generally are less educated than the contract workers. While nonstandard work often implies job insecurity for workers (thus labeled 'precarious' (Vosko 1998) or 'contingent' (Polivka and Nardone 1989)), both agency temporaries and contract workers may enjoy open-ended employment contracts. Still, the large majority of workers employed by THAs have a fixed-term contract (Torp et al 1998).

When to use nonstandard work. Much of the literature suggests that organizations should use nonstandard work outside the organizations' core area (Lepak and Snell 2002; Pfeffer 1994). Lepak and Snell (2002) argue that organizations' use of contingent workers should reflect the uniqueness of human capital and its strategic value. Their arguments draw partly on Transactions Cost Economics (TCE). Within this framework, employers choose between organizing work in markets (e.g. nonstandard work) or hierarchies (e.g. standard employment) depending on the features of the transaction (Williamson 1981). TCE suggests that the degree of firm-specificity is a guiding principle in determining when to use nonstandard workers. Whereas nonstandard workers may efficiently handle tasks that are characterized by little firm-specificity, those tasks that require firm-specific human capital create strong incentives to hire workers internally.

Nonstandard work and peripheral jobs. Nonstandard workers are believed to be advantageous when located in the periphery of the organization (Pfeffer 1994; Atkinson 1985). This produces a segregation of the organization, potentially creating "good" and "bad" jobs. Thus, nonstandard workers, as opposed to regular, full-time employees, are often referred to as belonging to the "secondary" or "peripheral" labor market. Supporting this, previous research reports that nonstandard workers are low skilled with little autonomy, are segregated from regular workers (Rogers 1995), have low job security, earn lower pay, and enjoy fewer fringe benefits than regular workers (Kalleberg et al. 2000).

They have more restricted scope of jobs (Ang and Soon 2001) and receive little training by the client-firm (see Davis-Blake and Uzzi 1993; Abraham and Taylor 1996; Lepak and Snell 2002).

Loyalty and commitment. Workers with strong commitment to the organization are considered more valuable (Meyer and Allen 1997). Because nonstandard workers have generic skills and are easily replaceable, their commitment and loyalty to the client-organization may seem less important. Contrary to this notion, Pearce (1993) found no differences between employees and contractors in terms of organizational commitment (to the client-organization). However, the triadic relationship with which agency temporaries and contract workers must deal makes organizational commitment complex (Connelly and Gallagher 2003). Who should nonstandard workers feel loyalty to: their client—or their employer? Some recent research reports evidence that managers are concerned by the lack of loyalty among agency staff (Grimshaw, Ward, Rubery, and Beynon 2001; Ang and Soon 2001), indicating that loyalty is not needed exclusively from workers with standard employment.

Nonstandard workers as inferior to regular workers. Based on their position in the labor market and organizations, nonstandard workers are generally thought to be inferior to regular employees. Geary (1992) found that the use of temporary workers gave rise to a number of tensions and disadvantages for the client firm. One was that regular workers “ordered” the temporaries around (Geary 1992). Rogers (1995) found that temporary clerical workers were alienated from work. Others report that occupational injuries are more common among contingent workers (Kochan et al. 1994), and that these workers lack work environment knowledge and are disfavored with regard to training (Aronsson 1999).

Recent theoretical frameworks and findings. The recent literature modifies the picture of nonstandard workers as low skilled, segregated, and taking care of only peripheral tasks (Kunda et al. 2002; Matusik and Hill 1998). One framework suggests that under certain conditions, such as in very dynamic environments, a limited number of contingent workers in core-value creation activities may be advantageous to the client-organization, creating a competitive advantage (Matusik and Hill 1998). There is evidence that firms in fact use temporary workers and contract workers in their core activities (Gramm and Schnell 2001; Nesheim 2001) and that temporary and regular workers often work side-by-side and in teams (Smith 2001). Lastly, Lautsch (2002) emphasizes the diversity of nonstandard jobs, reporting systematic differences in nonstandard jobs due to strategies and work practices of management.

Although the majority of studies on nonstandard workers have traditionally focused on low-skilled persons (Rogers 1995; Geary 1992; Barnett and Miner 1992; Nollen, 1996; Smith, 2001; Gottfried 1991), an increasing number of studies have included higher skilled persons (Kunda et al. 2002; Rogers 2000), and the stereotyped picture of nonstandard workers as inferior to regular employees is being challenged (Matusik and Hill 1998). Kunda et al. (2002) found that although high-skilled contract workers do face some of the same uncertainty as traditional temporary workers, they have a lot more autonomy and choices for further employment, and are sometimes better paid than permanent employees. For example, Rogers (2000) found that temporary lawyers experienced fewer

disadvantages than low skilled temporaries pointing to the significance of occupation.

Summarized, existing theoretical frameworks suggest, for the most part, that nonstandard workers should be used outside firms' core area, and previous findings frequently show that nonstandard workers are low skilled and inferior to regular workers. I will explore which kind of roles high-skilled nonstandard workers have in client-organizations, in particular which tasks they perform, whether they are segregated from the regular workers, how managers in client-organizations question the loyalty from nonstandard workers, and the complex power relations in triadic employment relationships. Before discussing the findings, I will present the method and cases.

Method and cases

Cases. This study uses a qualitative approach to examine the role of workers from Temporary Help Agencies (THA) and contract workers in the client-firm. As the service industries grow and there is a disproportionately high use of agency temporaries and contract workers in these industries, this seemed a promising context for studying the use of nonstandard work³. Selecting more than one organization increases the diversity, while selecting organizations within the same industry controls for some variation (see Eisenhardt 1989).

When doing case studies the objective is not to produce statistical generalizations to a larger population (see Yin 1994). Nevertheless, based on the selection of the cases, the findings may be generalized to some specific types of workplaces. First, the study is limited to the service industries—including two organizations within the financial sector and one within telecommunications. Second, the organizations in this study may be regarded as “high users” of nonstandard work arrangements. This was necessary to be able to study the questions posed—the role of nonstandard workers in client-organizations. Third, in all three organizations it was common to use agency temporaries for recruitment purposes. Thus, these may be more dedicated workers than usual, having prospects of being recruited for regular positions in the client-organization.

I conducted interviews with 28 persons in three case-companies. 20 of the interviews were semi-structured face-to-face interviews with top- middle- and lower level managers and union-representatives (all recorded and transcribed) (five interviews in FINANCE-I, eleven in FINANCE-II, and four in TELECOM). All of these took place in the client-organizations during 2000, and the interviews lasted on average one hour. The other eight were telephone interviews or shorter face-to-face interviews (not recorded) (three interviews in FINANCE-I, two in FINANCE-II and three in TELECOM), and often supplied with e-mail correspondence. At TELECOM the data collection had to stop at an earlier point than planned due to bankruptcy.

FINANCE-I, and FINANCE-II are insurance companies with 600 and 1100 employees respectively. Insurance, banking, and investment-products constitute the major part of their market area. Both companies had been through processes of downsizing during the 1990s. The share of unionized workers was 70 percent in FINANCE-I and 55 percent in FINANCE-II. The average age of employees was about

40 years in both companies. The main activities in both companies were to sell and process insurance and banking products.

TELECOM was a telecommunications company (non-unionized) founded in 1996 and the number of employees was 430. Telecommunications has been a growing industry, and TELECOM was one of the new competitors of the previously publicly owned company that had had a monopoly in the telecom market. TELECOM had a young workforce, the average age being about 33-34 years. The recession in the information technology sector hit TELECOM particularly hard and led to its bankruptcy in the fall of 2001. According to analysts the operation of TELECOM was too capital-intensive, and management had taken on too large a financial risk (*Dagens Næringsliv* 2001). The company had increased the number of employees very quickly. The significant use of agency temporaries and contract workers may not directly have caused the bankruptcy, although it may be an indication of a company that was trying to grow too fast without having a clear strategy⁴.

Although there are significant differences between the financial sector and telecommunications, they have some similar features: They both depend heavily on advanced information technology systems, and access to this expertise was limited in the period of this study (2000). (The unemployment rate was low at the time—3.5 percent (SSB 2004b).) In all three companies, the staffs ranged from lower clerical workers to highly skilled computer programmers and mathematicians. The majority of regular employees in these companies had to some extent similar educational backgrounds, 2-4 years of business administration education being common.

TABLE 1
NUMBER OF AGENCY TEMPORARIES AND CONTRACT WORKERS IN THE THREE CASE
COMPANIES

	Agency temporaries	Contract workers	Number of regular workers	Ratio- nonstandard/regular workers
FINANCE-I	80	8-10	560	0.16
FINANCE-II	30	35-40	1100	0.06
TELECOM	44	141	430	0.43

Note: The number are the average at one point in time, for FINANCE-I: March 2000, FINANCE-II: May 2000, and TELECOM: September 2000.

Table 1 shows the number of agency temporaries and contract workers. The use of agency temporaries and contract workers may be regarded as being institutionalized in both FINANCE-I and FINANCE-II. Both companies had ongoing arrangements with THAs and contract-companies to provide them with personnel, and the decision on when to use agency temporaries was decentralized. The authority to use contract workers was more centralized in all three companies⁵, which is due to the higher costs related to these workers. The use of agency temporaries had been relatively stable in both FINANCE-I and FINANCE-II for the last five years. Their assignments might be as short as one week, although the majority of assignments lasted approximately six months⁶. TELECOM had by far the most agency temporaries and contract workers, and in 2000 they constituted close to one third of the total workforce. In their own terms they call them “externals”, implying that these people had their employer outside TELECOM.

In all the companies the agency temporaries and contract workers were located at the client organizations' premises. In FINANCE-I and FINANCE-II, the number of agency temporaries cannot be found on internal lists of staffing, and the complete overview is provided by THAs. Reducing the number of both agency temporaries and contract workers was an explicit goal in TELECOM, while reducing the number of agency temporaries was of some importance in FINANCE-I. In FINANCE-II, the number of agency temporaries or contract workers was not an issue of discussion, either at corporate level or at lower levels in the organization. This may have to do with the fact there were not so many nonstandard workers in the organization at the time, and that FINANCE-II had faced major organizational changes in other respects.

Instrument. The interview guide consisted of two main groups of questions: (1) arguments and reasons for using agency temporaries and contract workers, if there had been any recent changes, if so, why etc, and (2) experiences with the use of these workers, which work tasks were done by nonstandard workers

versus regular workers, what challenges the managers faced by having both regular and contract workers in their unit. The interviews and documentary information were coded, first within- and then across cases, separately for agency temporaries and contract workers⁷. In the analyses that follow, the term nonstandard workers refer to both agency temporaries and contract workers. When the findings indicate different patterns for the two groups, this is emphasized.

Results and discussion

Nonstandard workers in core functions. According to the core-periphery model, nonstandard workers are believed to be advantageous when located in the periphery of the organization (Pfeffer 1994; Atkinson 1985). In the case-companies, I found that the agency temporaries and contract workers often did the same kind of work as regular workers, they held critical positions, and the lengths of their assignments were substantial.

The majority of workers from Temporary Help Agencies worked in the Customer-service (“Call-centers”) in both financial companies. This is where the major part of the calls and requests from customers is processed. In FINANCE-II, 70-100% of customer calls were being processed in this unit. FINANCE-I estimated that 90 percent of its calls were processed here. In TELECOM, agency temporaries were also used in this unit, in addition to many other units. The majority of contract workers worked in technical departments (IT-support, -implementation and -development) in TELECOM and FINANCE-II. IT-development is specific to each company, and both in FINANCE-II and in TELECOM, contract workers were involved in developing IT-solutions. In TELECOM, even the person that was responsible for developing IT-strategy worked for a contract company.

Table 2 gives a definition and description of agency temporaries and contract workers used in the three firms. The three companies gave two main reasons for using agency temporaries—to adjust to variable labor demand (absentees and peak periods) and to screen workers for regular positions. One of the assumed advantages of using nonstandard work is that their skills are generic, and do not need to be firm specific. However, it became apparent that the work that the agency temporaries do requires certain skills. This is reflected in the amount of training. Three to four months of training is common in Customer-service in FINANCE-II.

“If we know that we need a temp for a long period, then we hire a temp so that they can be a fully operational co-worker. Insurance is so complicated that it takes a long while before they can talk to customers on the phone, or do complicated things”. (Lower manager, FINANCE-I).

TABLE 2

DEFINITION AND DESCRIPTION OF WORKERS FROM TEMPORARY HELP AGENCIES AND CONTRACT WORKERS						
	Theoretical Definition	Description of workers				
	Who directs work?	Degree of skill-specificity	Educational level	Demand for skills	Client-organizations' main reasons for use	Costs
Agency temporaries	Client-organization directs work	General	Minimum 2 years after high school	Moderate	Covering for absence, peak periods, screening for recruitment	Slightly more than regular workers
Contract workers	Contract company directs work	Specific, technical experts	Mainly graduate-level	High	Special expertise, variable labor demand	On average two to three times the costs of regular workers (including indirect costs, like pensions, taxes etc).

In all three companies, the policy is to have contract workers do work that required special expertise (see Table 2). This is a consistent answer among all the respondents. The contract workers within IT are intended to either support the regular workforce by doing routine work or be involved in specific projects that were not part of the regular tasks. Policy and practice collide here, which becomes increasingly apparent when I talk to lower managers that have more direct contact with the agency temporaries and contract workers. Almost half of the respondents state that agency temporaries and contract workers often do the same work as regular employees.⁸

“In principle one should lease workers that should work on more basic routine work. This is hard to accomplish, so in fact we lease workers within all areas...it is ... we leased [contract] workers to do routine tasks, but in reality this can be hard”. (middle manager about the use of contract workers within IT, FINANCE-II).

The fact that contract workers hold critical positions in the client organization is particularly apparent in TELECOM. Even one of the managers of a large unit was an independent contract worker, which was considered a major problem. One reason for having so many agency temporaries and contract workers was that this company was in a period of growth. Due to the tight labor market

situation, the company did not manage to recruit enough people for regular positions, and was forced to hire more agency temporaries and contract workers.

Regarding recruitment for regular positions in the client-organizations, the agency temporaries and contract workers are treated distinctly different. First, the client-organizations' access to recruit contract workers for regular positions was often regulated (and limited) according to agreements between the contract company and the client-organization. Second, while agency temporaries often wanted regular positions at the client-firm, working for a contract company was considered attractive employment. These jobs paid well and the demand for labor (particularly within IT) was great at the time. This made several managers in the client-organizations express fear towards loosing workers to more attractive jobs in the contract work industry.

In FINANCE-I and TELECOM, nonstandard workers often had long-term assignments. Agency temporaries had sometimes been in the client firm for as long as two years. "This implies that they really fill a regular position, more than time limited projects or tasks" (middle manager, TELECOM). It is the *worker* that is temporary, not the *job*, following Smith's (2001) argument. TELECOM had detailed statistics on the number of nonstandard workers as a means to visualize how great their problem was. About half of the agency temporaries and contract workers (a total of 185) filled regular positions (by TELECOM's own definition), while the other half had temporary tasks. More than half of the agency temporaries and contract workers had been in the company for more than seven months, which was partly due to difficulties in getting qualified labor for regular positions, particularly within information technology. In TELECOM the aim was to have contract workers work on projects that were limited in time, which was often not accomplished. One example is when an IT-manager (contract worker) started on a three months assignment, and ended up staying in the organization for 18 months.

The use of nonstandard workers caused problems in some respects, despite the fact that the work tasks they performed were largely satisfactory to the client firm. In using contract workers, the greatest problems were related to costs. In TELECOM there were incidences of high-priced contract workers doing routine work for which they were over-qualified. As the costs related to a contract worker were up to three times that of regular employees (see Table 2), this was considered a major problem. The costs of using THA-workers are considerably lower, although higher than for regular workers. In customer-service in FINANCE-II, the hourly costs of these workers was on average 1-1.5 \$ more than for regular workers in the same unit. In this "screening"-period, that lasted 3-6 months, the THAs had employer-responsibilities for these workers. Having the ability to screen workers before hiring for regular positions was emphasized as a great advantage, particularly in FINANCE-I and FINANCE-II, which both had been gradually downsizing the workforce over the last few years. Considering the relatively strict regulations on hiring-and firing in Norway-causing exit-costs on regular employment-using agency temporaries made sense to the managers.

Segregation or integration? Previous research has found that nonstandard workers are segregated from regular workers (Rogers 1995). In all the three case-companies, neither the agency temporaries nor the contract workers are segregated from the regular workers—they work side-by-side and often on projects and teams together. Contract workers and agency temporaries can even be head of a project or

team. The staffing of projects was estimated in FINANCE-II to be 10-30 percent contract workers. In TELECOM it could be as high as 100%. In both FINANCE-II and TELECOM it was common that contract workers were team/project leaders.

The agency temporaries, contract workers, and regular workers were largely integrated in terms of attending meetings and arrangements in all three companies.

“Temporaries attend the same meetings as the regulars. I try to involve them (agency temporaries) in most things. ...that they attend meetings and gatherings and so forth. We are very dependent on them, so we try and include them whenever we can” (lower manager, FINANCE-I).

According to some managers and one union representative in FINANCE-I, the regular workers had complained about the agency temporaries even being *too* integrated. In an internal note to the personnel department from the union representative, some of the complaints were that; the agency temporaries boss around the regular employees, they learn tasks too quickly, they refuse to train the regular workers, and they have too critical positions in introducing the new work processes⁹. This may be an illustration of “periphery”-workers getting too close to the core, making the core-workers feel threatened. I asked why agency temporaries sometimes train regular workers. This happens occasionally. The lower manager in FINANCE-I explained that, when the agency temporaries have been in the company for a long time, and a new regular worker is recruited for a position, the agency temporaries would refuse to train the new worker. However, managers are aware of the tensions this may create and try to avoid this situation.

In FINANCE-I, managers emphasized that regular employees sometimes appear as the weaker part compared to agency temporaries. The personnel manager in FINANCE-I describes the agency temporaries as the “next generation of workers”. They are flexible, and they often grasp the technology more quickly than regular employees. One middle manager puts it this way:

“It is not many of the regular employees, which have been here for like ... 37 years that think it is fun that an agency temp learns and understands and grasps the tasks after a few weeks. And that has happened...”.

In introducing new work methods, the regular workers, who were generally older than the agency temporaries, had more trouble using IT-based tools.

“What was the biggest problem for the regular workers was easy for the agency temporaries”... “and than they [agency temporaries] have to teach the old ones [regular workers] everything with the new processes - that is the biggest problem for them...” (middle manager)

The new work processes also implied that regular workers might lose power in terms of knowledge. Knowledge that previously was exclusive to some workers would now be available to everyone.

Nonstandard workers: loyalty and commitment. As the nature of nonstandard work implies easy disposability, the question of loyalty among contingent workers has only just begun to be explored (Rubery et al. 2003). Largely due to the way that these companies use nonstandard workers (critical tasks etc), the loyalty of nonstandard workers came into question. One respondent puts this rhetorically “does their loyalty follow their own firm or our company?” – showing the complexity of the triadic employment relationship. The lack of loyalty was exemplified by one personnel director: a project leader, who was an agency temporary, quit giving notice within a week, and started working for one of TELECOM’s subcontractors.

The theoretical distinction between agency temporaries and contract workers is that contract workers are instructed by their employer and not by the client-company (see Kalleberg 2000). In practice this distinction is more blurred, which was particularly evident in TELECOM. In TELECOM the contract workers had little contact with their employer, sometimes not even on a monthly basis. This was a result of the company using the contract workers for the same work as regular employees, and not as intended, which was to use them for special projects. It was evident also in FINANCE-II that the client-organization directed the contract workers, and not the employer (the contract company).

When agency temporaries and contract workers stayed in the client-firms for long periods of time, they managed to acquire valuable knowledge of the firm, and the social relations were sometimes strong with the regular workers. Sometimes the agency temporaries treated the client-firm as their employer, which was also apparent in FINANCE-II.

“They regard us almost as their employer; it is just some lists of working hours [to the Temporary Help Agency]. But I am very concerned that the feedback from the Agency should also be there. Most of them have not had previous temp-assignments, so they do not really have a relationship with the Agency. This is a problem for us sometimes. They start bringing things to us that they really should speak to the Agency about, so we have to guide them a little too” (lower manager, FINANCE-II).

Other sources indicate that this is not exceptional. Among a representative sample of agency temporaries, 74 percent feel that their work colleagues are the employees in the client-organization, while less than four percent report that they feel the other temporaries (in the THA) to be their colleagues (Torp, et al 1998).

Quite a few of the managers regard lack of loyalty among nonstandard workers as problematic. This may be explained by the fact that the agency temporaries and contract workers are not that easily replaceable, having critical positions and doing largely the same work as regular workers. “The downside is the loyalty [of the agency temporaries]. . . .if you have someone that works two months and has high skills. . . you risk losing them” (lower manger, FINANCE-I). One example illustrates this:

“We have even had cases where the manager has had responsibility for the budget and also has been a contract worker and leased a lot of persons from his own company, and really had it going. That is not good.” (Lower manager, TELECOM).

FINANCE-II was aware of its vulnerability in using contract workers and the company had a clear policy on when to use contract workers—generally for projects, not in regular positions. Despite this not being fully accomplished, there seemed to be few problems in regard to the use of agency temporaries and contract workers in this company. One aspect that was mentioned as a potential source of conflict was that the control and maintenance of a service might be harder when having contract workers. One of the managers stated that regular workers have greater possibilities to understand the market-needs, understand the real needs and develop solutions internally (as opposed to agency temporaries/contract workers). This may be interpreted as “architectural knowledge”, which relates to knowledge concerning the whole (Matusik and Hill 1998).

Complex power relations. The conventional wisdom saying that nonstandard workers are inferior to regular workers is challenged in these companies. The findings suggest that under certain conditions, nonstandard workers constitute a power group within the client-organization. The power of agency temporaries became particularly apparent in one instance in FINANCE-I, when they formed a group based on their employment relation to the Temporary Help Agency.

In customer-service, the manager found that the agency temporaries at some point became a pressure group. “When you have many [agency temporaries] at the same time, they can become a pressure group.” (lower manager, FINANCE-I). “We had 14-15 agency temporaries that we were totally dependent on to make a good result”. These constituted half the workforce in this particular unit, and their contract at the client firm would stop at a predefined point. From this date they were promised regular positions at the client firm, which they were also offered. However, these agency temporaries became a pressure group, threatening to quit, not wanting a regular position unless wages were increased. This shows that resistance from agency temporaries may be collective, and not always individualized (Rogers 2000; Gottfried 1992). In certain circumstances, as in FINANCE-I, they can actually form a power group. One important condition, under which this power group was formed, was the fact that these agency temporaries were hired at the same point of time. This reinforced their perception of common interests, and a common image of their relationship to the Temporary Help Agency.

Conclusion and Implications

Depending on nonstandard work. This paper challenges conventional wisdom of how firms use nonstandard workers. Contrary to what is assumed in the literature on nonstandard work (which is mainly based on low-skilled labor), I find that agency temporaries and contract workers are often used in vital activities, they are largely integrated with regular workers, managers require loyalty of

nonstandard workers, and nonstandard workers are able to develop pressure groups in client-organizations. Although conventional wisdom fit with the low-skilled nonstandard workers, the picture becomes more complex when high-skilled labor is included.

The three case companies all rely heavily on nonstandard workers. The conditions under which this dependence is created may partly be explained by the shortage of skilled labor and partly by having let nonstandard workers share the tasks of regular workers. First, the demand for contract workers in the information technology industry was great at the time of the study. This enabled contract workers to pick and choose the more interesting and well-paid jobs, making regular employment at the client-organizations less attractive, which shows how the tight labor market situation challenges firms in managing workers whose skills are in great demand (Cappelli 1999). The second factor that creates this dependency is related to *how* the client-organizations often use agency temporaries and contract workers: in critical positions, on a long-term basis, and integrated with regular workers.

The implication of these findings is that the client-firm not only becomes dependent on the nonstandard workers in accomplishing important tasks, they also depend on their loyalty and commitment. Recent literature has emphasized the need for bringing inter-organizational elements into the employment literature: Commitment of nonstandard workers cannot be captured by viewing employment relationships within the boundaries of *one* organization (Rubery et al. 2003). Related to this, Kunda et al (2002) found in their study of (self-employed) contractors that many of these preferred contract work for reasons such as to avoid politics in large companies.

Institutional setting. The context of the study is Norway, distinct by its regulated labor market and high union density. Also, in Norway, there is little potential for organizations to save on fringe benefits by using nonstandard workers in Norway, because important benefits, such as health insurance, are based on residency and not employment status. The potential for organizations to reducing labor costs by using nonstandard workers may therefore be less than in other, less regulated labor market. Despite the distinct features of the labor market in Norway, many of the findings are in line with the growing body of research on high-skilled nonstandard work in the Anglo-Saxon countries (Smith 2001; Lautsch 2002). Although, this literature is too scarce to make any strong conclusions, the similarities may indicate that employers in nations with different institutional settings have similar policies towards nonstandard workers. For instance, Walsh (1997) found common trends in employers' use of part-time work, despite the institutional differences between Britain and Australia.

Limitations. Two factors need to be considered in terms of limitations and generalizability. First, the labor market in Norway may be characterized as corporatist (Høgsnes 1994), and in a labor market influenced by social democratic values—equality is highly valued. These values may affect how organizations treat the agency temporaries and contract workers, and the way they answer questions with regard to such issues, perhaps being reluctant to admit differences. To be able to meet this shortcoming, one needs more information from agency temporaries, contract workers, and regular workers.

Second, the nonstandard workers described in this paper are involved in a triadic relationship. They are employed by means of employment intermediaries, and may have a stronger position in the labor market than other nonstandard workers, such as direct-hired temporary workers. Many of these may have preferences for this type of work. Marler, Barringer, and Milkovitch (2002) refer to these as boundary-less workers, arguing that these are distinct from the traditional low-skilled temporary workers. The type of nonstandard workers included in this study, should be taken into consideration if generalizing to other types of nonstandard work.

Implications for further research. Two lessons may be learned from this study. First, even though the client-firms examined here all had seemingly clear policies towards the use of nonstandard workers, labor market shortfalls made for policy deviations in the use of nonstandard workers. The evidence suggests that even though employers may intend to employ workers according to a certain policy, such as a core-periphery strategy, the evidence of what they actually do, fails to support this (see Cappelli and Neumark 2004). In order to assess the importance of labor demand is for explaining how firms use nonstandard workers, one needs to conduct studies in different labor market situations. This should be a topic for further research. Second, this paper adds to the literature on nonstandard work by emphasizing that these jobs are diverse. The findings here indicate that neither the agency temporaries nor the contract workers can be characterized as having “secondary” roles in the client-firm. They often hold critical positions in the client-organizations, perform the same tasks, and have long assignments in the companies. This study emphasizes one recent trend within the contracting and THAs-industry—the increasing use of high-skilled workers. By examining what kind of roles nonstandard workers play in their daily work enables us better understand the phenomenon.

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Endnotes

¹ As certain benefits (e.g. pension rights) depend on seniority, workers on fixed-term contract are at higher risk for being excluded.

² And where the THA has the employer responsibility.

³ For example, among 230 establishments in the financial sector in Norway, 61 percent use workers from THAs and 86 percent use contract companies. The correspondingly numbers for a representative sample of establishments are respectively 30 percent and 71 percent (Olsen and Kalleberg 2004).

⁴ Several respondents argued this to be the case.

⁵ Unfortunately, I was not able to get an interview with the IT-manager in FINANCE-I. However, the use of contract workers was of minor importance, because the company was provided with IT-expertise from its owner-company.

⁶ Among a representative sample of agency temporaries the majority of the temporaries (39 percent) worked in assignments that lasted between 4 and 11 months (Torp et al. 1998).

⁷ The program NUDIST was used for coding the information.

⁸ This was not without controversy. Sometimes contingent workers held positions that the regular workers (and unions) thought they should have.

⁹ "New work processes" was a re-organization that aimed to make work-tasks run more efficiently and smoothly. There was also a goal of making jobs redundant. To avoid laying-off any of the regular employees when the change-processes were completed, the estimated reduction of positions was filled with agency temporaries.

Job Security and Temporary Employment in Scandinavia, Great Britain, and the U.S.

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Abstract

This paper examines job security among temporary workers and workers on open-ended contracts in Scandinavia, Great Britain, and the United States. The analyses are based on information obtained from the *International Social Survey Program* (1997) of 4157 workers. I report two main findings. First, workers in Great Britain and Sweden experience the lowest job security, which can partly be explained by the labour market situation and partly by the welfare system in these countries. Second, temporary workers experience lower job security than workers in regular (open-ended) employment, and worry more about losing their jobs in Sweden and Norway, whereas there are small differences in perceptions of job security between temporary and regular workers in the Anglo-Saxon countries and Denmark. This finding suggests that in countries characterised by weak employment protection, the perception of job security depends little on the employment contract.

Introduction

The growth of the contingent workforce during the 1990s has led to a concern for a decline in job security (Standing 1997). A job provides workers with their main source of livelihood, which make job security essential for their prospects. An absence of job security leads to greater levels of strain for individuals (Mak and Mueller 2000). The labour market situation, such as the level of unemployment in a country is likely to influence workers' perception of job security, as is the institutional setting by its regulatory environment, the welfare systems, and bargaining systems. In this paper I examine differences in job security between countries and between groups of workers (temporary and regular workers) within countries. I use comparative data on perceptions of job security in Scandinavia, Great Britain, and the United States.

Comparing workers in Scandinavia and Anglo-Saxon countries is likely to be fruitful because these countries differ on institutional and regulatory that may affect job security. The Scandinavian countries are characterised as corporate, in which labour is strong, benefits are generally provided on a universal basis, and employment protection legislation (EPL) (particularly in Norway and Sweden) is strict. By contrast, few regulations, more restricted benefits, and weaker unions characterise the U.S. and Great Britain. The labour market situation in these countries shared similarities during the 1990s. In Norway, Denmark, Great Britain, and the U.S., the unemployment rates were decreasing. Sweden was the exception to this pattern, in which unemployment rates were rising and reached a peak in 1997 (OECD 2004). Also, temporary employment in Sweden rose from 10 percent in the end of 1980s to 15 percent in 1998 (Aronsson 1999).

The main feature of temporary jobs is the lack of job security. Job security is one aspect determining the quality of jobs (Gallie 2003). Temporary jobs are also found to share other bad job characteristics, such as low pay and few benefits (Kallberg et al. 2000; McGovern et al. 2004). The lower quality of temporary jobs fit with the assumption in the *marginalisation thesis*. According to this thesis, temporary jobs belong to a secondary labour market segment. However, features of the labour markets, such as the employment protection system, the strength of unions, and the ties between careers and educational credentials have been

forwarded as important in influencing to what extent temporary workers are segmented (Giesecke and Gross 2003; Golsch 2003; Scherer 2004).

Despite the growing concern for job security, very few studies have taken an explicitly comparative approach to studying temporary employment or job security. Comparative studies are needed to examine the importance of institutional and regulatory factors on job security. Some exceptions are Kalleberg and Reynolds's (2004) study of part-time, self-employed and temporary workers in 12 countries, and Scherer's (2004) study on mobility patterns among workers on fixed-term and workers in a low status position in Great Britain, Italy and Germany. Furthermore, Sousa-Poza (2004) takes a comparative perspective on job security and stability in Switzerland during the 1990s, and Gallie (2003) compares job quality (including job security) in European countries.

The proportion of temporary employment differs between these countries. In 2000, 10 percent of the workers in Norway and Denmark, had temporary employment, about 15 percent in Sweden, 7 percent in United Kingdom, and 4 percent in the U.S. (OECD 2002). The greater proportion of temporary employment in Scandinavia has been explained in part by a stricter EPL creating demand for employment contracts that are easier to determinate (Polivka and Nardone 1989), and the welfare states providing workers with generous access to leave of absence, which also creates a demand for short-term contracts (Olsen and Kalleberg 2004).

In this paper, I pose two main questions: (1) How does national context affect job security of workers; and (2) how do institutional features, such as labour law influence the segmentation of temporary and regular workers with regard to job security? Temporary work is defined as a fixed-term contract, i.e. an employment contract that ends at a predefined point in time. Unfortunately, the data do not allow us to distinguish between direct-hired temporary workers and temporary workers hired by a temporary help agency. The paper is organized in the following way. I first discuss some of the key features that are likely to differentiate job security between and within Scandinavia, Great Britain, and the U.S. I then describe the data and variables, and discuss the results of the analyses. I finally consider some of the implications of the findings for theory and further research.

Differences in job security

The aim in this paper is to explain differences in job security *between* countries and between groups of workers *within* countries. Besides the labour market situation being important to job security, two institutional features are of main interests in explaining differences in job security: (1) the welfare systems, and (2) labour law, by its definition of temporary work and the employment protection legislation (EPL). Model 1 categorises the five countries according to these two institutional dimensions. The categorisation of welfare-regimes is based on Esping-Andersen (1998), and the EPL presented in OECD (2004). Model 1 shows that Denmark can be distinguished from the other Scandinavian countries, because of its more lenient regulations on EPL, albeit stricter than in the U.S. and Great Britain.

Model 1. Categorisation of countries according to employment protection legislation (EPL) and welfare-regime

		<i>Welfare regime</i>	
<i>EPL</i>	Strict	Social democratic	Liberal
		Sweden	
	Lenient	Norway	U.S.
		Denmark	Great Britain

Note: Sources for categorisation: (Esping-Andersen 1998) and OECD (2004).

Country-differences

Three features may help explain differences in job security between the Scandinavian countries, and Great Britain and the U.S. First, in Scandinavia, the social protection measures, provided by the welfare state, guarantee workers an income, also when they are not working because of illness, accidents, unemployment, etc (Esping-Andersen 1998)¹. In universally based welfare systems, it is less detrimental for workers losing their jobs. Thus, being out of a job may have less unfortunate consequences in the social democratic welfare states.

Second, the EPL provides workers with protection from unfair dismissals. In countries characterised by a strict EPL, it is more difficult for employers to lay-off workers. Thus, countries characterised by a strict EPL are expected to provide workers with greater job security.

Third, when unemployment rates are high, workers are likely to experience low job security. The trends in unemployment have been the same in all of these countries, with the exception of Sweden. Sweden experienced a severe economic situation in the 1990s and unemployment peaked to almost 10 percent in 1997. In the other four countries, unemployment rates were decreasing during the mid 1990s (from 1993/1994 to 1997), and were fairly low in the U.S., Norway and Denmark (4-5 %). In Great Britain the unemployment rate was still quite high in 1997 (6.9 %).

Based on these three features, one would expect the highest perceptions of job security in Norway and Denmark, because unemployment was low, and these countries are categorised, as social democratic welfare states where benefits are mainly provided on a universal basis. In Norway the EPL is ranked as relatively strict, while it is more lenient in Denmark. The EPL is also strict in Sweden. However, in this country the level of unemployment was very high at the time. Thus, I hypothesise.

Hypothesis 1: Job security is lower in Great Britain, the U.S., and Sweden than in Norway, and Denmark.

Temporary *versus* regular workers

Temporary workers have by definition less secure jobs than workers on open-ended contracts, due to their employment contract being ended at a predefined point in time. Examining differences in job security of temporary and regular workers may seem tautological. However, the purpose here is to examine whether having a temporary contract depend on the institutional setting.

Two features of the institutional setting are likely to influence the segmentation of temporary workers: the way temporary work is defined in labour law and the strictness of the overall EPL in a country. First, in Scandinavia a temporary contract is a distinct legal form of contract. In the U.S. and the Great Britain, fixed-term contracts are not institutionally defined in labour law or by collective agreements, making temporary employment as a legal category less clear than in many other European countries (Storrie 2003). Employment contracts in the U.S. are more often categorized as ‘explicit or implicit’ (Polivka and Nardone 1989), using workers’ and employers’ *perceptions* as a basis for defining employment contracts. The different ways of defining non-standard forms of employment illustrates that employment contracts are social categories and that the difference between being on a regular contract or on a time-limited depends on the regulatory environment (Nesheim 2002; Golsch 2003).

Second, the EPL differs between these countries. The five countries are ranked (1=least strict) in the following manner: US (1), UK (2), Denmark (10), Norway (21), and Sweden (22), among 28 OECD-countries (OECD 2004). In this ranking, regulations on temporary work are included in EPL. Overall, a strict EPL corresponds with strict regulations on temporary work (OECD 2004). There are wide differences between countries’ EPL, although there is evidence of convergence (mainly by easing regulations on temporary work) (OECD 2004). Denmark sticks out from the rest of Scandinavia with regard to EPL. Gallie (2003) reported (based on a survey of individuals) that workers in Sweden experienced the greatest protection from dismissals in Europe, whereas Denmark received a much lower score, albeit higher than in Great Britain (Norway was not included). Noteworthy, this study shows that there seems to be high correlations between measures in the survey of individuals and the OECD-ranking, which is based on the legislative framework.

The distinct definition of a fixed-term contract and greater employment protection for regular workers in Scandinavia (particular Sweden and Norway) may increase the distinction between insiders (regular employment) and outsiders (insecure employment, such as fixed-term contracts). By contrast, in the more flexible labour market (e.g. weak EPL), such as Great Britain, the U.S., and to some extent Denmark, having a temporary job may make less of a difference due to the lower employment protection for all workers. Thus, a strict EPL may make the segmentation of workers stronger. Golsch (2003) argued for Spain that the shift from one of the most rigid employment protections systems to a highly flexible labour market deepened the insider-outsider divide, having far-reaching consequences for the ‘outsiders’, whereas it left those in rewarding employment largely unaffected. Because the insider-outsider division on job security may be stronger in Sweden and Norway due in part to stronger employment protection, we expect that job security among temporary workers will be lower than for regular

workers in these two countries. By contrast, in countries characterised by lenient EPL, such as the U.S., Great Britain, and Denmark there will be no differences in the perception of job security.

Hypothesis 2: Temporary workers will perceive lower job security than workers on open-ended contract in Norway and Sweden; there will be no difference in the Anglo-Saxon countries, and Denmark.

Data and methods

ISSP 1997: National samples

Data consist of a cross-national data set, the 1997 *International Social Survey Program* (ISSP) module on 'work orientations'². The sample analysed in this paper is restricted to those working for pay at the time of the interview, and workers that are self-employed are excluded from the analyses (in line with McGovern et al. 2004). This leaves a total of 4157 workers. The response rates range from 62 percent in Great Britain to 73 percent in the United States (Harkness et al. 2000). Data were collected in 1997, except for the U.S., which were collected in 1998. The samples are drawn from people age 18 and above³.

Methods

Measures of job security

Two indicators measure job security: to what extent workers agree to the statement 'I agree that my job is secure' and to the extent that they 'worry about losing the job'. In Tables 1 and 2, low job security is categorised as workers saying 'disagree' or 'strongly disagree' that my job is secure, and those saying they 'worry a great deal' or 'worry to some extent' about losing their jobs.

Models

In order to test the country differences, as logistic model was conducted (Table 2). An ordered logit model was used to estimate the difference between temporary and regular permanent workers' job security⁴ (Table 3). The ordered logit model assumes an ordinal outcome variable with categories that can be ranked, but the distance between them cannot be determined (Long 1997). The ordinal scale takes 5 values for the variable 'my job is secure'. The variable 'worry about losing job' takes 4 values.

Measures of explanatory variables

Temporary workers are defined as those having an employment contract that is fixed-term⁵. Like Kalleberg and Reyonld's (2001) study (using ISSP-data), I treat workers with no written contracts along with workers with open-ended contracts⁶. In testing the hypotheses I control for the following variables: Part-time work (defined as less than 35 hours per week, which is a commonly used (e.g. Houseman and Osawa 1998, Ellingsæter 1995)), education (measured in number of years), age, gender, occupation (professional and technical, service and clerical, and

crafts)⁷, and public sector (not available in the U.S.). See Table A1 for descriptive statistics of explanatory variables. (Because workplace size only is available in the Norwegian, and the U.S. (through GSS) data sets, this variable has not been included in the analyses that are presented.)

Job security is likely to be influenced by these socio-economic variables. One may expect that age and education is positively related to job security. As older workers are more likely to have longer seniority, we believe age to be positively related to job security. Furthermore, more years of education gives greater human capital, which assumes to give protection from lay-offs. Occupation may affect job security through the unemployment situation. As service sector jobs generally are increasing, on behalf of blue-collar jobs, we expect crafts workers to have lower job security than workers in professional/technical and service occupations. Jobs in the public sector are assumed to provide workers with greater job security. Lastly, women are thought to have a weaker connection to the labour market, for instance indicated by their more extensive part-time work. After controlling for part-time work, we expect no differences in perception of job security between men and women.

For a description of temporary workers by contracts by socio-economic status and country, see Table A2. Table A2 shows that women are over-represented in temporary work in most countries, temporary workers are more likely to be young, and more likely to work in the public sector than workers in standard employment. The exception is the U.S., where temporary workers are more likely to be men, have longer education, and slightly older than workers in standard employment. In the U.S. temporary workers are overrepresented in professional and technical occupations. Also, in Great Britain temporary workers tend to be slightly older than workers in standard employment, which probably reflects an overrepresentation of long-term temporary workers into the ISSP.

Results

Country differences

Table 1 shows the proportions of workers that perceive their jobs to be insecure, by country.⁸

Table 1. Job insecurity and unemployment rates by country. Ranking of countries in parentheses.

	<i>Percentage who perceive low job security 1)</i>		<i>Percentage who worry about losing job 2)</i>		<i>Unemployment rates (1997)</i>	
Sweden	18	(2)	22	(2)	9.9	(1)
Norway	12	(4)	11	(5)	4.0	(5)
Denmark	12	(4)	12	(4)	5.3	(3)
Great Britain	26	(1)	29	(1)	6.9	(2)
U.S.	14	(3)	17	(3)	4.9	(4)

Note: Standardised unemployment rates based on OECD Employment Outlook (2004). OECD reports unemployment rate only for United Kingdom, not Great Britain.

1) Disagree/strongly disagree that my job is secure

2) Worry a great deal/to some extent about possibility of losing job.

Questions as posed in the ISSP-questionnaire:

For each of these statements about your (main) job, please tick one box to show how much you agree or disagree that it applies to your job:

"My job is secure": strongly agree (5), agree (4), neither agree nor disagree (3), disagree (2), or strongly disagree (1).

To what extent, if at all, do you worry about the possibility of losing your job?

I worry a great deal (4), I worry to some extent (3), I worry a little (2), I don't worry at all (1)

Table 1 shows that the perception of job security largely corresponds to the economic situation in a country, measured by unemployment rates. Sweden and Great Britain have the highest level of unemployment (numbers for 1997) of the five countries, and the perception of job insecurity is also found to be highest in these two countries (although in reversed ranking).

Table 2 presents the results from a logistic regression of country-differences. The analyses control for education, age, temporary employment, and full-time/part-time. Only the country effects are presented. (Due to missing data on occupation in Great Britain and public sector in the U.S., it not possible to include these variables when the data are pooled.) Table 2 shows that workers in Sweden, Great Britain, and the U.S. are more likely to experience low job security and worry about losing their jobs than workers in Denmark and Norway (Denmark constitutes the reference-group). The finding provides support for hypothesis 1. Workers in Great Britain and Sweden experience lower job security than workers in Denmark, Norway and the U.S. Furthermore, workers in Great Britain, Sweden, and the U.S. worry more about losing their job, compared to the two other countries. Both the labour market situation and the welfare system may help us explain this finding. Both Sweden and Great Britain had high rates of

unemployment at the time. The reason that also U.S. workers tend to worry more about losing their jobs than workers in Denmark and Norway, may be due to the restricted benefits in this country, which put workers at greater risk when out of a job.

Table 2. Logistic regression. Job insecurity by country, controlling for socio-economic variables.

	<i>Low job security</i>		<i>Worry about losing job</i>	
	b	se	b	se
Sweden	0.601 **	0.160	0.791 **	0.154
Norway	0.025	0.150	-0.005	0.150
Great Britain	0.965 **	0.164	1.194 **	0.159
U.S.	0.232	0.168	0.522 **	0.162
Constant	-2.176 **	0.135	-2.095 **	0.133
R2	0.077		0.059	
N	3942		3967	

**p<0.01, *p<0.05, +p<0.1

Note: Reference category: Denmark, open-ended contract, full-time, man, average age, and average education.

One explanation for the few differences between temporary and regular workers in Great Britain is that the temporary workers in this survey mainly consist of long-term temporary workers⁹. The findings in this paper are in line with results from Gallie et al. (1998), who found that long-term temporary workers ('contract workers') resembled regular workers.

Job security for temporary *versus* regular workers

All temporary jobs have by definition lower job security than open-ended contracts. However, we expect that the differences in job security between these groups of workers depend on the institutional setting in a country. Table 3 presents the results from the ordered logit analyses, conducted separately for each country. Job security is measured on ordinal scales (see method section).

Table 3. Ordered logit model. Job security by employment status, controlling for socio-economic variables.

	<i>My job is secure</i>		<i>Worry losing job</i>	
	b	se	b	se
Sweden				
Temporary	-2.458 **	0.279	0.648 *	0.261
Part-time (open-ended)	-0.007	0.205	0.027	0.207
Female	-0.123	0.164	-0.064	0.168
Age	0.013 +	0.007	0.004	0.007
Education	0.028	0.023	0.000	0.023
Professional	0.318 +	0.191	-0.671 **	0.195
Crafts	0.207	0.205	-0.133	0.207
Public	-0.079	0.153	0.149	0.156
R2	0.050		0.010	
Log-likelihood	-906.230		-798.570	
N	666		678	
Norway				
Temporary	-1.300 **	0.173	0.678 **	0.181
Part-time (open-ended)	-0.062	0.138	-0.320 +	0.165
Female	0.141	0.116	0.016	0.135
Age	-0.012 **	0.004	0.015 **	0.005
Education	0.036 +	0.021	-0.088 **	0.027
Professional	0.384 **	0.139	-0.462 **	0.162
Crafts	0.042	0.149	0.097	0.165
Public	0.515 **	0.111	-0.099	0.126
R2	0.030		0.030	
Log-likelihood	-1776.850		-1202.910	
N	1397		1391	
Denmark				
Temporary	-1.379 **	0.289	0.351	0.300
Part-time (open-ended)	0.299	0.229	0.183	0.245
Female	-0.129	0.187	-0.144	0.206
Age	-0.003	0.007	-0.006	0.008
Education	0.041	0.029	-0.035	0.031
Professional	-0.103	0.225	0.324	0.250
Crafts	-0.084	0.234	0.516 *	0.258
Public	0.530 **	0.176	-0.471 *	0.193
R2	0.030		0.020	
Log-likelihood	-693.320		-525.110	
N	575		576	

Table 3 continued...

Great Britain

Temporary	-0.250	0.258	0.140	0.265
Part-time (open-ended)	0.297	0.251	-0.416	0.254
Female	0.278	0.185	-0.170	0.187
Age	-0.015 *	0.007	0.001	0.007
Education	-0.022	0.031	-0.033	0.031
Public	-0.176	0.195	0.113	0.191
R2	0.010		0.010	
Log-likelihood	-679.010		-606.840	
N	478		484	

US

Temporary	-0.511 *	0.231	0.354	0.233
Part-time (open-ended)	-0.071	0.199	-0.502 *	0.213
Female	0.267 +	0.152	-0.215	0.157
Age	-0.008	0.006	-0.005	0.006
Education	-0.020	0.033	-0.013	0.034
Professional	0.261	0.186	-0.212	0.192
Crafts	-0.080	0.202	-0.441 *	0.214
R2	0.010		0.010	
Log-likelihood	-924.480		-764.850	
N	705		717	

**p<0.01, *p<0.05, +p<0.1

Note: Reference category: open-ended contract, full-time, man, average age, average education, service occupation (except Great Britain), and private sector (except the U.S.). To simplify the table, the cut-off points have been omitted.

Table 3 shows that in Scandinavia, all fixed-term workers are less likely to agree to the statement 'my job is secure'. The effect is also significant in the U.S., whereas there is no difference between workers on open-ended and temporary contracts in Great Britain.

A second aspect of job security is to what extent workers worry about losing their job. In Sweden and Norway, temporary workers worry more about losing their jobs compared to workers on open-ended contracts. There is no

significant difference between temporary and regular workers in Denmark, Great Britain, and the U.S.—the three countries, having the lowest EPL. The results show that temporary workers in Norway and Sweden both regard their jobs to be insecure and worry about losing their jobs.

Table 4 presents predicted probabilities for job rewards by country. This is to be better able to see the sizes of the gaps between countries. The probability for a temporary worker in Sweden to strongly agree that ‘my job is secure’ is 0.005 (0.5 percent), and the probability for a worker with open-ended contract is 0.162 (given the same individual characteristics). Also, in Norway and Denmark, the gap is greater than in the U.S.

Table 4. Predicted probabilities based on ordered logit model.

	Sweden	Norway	Denmark	Great Britain	US
<i>My job is secure (strongly agree).</i>					
Open-ended, full-time	0.162	0.235	0.529		0.224
Temporary	0.005	0.104	0.266		0.154
Gap	0.157 **	0.131 **	0.263 **	n.s.	0.070 *
% change	96.9	55.7	49.7		31.3
<i>Worry about losing job (I worry a great deal)</i>					
Open-ended, full-time	0.087	0.041			
Temporary	0.139	0.068			
Gap	-0.052	-0.027	n.s.	n.s.	n.s.
% change	-59.8	-65.9			

**p<0.01, *p<0.05, based on analyses in Table 3.

n.s. = no significant difference between temporary and regular workers.

Note: The probabilities are computed for alternative 5 on 'my job is secure', and alternative 4 on 'worry about losing job'. The control variables take the values of the reference group (see note Table 3).

The most striking finding on job security is that fixed-term workers in Scandinavia (particularly in Sweden and Norway) are more likely to regard their jobs as insecure relative to regular workers. In Great Britain and the U.S. there is either no significant difference, or the gap is small. This finding supports the argument saying that employment categories are social categories and that the perceptions of job security depend on the institutional setting (the strictness of EPL and the way temporary contracts are defined in labour law). The findings mainly support hypothesis 2, although temporary workers in Denmark and the U.S. also tend to regard their jobs as more insecure than workers on open-ended contracts.

As to the effects of the other socio-economic variables, Table 3 shows no difference between part-time and full-time workers on perception of job security. In Norway and the U.S., part-time workers worry less about losing their job, compared to regular workers. On the other variables somewhat mixed effects are found. In Denmark, Great Britain, and the U.S. there are few significant effects. Higher education and having a high status job (professionals and technical) provides greater job security as expected, although these effects are only significant in Norway, and Sweden (only professional is significant). In Norway and Great Britain tend to regard their jobs as less secure, whereas the opposite is the case in Sweden. We find few differences between women and men, which suggest that the other socio-economic variables, such as occupation and part-time work may capture potential differences. Only in the U.S., women tend to perceive their jobs as more secure than men.

Discussion and conclusions

The analyses suggest two main conclusions: First, workers in Great Britain and Sweden experience the lowest job security. Also in the U.S. workers tend to worry more about losing their jobs than in Norway and Denmark. This finding can partly be explained by the labour market situation and partly by the institutional features, such as welfare systems and EPL. Sweden experience a severe economic situation in the 1990s, unemployment peaked to almost 10 percent in 1997, which is likely to be the main reason for low perceptions of job security in this country. In the other four countries, unemployment rates had been decreasing over the mid-1990s, and were fairly low in the U.S., Norway and Denmark (4-5 %). Still, particularly workers in the U.S. tend to worry more about losing their jobs than workers in Norway and Denmark. I argue that the greater tendency for worrying about losing one's job in the U.S. may be due the lack of universally based benefits. Losing one's job makes has more detrimental consequences in countries characterised as 'liberal' welfare states. Also, the weaker EPL in the U.S. and Great Britain make workers less protected from dismissals.

Second, temporary workers tend to report lower job security in countries that are characterised by a strict employment protection legislation (Sweden and Norway), also when controlling for socio-economic variables and occupation. In the U.S., Great Britain, and Denmark, where the EPL is more lenient, there are small or no differences between temporary and regular workers in how they perceive their job security. The finding is particularly striking on the indicator measuring how much workers worry about losing their job. Temporary workers in Sweden and Norway tend to worry more about losing their jobs, compared to regular workers with the same characteristics, whereas there is no difference in Denmark, the U.S., and Great Britain. I explain this finding based on the differences in labour laws in these countries. In the U.S., Great Britain, and to some extent in Denmark, the employment protection is low for *all* workers, regardless of employment contract. Thus, having an open-ended contract in these countries does not necessarily provide workers with a sense of job security. This illustrates that employment categories are *social* categories, embedded in the institutional setting (Nesheim 2002; Hakim 1990). The findings indicate that the insider-outsider division in regard to job security may be greater in countries with strict employment protection legislation, which is in line with findings from Spain (Golsh 2003). One mechanism that can help explain this finding is that the workers compare and perceive their job security to other workers *within the same context* (here: the national labour market). Consequently, even if temporary contract ends at a predefined point in time, both in Scandinavia and the Anglo-Saxon countries, the stricter employment protection in Norway and Sweden makes the differences in perception of job security greater in these two countries.

This paper has examined job security as one main source of segmentation for temporary workers. The findings suggest that the segmentation on job security take different forms due to the institutional features. Scherer (2004) found that the more segmented labour market in West-Germany and Italy lead to stronger entrapment for lower status position than in the flexible labour market in Great Britain. However, there was evidence of fixed-term contract being a potential stepping-stone in all three countries. Previous research found support for temporary workers mainly being part of a secondary market, as found for Germany (Giesecke

and Gross 2003). However, temporary employment is also found to be used for screening to regular positions: in the United Kingdom (in particular temporary workers on long contracts) (Booth et al. 2002), in Norway (Try 2004¹⁰; Longva 2002), and that temporary jobs were 'stepping stones' out of unemployment in Sweden (Korpi and Lewin 2001). More comparative research is needed to address the importance of institutional factors in determining the role of temporary workers in the labour markets.

One limitation is that the data used here provides information at one point in time. Having longitudinal data would help us better adjudicate between the importance of labour market situation and the institutional features. Also, in these data it is not possible to distinguish between temporary workers directly hired by the organization and workers from temporary help agencies. This should be taken into account when generalising the findings. Furthermore, short-term temporary jobs may be more likely to be underrepresented, as these may be less likely to be selected into such surveys. The potential under-representation of short-time temporary workers may underestimate the differences in job security between temporary and regular workers.

Further research should aim to including more information on aspects of temporary jobs, such as promotions, pay, turnover, etc, as well as whether the temporary workers in fact receive benefits. This paper provides findings that indicate that the national labour markets are useful context for studying the role of temporary jobs. Despite the tendencies of globalisation, the distinct regulatory framework in national labour markets still makes it essential to studying the nation state as a context.

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Appendix

Table A1. Descriptive statistics by country. Mean numbers

	<i>Temps</i>	<i>Open-ended, full-time</i>	<i>Open-ended, part-time</i>	<i>Female</i>	<i>Age</i>	<i>Edu-cation</i>	<i>Profes-sional</i>	<i>Crafts</i>	<i>Service</i>	<i>Public</i>	<i>N</i>
	%	%	%	%	years	years	%	%	%	%	
Sweden	9	67	16	52	43	12	41	32	27	51	737
Norway	12	60	20	51	39	12	45	26	29	47	1517
Denmark	11	62	18	53	41	12	41	29	30	48	660
Great Britain	13	59	17	57	39	12	n.a.	n.a.	n.a.	31	494
US	11	62	16	56	40	14	46	28	27	n.a.	749

n.a.= information not available

Table A2. Socio-economic variables by country and employment contract. Mean numbers

	<i>Female</i>	<i>Age</i>	<i>Education</i>	<i>Profes-</i>	<i>Crafts</i>	<i>Service</i>	<i>Public</i>	<i>N</i>
	%	years	years	ional	occ.	occ.	occ.	
				occ.	occ.	occ.	occ.	
				%	%	%	%	
Sweden								
Temporary	64	38	14	47	30	23	69	66
Regular	41	43	12	45	32	23	46	486
Norway								
Temporary	62	34	13	41	24	36	66	177
Regular	38	40	13	54	24	21	44	908
Denmark								
Temporary	57	35	13	39	32	29	70	74
Regular	43	40	12	44	33	23	41	410
Great Britain								
Temporary	73	39	13	n.a.	n.a.	n.a.	48	64
Regular	41	38	13				26	289
U.S.								
Temporary	46	41	15	59	19	22	n.a.	81
Regular	53	40	14	46	30	24		466

n.a.= information not available

Endnotes:

¹ Esping-Andersen (1999) ranks countries according to their score on de-commodification (pensions, sickness benefits, and unemployment insurance). Among 18 countries, Sweden, Denmark and Norway receive the highest scores, whereas the U.K. is ranked as number 13 and the U.S. as number 17.

² The data from *The International Social Survey Programme (ISSP) 1997* is provided by *Norwegian Social Science Data Services (NSD)*. The ISSP and NSD are not responsible for the analyses of the data or the interpretations offered.

³ See Harkness et al. (2000) for a detailed description of data.

⁴ Due to invalid values on some variables, *N* varies somewhat across the tables.

⁵ In addition it is possible to distinguish between fixed-term contracts that last longer or shorter than one year. The analyses stayed mainly the same as presented when distinguishing between long- and short-term temporary workers.

⁶ In Europe all workers are required by EU-directives to have a written contract. The proportion having no written contract is less than 7 percent in Norway, 11 in Denmark, 10 in Sweden, 17 in Great Britain, while the proportion is 42 percent in the U.S.

⁷ The categorisation is based on ISCO-codes: 1-3 (officials, managers, life science and health professionals, technicians and associate professionals), 4-5 (clerks, service, and shop market sales workers), and 6-9 (skilled agricultural and fishery workers, crafts and related trades workers, plant, machine operators and assemblers, and elementary occupations).

⁸ I present the data un-weighted. Some countries supply weights (Denmark, Sweden, and Great Britain) but the U.S. and Norway do not. Using un-weighted numbers imply that descriptive statistics cannot be read as representative for each country.

⁹ Among the 64 temporary workers in the ISSP for Great Britain, only 11 have a short-term contract (less than one year).

¹⁰ This study shows that fixed-term jobs were important entry position for highly educated people.