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**AMSTERDAM INSTITUTE FOR
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EMPLOYMENT PROTECTION IN DUTCH COLLECTIVE LABOUR AGREEMENTS

**Trudie Schils
Amsterdam Institute of Advanced Labour Studies
University of Amsterdam**

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ABSTRACT

The Dutch system of employment protection is often perceived as too strict for workers on permanent contracts, because of the large procedural inconveniences, difficulty of dismissal and high severance pay. It is suggested that the system of employment protection lowers labour market flexibility by lowering hiring and firing rates, and increasing the employers' labour costs. Many parties (e.g. government, employers and trade unions) have opted for reforms of the system in recent years. One of the proposed scenarios is to allow for more differentiation by decentralising employment protection, e.g. regulations in individual or collective labour agreements. At present, however, it is already possible to regulate employment protection on a decentralised level, *i.e.* in collective labour agreements on a sector or company level. Dutch national labour law is only $\frac{3}{4}$ binding, implying that deviations are allowed for in collective labour agreements. Yet, most research on employment protection is on the national provisions and disregards this sector level differentiation. With this study we contribute to the literature by investigating employment protection provisions on a sector level.

The level of employment protection on the sector level not only depends on the national level of employment protection, the system of unemployment insurance, but also of union power and collective bargaining strategies pursued by the trade unions. Employment protection provisions might be used as a trading good in collective bargaining, *i.e.* there might be a trade off with other provisions such as bargained wage development or extra-statutory unemployment insurance. This might lead to sector differences in the level of employment protection found in collective labour agreements. In addition, employment protection affects labour market performance. Hiring and firing rates are expected to be lower at higher levels of employment protection, and the use of temporary contracts as an alternative to regular workers is expected to be higher. To analyse the collective labour agreements, we use the FNV CLA databank and for the analysis of labour market dynamics, we use the online databank of Statistics Netherlands.

Our study shows that sector level provisions on employment protection are at or above the national level, which is related to union density. The higher levels of employment protection seem to come at a cost for employers who have higher labour costs, both non-wage and wage costs. Consequently, hiring and firing are indeed lower at higher levels of employment protection. The use of temporary contracts, however, is not higher at higher levels of employment protection, but the opposite is observed. These findings can have important policy implications, especially with respect to the debate in shifting responsibilities, in general but particularly with respect to employment protection regulation, to the sector level.

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I INTRODUCTION

Recently the debate on employment protection in the Netherlands was raised again. First with the awaited (and abandoned) advise of the Social and Economic Council (SER) and now in light of the upcoming '*Participatietop*', negotiations between the employers' organisations and trade unions on labour participation issues. The Dutch system of employment protection is perceived as too strict for workers on permanent contracts, because of the large procedural inconveniences, difficulty of dismissal and high severance pay. The system is believed to exaggerate a dual market: one for the insiders (those with permanent contracts, mostly prime-aged men) who enjoy good employment protection and one for the outsiders (those with temporary contracts, mostly women and young workers) who enjoy less protection. In addition, it is suggested that the system of employment protection lowers labour market flexibility, *i.e.* by lowering hiring and firing rates, increasing the share of temporary workers and increasing the employers' labour costs (WRR, 2007a; 2007b). In recent years, many parties (e.g. government, employers' organisations and trade unions) have opted for reforms. The employers are in favour of less employment protection to be able to adapt the workforce more quickly to changing economic circumstances. The trade unions favour the protection of workers against sudden dismissal and the negative income consequences associated with this.

In a recent report of the Netherlands Bureau of Economic Policy Research (CPB) one of the recommended scenarios for reform is "[...] to allow for more differentiation and decentralisation of employment protection. In particular, responsibility with respect to setting the level of employment protection would be shifted to employers' and trade unions. This could be done at the individual level but also via e.g. collective labour agreements" (Deelen *et al.*, 2006: p.77). At present, however, it is already possible to regulate employment protection on a decentralised level, *i.e.* in collective labour agreements (CLAs) on a sector or company level. Dutch national labour law is only $\frac{3}{4}$ binding, implying that deviations (even those at the worker's expense) are allowed for in CLAs. It is the responsibility of the social partners to negotiate on the employment protection provisions. Remarkably, most research on employment protection, as well as the debate, focuses on the national provisions. With this study we contribute to the literature by investigating employment protection provisions on a sector (or company) level.

The following research questions are analysed both theoretically and empirically: To what extent are differences from national law found in CLAs and are there any differences between the sectors (e.g. reflecting different union power)? Are the provisions on employment protection related to other provisions in CLAs, such as wages or extra-statutory unemployment insurance (e.g. employment

protection as a trading good in collective bargaining)? Is the labour market performance in sectors with deviating employment protection legislation different from that in other sectors (e.g. inflow into unemployment, productivity, composition of labour force)?

These questions are addressed successively in this paper. In section 2 we present the theoretical framework on employment protection, the relation with trade unions' bargaining power, with other policy instruments such as unemployment insurance and with labour market performance. The main hypotheses to be tested are derived from this theoretical discussion. Next, in section 3, we elaborate on the methods used for the analysis. Sections 4 and 5 present the results, conveniently divided into two separate sections. We start with the results on our findings with respect to sector or company level provisions on employment protection and how these diverge between sectors. Next, we analyse how these findings relate to the trade unions' bargaining power and the labour market performance in the various sectors. Finally, section 6 summarises and concludes.

2 EMPLOYMENT PROTECTION AND CLAs IN THEORY

Rather than presenting a full theoretical discussion on the role of trade unions, collective bargaining and the labour market effects of employment protection, we briefly focus in this paper on the issues that are reflected in our empirical analysis.

2.1 TRADE UNIONS AND COLLECTIVE BARGAINING

Trade unions act as agents for individual workers and represent their interests on a sector and national level in the debate with employers and the government on labour market issues.¹ They want to secure favourable wages and working conditions for the workers, including employment protection and income protection after involuntary dismissal (*cf.* Freeman and Medoff, 1984, Faith and Reid, 1987). Employers are generally willing to share their profits (in return for provisions in CLAs) to avoid industrial conflict, which might be more costly (*cf.* Booth, 1995). Union power is weaker in sectors where the non-unionised market is larger and non-union workers can ‘easily’ replace union workers. In the Netherlands, however, non-union workers are also covered by the CLAs, in two ways. First, when an employer is a negotiating partner for a specific CLA, the outcome applies to all his workers, regardless whether these are union members. Trade unions thus bargain for both union and non-union members (*cf.* Hartog, 1999). Second, the trade unions can file a request with the government to legally extend a sector level CLA to all workers in a specific sector, regardless whether their employer is a negotiating partner. Consequently, about 85 percent of Dutch workers is covered by a CLA and a ‘non-unionised’ worker market to replace ‘unionised’ workers is virtually non-existent. Union power to establish employment protection provisions, however, might still depend on union density. In sectors where union density is lowest, the position of trade unions is weaker compared to sectors where many workers are union members. A first hypothesis to be tested in our research is whether *‘provisions on workers’ employment protection are more common/higher in sectors where union density is highest’*.

Trade unions usually bargain on a set of provisions, including minimum wages or wage development, employment protection provisions and extra-statutory benefits after involuntary dismissal. Different provisions can be traded off against each other as part of the bargaining process. For example, in sectors where the probability of unemployment is smallest, the trade unions might be more eager to establish higher wages rather than employment protection. In addition, employment protection provisions and extra-statutory unemployment benefit can be used as substitutes in the bargaining

¹ For an overview of Dutch industrial relations see Hartog (1999) and for an overview of trade union theory see Aidt and Tzannatos (2002).

process (cf. Addison and Teixeira, 2001; Blanchard and Tirole, 2004). This might also depend on the organisation and level of unemployment insurance. In the Netherlands, unemployment insurance is set by the government and the level is relatively generous with benefits ranging from 70 to 75 percent of previous earnings. This could imply lower levels of employment protection in CLAs, when it holds that the two are substitutes, with the costs of dismissal being passed on to the state. Additionally, employers and trade unions might argue that there is no need for extra-statutory unemployment insurance in CLAs because of this generosity. Yet, trade unions might bargain such extra-statutory unemployment insurance in sectors with lower levels of employment protection. A second hypothesis to be tested is whether *'Extra-statutory unemployment insurance is more common/higher in sectors with lower levels of employment protection'*.

Finally, employment protection provisions might be traded off against other CLA provisions, such as the negotiated wage. The theoretical effect of employment protection on wages, however, is ambiguous. On the one hand, when there already is a good level of employment protection, this can be used to negotiate ex post higher wages by the well-protected insiders (cf. Deelen et al., 2006). On the other hand, one could argue that when trade unions are in the bargaining process for higher levels of employment protection, this reduces the potential room for ex ante wage bargaining. Employment protection raises labour costs for the employer since he cannot costily fire less productive workers or adapt the workforce fast to a changing economic environment (cf. Addison and Teixeira, 2001). Consequently, a third hypothesis to be tested is whether *'higher levels of employment protection reduce the scope for ex ante wage bargaining, i.e. negotiated wages in CLAs'*.

2.2 EMPLOYMENT PROTECTION AND LABOUR MARKET PERFORMANCE

Employment protection was originally designed as a means of insurance against income loss at times of dismissal. It facilitates the immediate search for a new job without excessive loss of income for the employee, because of a period of notice or severance pay. In addition, employment protection prevents a shift of the dismissal costs from the employer to society, after all the unemployed employee receives unemployment benefits in most countries. There are quite a number of theoretical studies on the expected effects of employment protection (see Deelen et al., 2006 for an overview). Many of the hypothesised effects, however, are ambiguous or depend on a large set of other variables (e.g. unemployment insurance, composition of labour force, economic businesscycle). One of the first and main effects expected from higher levels of employment protection is reduced labour market mobility, i.e. both firing and hiring are lower because of the higher firing costs applying to the employer (cf. Bentolila and Bertola, 1990). In the current debate on labour market flexibility, strict employment protection is viewed as one of the main hampering factors, especially in combination with generous unemployment insurance such as in the Netherlands. Consequently, a

hypothesis to be tested is whether *'higher levels of employment protection reduce, ceteris paribus, firing and hiring rates'*.

As a consequence of employment protection provisions, the use of workers on temporary contracts is expected to rise. First, it is a way for employers to get around the rules of employment protection, which usually do not apply to workers on temporary contracts. In general, hiring temporary workers is less costly for the employer mainly because of the ease with which they can be dismissed. Second, such workers can be used by employers to adapt their workforce more quickly to a changing economic environment. The regular workers, or the insiders, cannot be used for this, since they cannot be dismissed easily during times of economic downturn. A second hypothesis to be tested is whether *'higher levels of employment protection lead to a larger share of workers on temporary contracts'*.

Finally, as mentioned before, employment protection also affects labour costs. The relation, however, is not clear-cut. *Ceteris paribus*, labour costs are expected to increase due to the introduction of employment protection because of the higher costs of dismissal that have to be internalised by the firm. Yet, everything else is not held constant in practice. A rational employer would reduce the worker's wage, *i.e.* shift the costs of employment protection to the worker, keeping labour costs equal. In addition, when it is true that employment protection lowers firing, or the inflow into unemployment, and the employers' contributions to unemployment insurance depends on the unemployment rate, then the contributions can be lowered, *ceteris paribus*, lowering labour costs (*cf.* Blanchard and Tirole, 2004). Moreover, as argued before, the existence of employment protection can increase the scope for *ex post* wage bargaining, pushing up wages and labour costs. It is not sure which effect will be dominant, or if there is an effect on labour costs at all. Nevertheless, our final hypothesis is whether *'higher levels of employment protection lead to higher labour costs'*.

3 METHOD

In 2005 about 750 CLAs existed in the Netherlands, covering about 85 percent of the employed labour force (SER, 2006). Just over one-fifth (23 percent) of these CLAs are sector agreements, covering 86 percent of the workers under CLA. The remaining CLAs are company CLAs. As mentioned before, the coverage of company or sector CLAs is extended to all workers working with an employer who is a partner in the CLA negotiations, regardless whether they are union members. In addition, sector CLAs can be extended to all workers within the sector, regardless whether the employer was a partner in the negotiations or whether the worker is a union member. This legal extension increases CLA coverage with about 10 percent (SER, 2006).

The Federal Trade Union Confederation (FNV), the largest trade union confederation in the Netherlands, has set up a CLA databank in the early 1990s consisting of all CLAs of which the FNV was a negotiator, which is 92 percent (Schreuder and Tijdens, 2004). By the end of 2003, 983 different CLAs are prevalent in the FNV Databank, including those that have expired. For the analysis in this paper, we used the actual text of 506 recent CLAs, all with a term ending after January 1, 2005. The overall coverage ratio of these CLAs is 74 percent (Table 3.1), which is not bad in comparison with a national coverage of 86 percent. Table 3.1 also shows that coverage of the CLAs in the dataset varies between the sectors and is lowest in commercial services (about 59 percent) and highest in education (about 92 percent).

Table 3.1: Coverage ratio of CLAs selected from the FNVs CLA databank.

Sector	Coverage rate CLAs in analysis	Sector	Coverage rate CLAs in analysis
Agriculture	74.26	Commercial services	59.01
Industry	71.29	Government	85.18
Construction	82.49	Education	91.79
Transport	69.59	Health care services	79.72
Trade	73.40		

Apart from the actual text of the CLA, the FNV also provides the user with other information, including the number of workers covered by a specific CLA. This allows the use of the weighted impact of the CLA, *i.e.* the ratio of workers covered by a specific CLA to the total number of workers covered by a CLA in that sector. In this way, our analysis differs from a recent research performed by the Ministry of Social Affairs and Employment on the employment protection provisions in Dutch CLAs (*cf.* SZW, 2004). In their analysis, the number of CLAs with a specific provision is calculated and it remains unclear how many workers are covered by the provisions.

We analysed the CLAs on a number of variables that are of interest to our study: period of notice, trial period, the maximum number and duration of temporary contracts and the existence of extra-statutory unemployment insurance. In addition, we used the online database of Statistics Netherlands (Statline, 2007) to retrieve sector level information on hiring and firing rates, union coverage, negotiated and actual wage development, the number of flexible contracts, labour costs and the share of unemployment contribution and severance payment in those labour costs. This allows us to test the hypotheses on the labour market effects of employment protection.

4 EMPLOYMENT PROTECTION IN DUTCH CLAs

4.1 EMPLOYER'S PERIOD OF NOTICE

An employer who wants to dismiss a worker on a regular contract has to observe a period of notice.² With respect to this period of notice, national law (Civil Code Book article 672) states that:

- Notice is given at the end of the month, unless differently arranged in a written agreement;
- The employer's period of notice is 1 month for contracts shorter than 5 years; 2 months for contracts in between 5 and 10 years; 3 months for contracts in between 10 and 15 years; and 4 months for contracts longer than 15 years;
- Only if permission is granted by the authorised public body (currently the Centre for Work and Income, CWI) to dismiss an employee, the employer's period of notice can be shortened with 1 month, provided that a minimum of 1 month remains;
- The employer's period of notice as mentioned before can be shortened or extended in collective labour agreements or other agreement arranged by a competent governing body. However, the employer's period of notice cannot be shorter than that of the worker.

This shows that the employer's period of notice can be shortened or extended by CLAs. The fact that CLAs can contain 'worse provisions' for the worker, is rarely observed in countries where national law on employment protection exists. For example, in Germany, CLAs can only provide 'better provisions' for workers. Table 4.1 shows that for about 75 percent of the workers covered by a CLA (CLA workers) the national provisions apply. Only for contracts longer than 15 years, this percentage is lower, about 69 percent. For 20 percent of the CLA workers the employer's period of notice is higher than the national period of notice, *i.e.* these workers enjoy a higher level of protection, *ceteris paribus*. Of workers with longer running contracts, 14 to 32 percent enjoys a lower level of protection, compared to national law, as is also reflected in the average period of notice. For labour contracts longer than 5 years it is shorter than the national one, with the difference increasing with the duration of the contact, *i.e.* ranging from 0.05 months shorter for contracts between 5 and 10 years to 0.5 months shorter for contracts longer than 15 years.

Table 4.1: Employer's period of notice observed in Dutch CLAs (% of CLA workers)

	Duration of contract			
	< 5 years	5 – 10 years	10 – 15 years	> 15 years
Employers' period of notice observed in CLAs:				
- according to national law	76.07	77.93	76.85	68.64
- shorter than national law	3.73	14.1	22.93	31.19
- longer than national law	20.2	7.97	0.22	0.17
Period of notice according to national law	1	2	3	4
Estimated average period of notice	1.247	1.947	2.747	3.494

Source: FNV CLA databank (2006).

² Note that a period of notice is only applicable if the employer follows the public route for dismissal (about 50 percent of the dismissal cases). In case the court route is followed, a severance pay applies rather than a period of notice. See Schils (2007), among others, for an overview of the Dutch dismissal system.

For about 8 percent of the CLA workers the old regulation on the period of notice applies. In 1999, national law on the period of notice, among other things, changed. The old rule provided a period of notice in weeks equal to the number of years that the worker had been employed, with a maximum of 13 weeks (no minimum). The new legislation is more protective than the old one, however, two remarks have to be made. First, for just over half of the workers covered by a CLA with the old rule (53 percent), a minimum period of notice of one month applies, similar to the new legislation. Second, for older workers in many cases a different period of notice applies.

For about 22 percent of the CLA workers, a fixed period of notice applies regardless of the duration of the contract, varying from one to three months as shown in Table 4.2. The table also shows that, in CLAs with a fixed period of notice, higher level workers have a slightly, yet not significant, longer period of notice than lower level workers. Another important lesson that can be learned from the information presented in this table is that correcting for the number of workers covered by a specific CLA is necessary. When only looking at the share of CLAs in which a certain period of notice is observed, one would mistakenly conclude that higher level workers have a significantly longer period of notice compared to lower level workers.

Table 4.2: Period of notice in CLAs with fixed period of notice.

	Lower level workers		Higher level workers	
	% of CLAs	% of CLA workers	% of CLAs	% of CLA workers
Fixed period of notice	13.24	21.18	14.23	21.61
• 1 month	• 4.74	• 4.90	• 3.16	• 4.67
• 2 months	• 7.31	• 9.62	• 7.91	• 9.68
• 3 months	• 1.19	• 6.66	• 3.16	• 7.26
Period of notice depending on contract duration	86.76	78.82	85.77	78.39

Source: FNV CLA databank (2006).

Next, we analysed sector differences in the negotiated period of notice, shown in Table 4.3. For contracts shorter than 5 years, the observed difference is largest for workers in education and construction, where for less than half of the CLA workers the national period of notice applies. The observed difference is smallest for workers in trade and transport, where the national provisions apply to 95 percent of the CLA workers. In most cases, the observed period of notice is longer than the national one, with the highest estimated average period of notice found in education. The shortest notice periods are found in trade, transport or commercial services. For contracts with a duration between 5 and 10 years, the observed difference is largest for workers in government, transport and commercial services where national provisions apply to about 60 percent of the CLA workers. The average period of notice is significantly shorter than the national one for workers in industry, construction, trade, transport and commercial services, while it is significantly longer for workers in education and government.

Table 4.3: Observed period of notice in CLAs and compliance with national law, by sector (% of CLA workers)

	Contracts shorter than 5 years				Contracts between 5 and 10 years			
	shorter	national	longer	est. avg.	shorter	national	longer	est. avg.
Agriculture	0.46	74.54	25.00	1.249	0.46	99.54	0	1.996
Industry	1.86	89.92	8.22	1.093	9.76	87.85	2.39	1.926
Construction	12.66	49.06	38.29	1.316	12.66	87.34	0	1.894
Trade	0	98.06	1.94	1.019	17.33	82.67	0	1.852
Transport	0.24	93.71	6.04	1.057	29.23	70.33	0.43	1.711
Commercial services	15.25	76.92	7.82	0.988	37.89	60.52	1.59	1.662
Government	0	59.00	41.00	1.739	0	62.33	37.67	2.380
Education	0	43.90	56.10	2.037	0	97.86	2.14	2.476
Health care	0	67.53	32.47	1.325	0.22	99.78	0	2.001
	Contracts between 10 and 15 years				Contracts longer than 15 years			
	shorter	national	longer	est. avg.	shorter	national	longer	est. avg.
Agriculture	25.46	74.54	0	2.747	25.46	74.54	0	3.495
Industry	15.11	84.34	0.54	2.842	15.87	84.13	0	3.734
Construction	50.94	49.06	0	2.532	50.94	49.06	0	3.110
Trade	19.33	80.67	0	2.865	19.34	80.66	0	3.794
Transport	14.74	85.25	0.01	2.760	35.28	64.72	0	3.408
Commercial services	42.18	57.39	0.43	2.404	42.55	57.37	0.07	3.085
Government	0.85	98.85	0.31	2.995	33.76	66.24	0	3.654
Education	11.18	88.82	0	2.915	54.47	45.53	0	3.371
Health care	24.65	75.35	0	2.756	24.65	75.35	0	3.511

Source: FNV CLA databank (2006).

For contracts longer than 10 years, the observed difference is largest for workers in construction and commercial services, where national law applies to less than 60 percent of the CLA workers. The observed average period of notice is significantly shorter than the national one, except for workers in government and education with a contracts between 10 and 15 years. The observed difference is smallest for workers in industry and trade with a contract over 10 years or for workers in government and education with a contract in between 10 and 15 years, where national law applies to over 80 percent of the CLA workers. The shortest period of notice is observed for workers in commercial services and the longest period of notice is observed for workers in government and education with contracts between 10 and 15 years and for workers in industry and trade with contracts longer than 15 years.

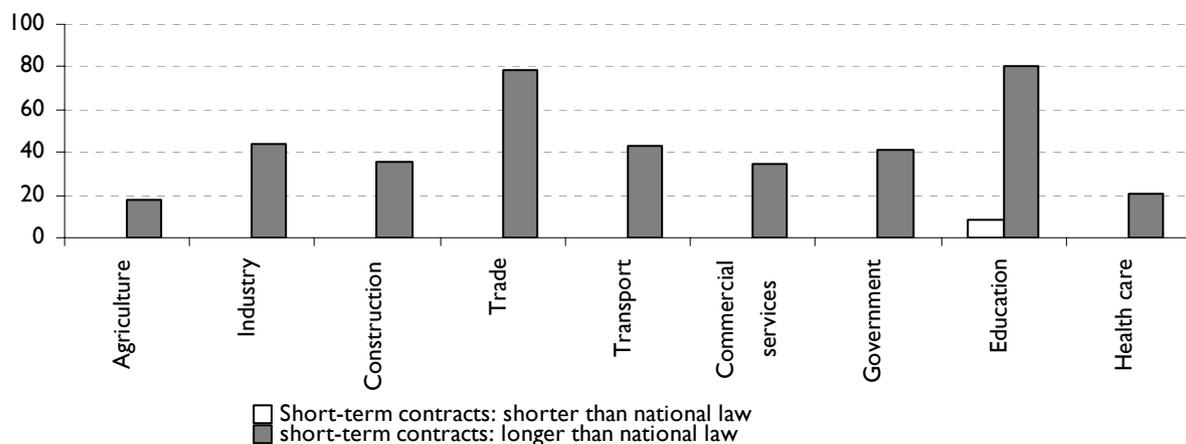
4.2 TRIAL PERIOD

A trial period refers to the first months of a contract during which dismissal is possible without a period of notice. National labour law states that

- The trial period for permanent contracts is set at 2 months;
- For temporary contracts the trial period is set at 1 month for contracts shorter than 2 years and 2 months for contracts of 2 years and longer;
- Trial periods at the expense of the worker can be arranged in collective labour agreements or other agreements arranged by a competent governing body;
- Trial periods longer than 2 months are illegal.

The allowed variance in CLAs implies that for workers on a temporary contract shorter than 2 years both a lower level of employment protection (a longer trial period up to 2 months) or a higher level of employment protection (a shorter trial period) can be arranged. For workers on a permanent contract only a higher level of employment protection can be arranged in CLAs. Our research shows almost no variation in the trial period for workers on a permanent contract. Only in industry for about 0.2 percent of the CLA workers a trial period of one month applies, regardless of the duration of the contract. Variation is only observed for workers on short-term contracts. For about 47 percent of the CLA workers a trial period of two months applies, regardless of the duration of the contract, implying a lower protection for workers on short-term temporary contracts. Figure 4.3 shows that the observed divergence from national law with respect to the short-term contracts is lowest for workers in agriculture and health care, with over 80 percent of CLA workers covered by the national provisions. The divergence is largest for workers in trade and education, where the national trial period only applies to 20 percent of the CLA workers. The figure also shows a shorter trial period of zero months or two weeks for short-term contracts, *i.e.* a higher protection level, in education.

Figure 4.3: Observed trial periods in CLAs (% of CLA workers)



Source: FNV CLA databank (2006).

4.3 THE USE OF TEMPORARY CONTRACTS

The Flexibility and Security Act dating from January, 1999 (Wet Flexibiliteit en Zekerheid) has been established to enlarge the possibilities for flexible contracts but at the same time protect the workers on such contracts. One of the main regulations within this law concerns the limitation of the number and total duration of a sequence of temporary contracts. Crucial here is the interval period in between the temporary contracts: only contracts that follow each other within a period of three months are counted as sequential contracts. Law states that (Civil Code Book art. 668A):

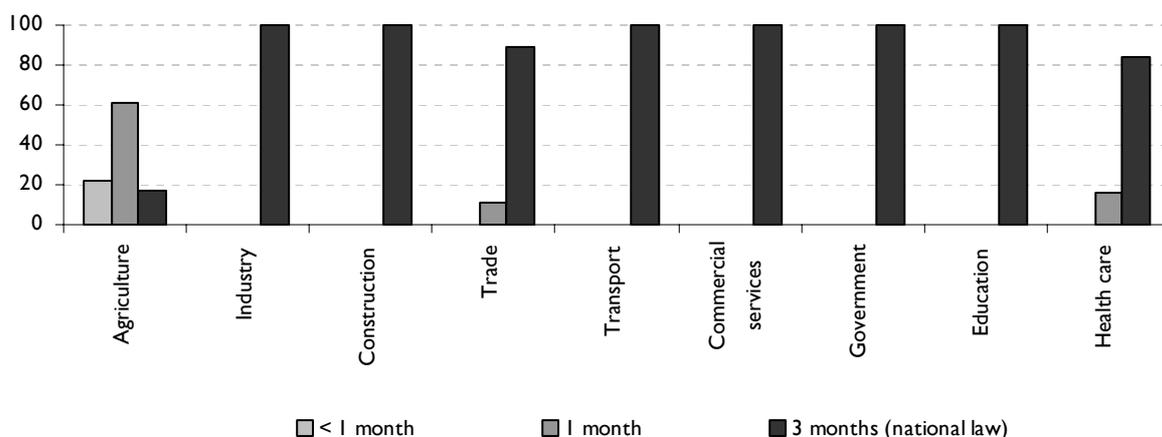
As from the day that between the employer and the worker:

- a. A series of temporary labour contracts with an interval period of at most 3 months have followed each other and exceed, including the interval periods, a total duration of 36 months, the latest contract counts as a permanent one;
- b. More than 3 temporary labour contracts have followed each other with an interval period of at most 3 months, the latest contracts counts as a permanent one.

There is no notice period for the termination of temporary contracts (since the end date is specified in the contract). A temporary contract can be dissolved before it legally ends, only when this is agreed upon in the individual labour contract. When the dissolution is the employer’s initiative, however, he still needs a legal permit from the public authority.

The provisions on the interval period in between temporary contracts, the maximum number and total duration of temporary contract can be differently arranged in collective labour agreements. Our research shows that for 93.4 percent of the CLA workers the national interval period of three months applies and for 6.6 percent a shorter interval period is observed. In none of the analysed CLAs a longer interval period is observed. Figure 4.4 shows that the divergence from national law on this item is only observed for workers in agriculture, trade and health care. In agriculture, hardly any CLA complies with the national provisions, for 60 percent of the CLA workers in this sector an interval period of one month applies, and for 20 percent an even shorter interval period. The protection level is lower, since workers can be re-hired on a temporary contract after a month, without it being a sequence of contracts to which the rules of the Law Flexibility and Security apply. This is likely to reflect the large fluctuations in labour demand in this sector. In both trade and health care, 10 to 15 percent of the CLA workers have a shorter interval period of 1 month.

Figure 4.4: Interval period in between temporary contracts in CLAs (% of CLA workers)

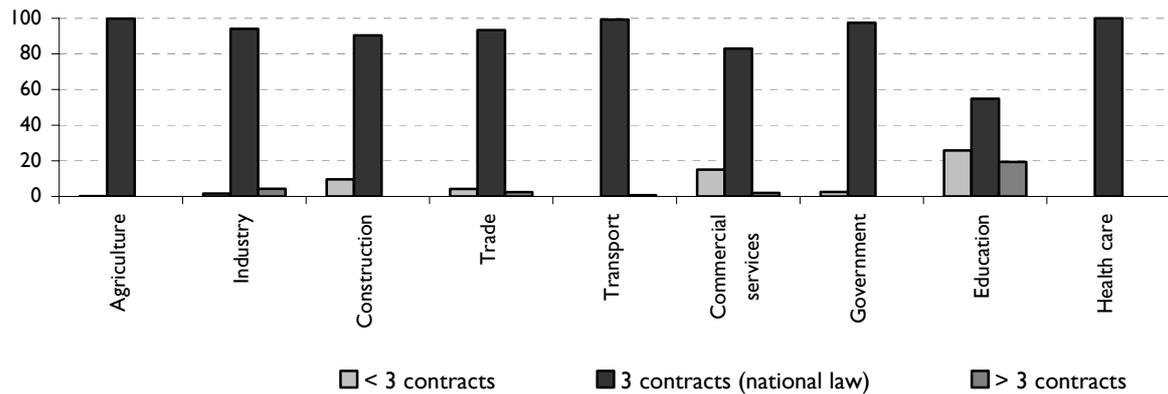


Source: FNV CLA databank (2006).

Figure 4.5 shows that especially for workers in education, but to a lesser extent also those in industry, construction, trade and commercial services, a divergence from the national provision on the maximum number of temporary contracts is found. When a lower maximum is agreed upon in

the CLAs (e.g. in construction, trade, commercial services), a maximum of two temporary contracts is most common, yet in a small number of CLAs (e.g. particularly in industry) it states that only one temporary contract is allowed, and particularly in special economic circumstances. When a higher maximum is agreed upon in CLAs (e.g. mainly in education), there is larger variation, ranging from a maximum number of 4 to 12 temporary contracts.

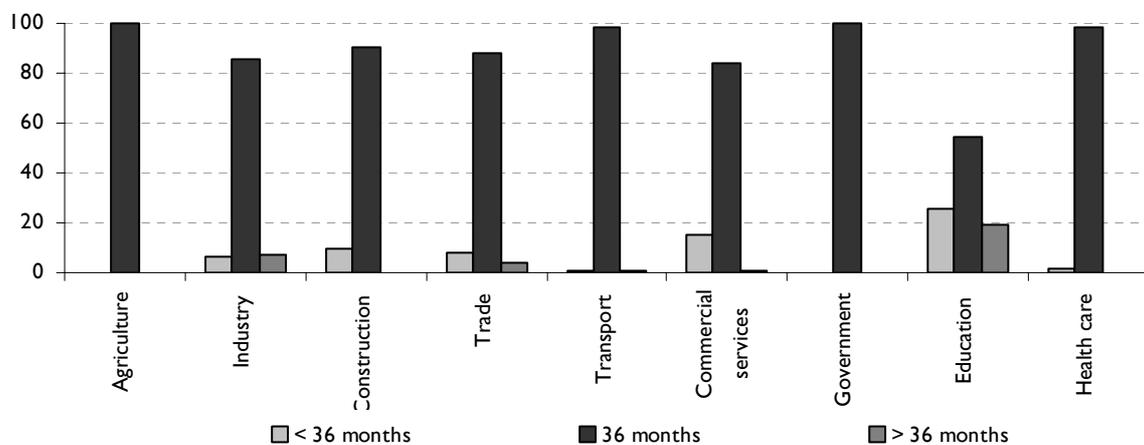
Figure 4.5: Maximum number of temporary contracts allowed for in CLAs (% of CLA workers)



Source: FNV CLA databank (2006).

Finally, divergence from the national provision on the maximum duration of a sequence of temporary contracts is found in the same sectors where a divergence from national law was found with respect to the maximum number of temporary contracts, e.g. education, industry, construction, trade and commercial services (see Figure 4.6). In the latter three sectors mainly a lower maximum duration is found, ranging from 6 months to 24 months, whereas in the first two sectors also longer durations are found, up to 72 months or even an unlimited total duration for about 4 percent for the CLA workers in education.

Figure 4.6: Maximum total duration of a sequence of temporary contracts observed in CLAs (% of CLA workers), by sector.



Source: FNV CLA databank (2006).

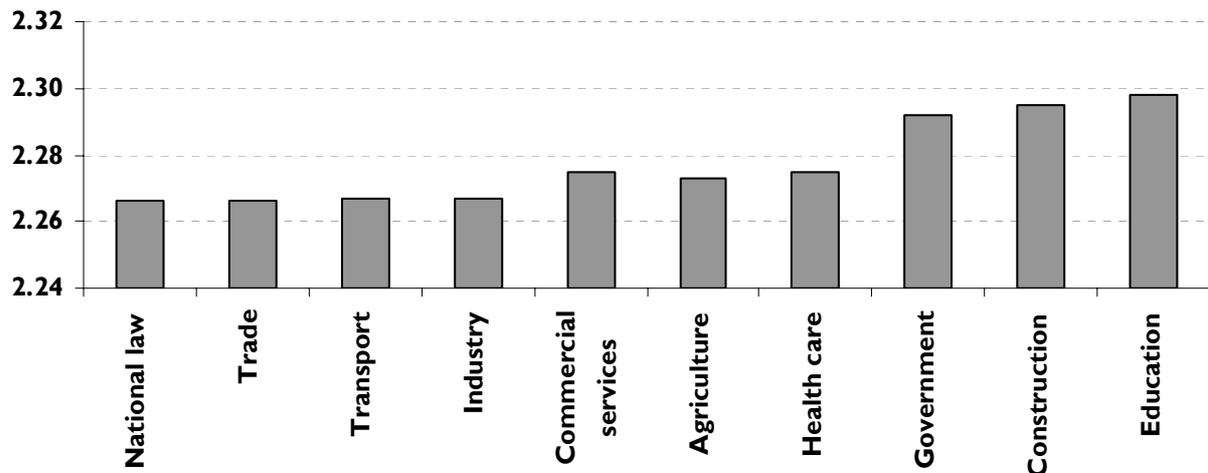
4.4 OVERALL PROTECTION LEVEL BY SECTOR

To compare protection levels between sectors, we use the OECD Employment Protection Legislation (EPL) indicator (OECD, 2004). The OECD developed this indicator originally to compare countries, and although criticism has been put forward on this indicator (Deelen *et al.*, 2006), mostly on the subjectivity of the coding frame, it is the most common way to compare levels of protection at the moment. The index is a weighted average of scores on 18 different aspects of a country's employment protection, such as period of notice, severance payment, procedural delays, reasons for dismissal, the use of temporary and fixed-term contracts, the length of trial periods and the rules for collective dismissal. Using the evidence on the period of notice, trial period and the use of temporary contracts discussed in the previous section, we are able to calculate the index on a sector level in the Netherlands. We recognise the fact that deviations from the national index are rather small, since only a few input variables vary between the sectors (4 of the 18 items in the OECD indicator to be specific), yet we still find this exercise of importance.

Details on the calculation of the sector based indices are presented in the Appendix, but it is worth mentioning here that we used a slightly different technique compared to the OECD. The OECD index uses rather crude categories for the scores, which is also one of the points of criticism on the index (*cf.* Bertola *et al.*, 2000). For example, part of the coding frame for the employer's period of notice at 9 months tenure is: a score of 1 for a period of notice smaller than 0.4 months, a score of 2 for a period of notice in between 0.4 and 0.8 months and a score of 3 for a period of notice in between 0.8 and 1.2 months. When using the average notice period measured at the sector level, and corrected for the fact that about half of the dismissal cases goes by court without a period of notice applying, almost all sectors receive a score of 2 (except for government and education where the score is 3). It can be argued, however, that in the category between 0.4 and 0.8 months, differences exist between the sectors that should be accounted for in the index. We have chosen to do so using extrapolation methods.

Figure 4.7 presents the calculated scores representing the level of employment protection for all sectors. The first bar is the score when using the national legislation. Although differences are small, it can still be observed that in all sectors the sector level provisions lead to a similar or higher level of employment protection compared to the national legislative level. For workers in trade, transport or industry, the observed differences are zero or smallest and for workers in government, construction and education these are largest.

Figure 4.7: OECD Employment Protection legislation Indicator by sector in the Netherlands



Source: OECD (2004), FNV CLA databank (2006).

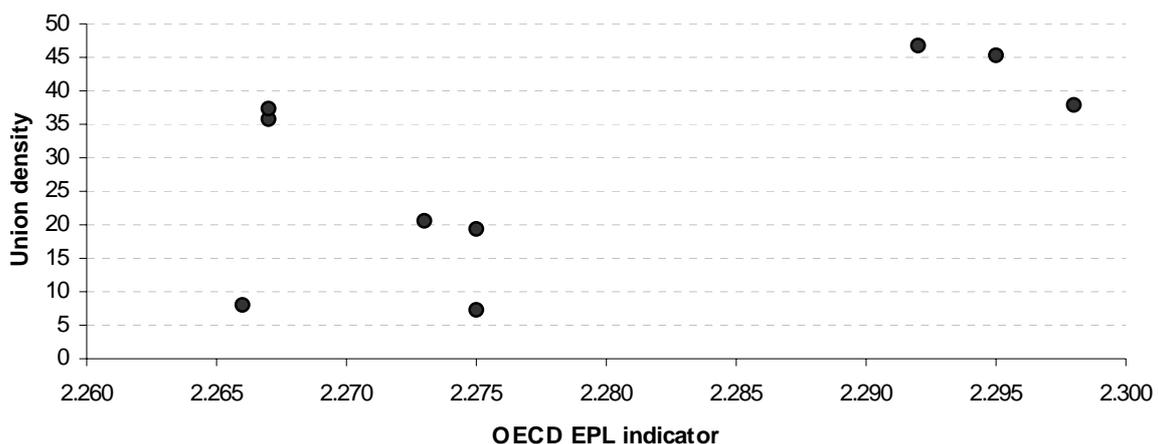
The fact that the indicator is nowhere lower than the national average might seem surprising at first sight, since the CLA research showed some lower protection measures in some sectors. This is explained, however, by the items of employment protection that are reflected in the OECD indicator. For example, the average period of notice is measured at a tenure of 9 months and 4 years, and in the CLAs it was observed that these were higher in most sectors compared to the national legislation. This pushes the OECD indicator upwards. The average period of notice for longer running contracts was larger in our CLA research, yet only the period of notice at 20 years tenure is included in the OECD indicator. In addition, we found that trial periods for workers on short-term contracts were higher than the nationally determined ones, indicating lower protection levels. However, the trial period for short-term temporary contracts is not included in the OECD indicator. Including these items in the indicator could lead to somewhat lower levels of employment protection in some or all sectors. The extent to which the levels of the indicator would be lowered, depend on the coding schemes that would be used to include them.

5 EMPLOYMENT PROTECTION, BARGAINING POWER AND LABOUR MARKET PERFORMANCE

5.1 EMPLOYMENT PROTECTION AND BARGAINING POWER

The first hypothesis raised in the theoretical part of this paper is that ‘provisions on workers’ employment protection are more common/higher in sectors where union density is highest’. As Visser (2006) already showed, union density rates in the Netherlands are relatively low with just over one-fifth of the labour force population being a union member (22.3%). Union density rates are lowest in commercial services and trade (7.3 and 8.0 percent respectively) and highest in the construction and government sector (45.3 and 46.8 percent respectively). Figure 5.1 shows the relation between these union density rates and the observed level of employment protection. It shows that there is a positive correlation between the two, with higher levels of employment protection corresponding to higher union density rates (correlation coefficient is 0.60). Although such correlation does not show causality, it is still instructive. Two sectors behave differently: in industry and transport union density rates are relatively high, yet the level of employment protection is relatively low. It might be that the trade unions’ focus in bargaining working conditions for the workers in these sectors is not on employment protection but on other conditions.

Figure 5.1: Employment protection and union density by sector in the Netherlands, 2004.

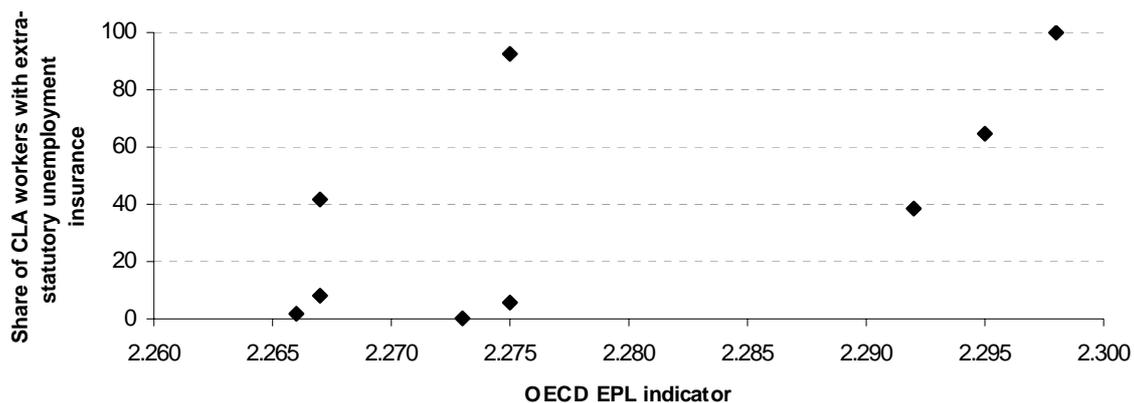


Source: Statistics Netherlands (2007).

The second hypothesis raised in the theoretical part is that ‘Extra-statutory unemployment insurance is more common/higher in sectors with lower levels of employment protection’. To test this, we analysed the CLAs on the provisions of extra-statutory unemployment insurance. In contrast to employment protection provisions, with respect to unemployment insurance only supplements are allowed in CLAs. Even though national unemployment insurance in the Netherlands

is relatively generous, for about 37 percent of the CLA workers supplementary unemployment insurance exist. Total unemployment benefits can mount up to 95 percent of previous earnings (including state benefits that are 70 to 75 percent of previous earnings). The duration depends on the worker's tenure and is in most cases similar to that of state benefits. In most cases, there is a very high supplement (up to 95 percent) in the initial months of unemployment which is then lowered when the unemployment duration is longer. Such supplements are most common for workers in education and health care, where almost all workers are covered by such provisions (93 to 100 percent). In contrast, it is least common in agriculture and trade where at most 2 percent of the workers are covered by supplementary unemployment insurance. Figure 5.2 shows the relation between the level of employment protection and such extra-statutory unemployment insurance. Interestingly, rather than the expected substitution between employment protection and unemployment insurance on the sector level, we observe a positive relation (correlation coefficient is 0.63). The two seem to be complementary. Again, not all sectors fit this profile. Workers in government do enjoy, on average, higher employment protection, yet supplementary unemployment insurance only exists for about 40 percent of the workers in this sector. For workers in health care, the reverse is observed with an average level of employment protection, yet supplementary unemployment insurance for about 93 percent of the workers. In addition, the correlation between extra-statutory unemployment insurance and union density on the sector level is less strong than that between extra-statutory unemployment insurance and the level of employment protection (correlation coefficient of 0.44 compared to 0.63).

Figure 5.2: Employment protection and extra-statutory unemployment insurance by sector in the Netherlands, 2005.

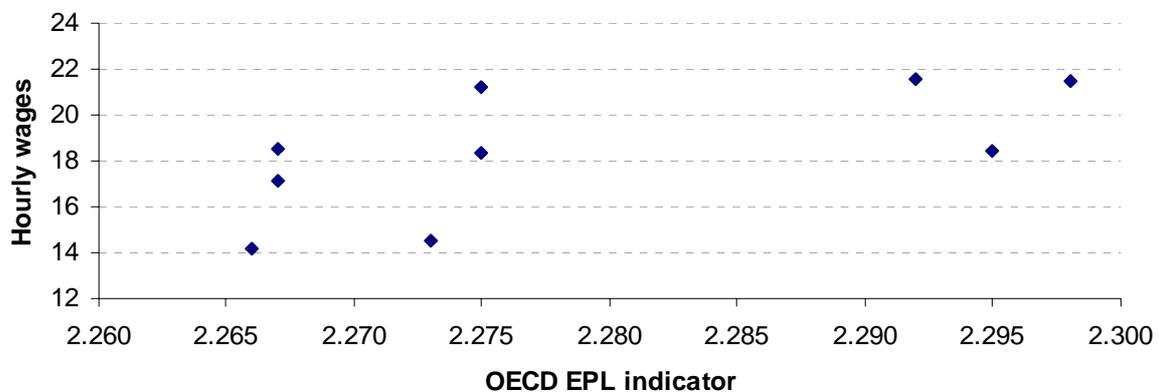


Source: FNV CLA database (2006).

A final hypothesis with respect to collective bargaining is that higher levels of employment protection reduce the scope for wage bargaining, *i.e.* negotiated wages. To test this we used the hourly wages by sector (Statistics Netherlands, 2007). Recognising the fact that this might be a crude proxy, at the moment we do not have an alternative. Hourly CLA wages are not available, and it is

difficult to calculate ‘the average CLA wage’ because there are different wage categories negotiated in CLAs. We find that the hourly wages are below the national average for workers in agriculture and trade, where workers earn about 75 percent of the average (national) hourly wage. These are two sectors where the previously discussed indicators differ. Workers in the trade sector enjoy a relatively low level of employment protection, have no extra-statutory unemployment insurance, and union density rates are low. In agriculture, union density rates as well as the bargained level of employment protection are average, while extra-statutory unemployment insurance is low. In addition, hourly wages are highest for workers in, commercial services, government and education. The commercial service sector is an outlier in this respect, with low union density, a low level of employment protection and no extra-statutory unemployment insurance. Figure 5.3 shows the relation between the level of employment protection and the observed hourly wages by sector. Rather than the expected negative relation, a positive relation is observed between the level of employment protection and hourly wages (correlation coefficient is 0.64). It more likely supports the opposite relation put forward in some studies is true that higher levels of employment protection increase the room for the insiders to bargain for higher wages (*cf.* Deelen *et al.*, 2006).

Figure 5.3: Employment protection and hourly wages by sector in the Netherlands, 2005



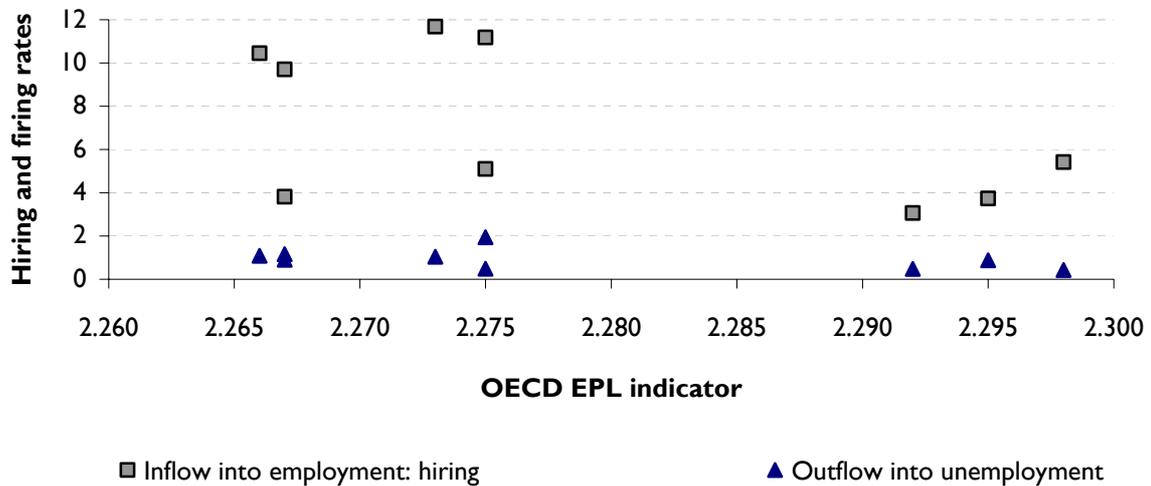
Source: Statistics Netherlands (2007)

5.2 EMPLOYMENT PROTECTION AND LABOUR MARKET PERFORMANCE

Our first hypothesis with respect to the labour market effects of employment protection was that ‘higher levels of employment protection reduce, *ceteris paribus*, firing and hiring rates’. For the analysis we used data from Statistics Netherlands and to correct for short-term economic fluctuation effects we used averages from 2000 to 2005 for all labour market indicators discussed in this section. Figure 5.4 shows some evidence on the relation between the level of employment protection and hiring and firing rates by sector. As a proxy for hiring rates, we use the inflow into

labour and as a proxy for firing rates we use the outflow rates out of labour into unemployment insurance or social assistance, which can be used to reflect the firing rates.

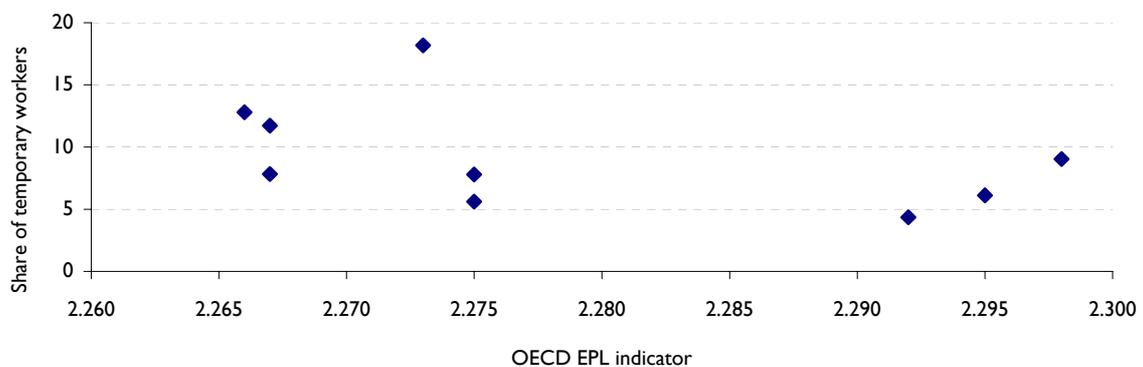
Figure 5.4: Employment protection, hiring and firing by sector in the Netherlands, 2000-2005



Source: Statistics Netherlands (2007).

The expected negative relation between the level of employment protection and both hiring and firing rates seems to be supported by this evidence (correlation coefficients -0.58 and -0.49 respectively). Some sectors diverge from this pattern with highest hiring rates in commercial services and agriculture, two sectors with average levels of employment protection. Alternatively, the sector specific contribution to unemployment insurance can be used as a proxy for the level of unemployment by sector. Contributions to unemployment in the Netherlands are partly dependent on the sector-level unemployment rates. The resulting correlation between the level of employment protection and the sector-specific contribution rates is similar to that with the outflow into unemployment (correlation coefficient is -0.44).

Figure 5.5: Employment protection and the share of workers on temporary contracts by sector, 2005

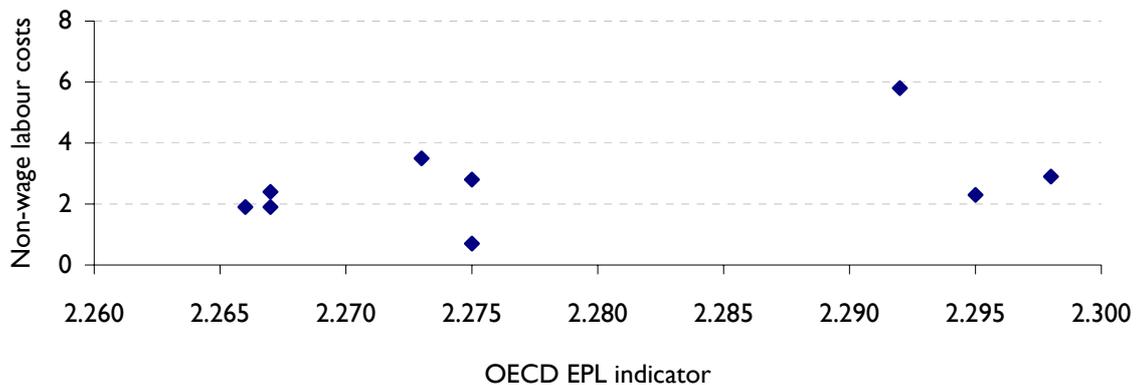


Source: Statistics Netherlands (2007).

A second hypothesis raised in the theoretical section was whether ‘higher levels of employment protection lead to a larger share of workers on temporary contracts’. Figure 5.5 shows the relation between the level of employment protection and the share of workers on a temporary contract by sector. Rather than the expected positive relation, there seems to be evidence of a negative relation between the level of employment and the share of workers on a temporary contract (correlation coefficient is -0.47). This might be due to the fact that the provisions on the use of workers on temporary contracts are also changed in a number of CLAs, as discussed before.

The final hypothesis raised in our theoretical section was that ‘higher levels of employment protection lead to higher labour costs’. To test this, we looked at non-wage labour costs, in particular the costs of sector dependent unemployment contributions plus severance payments. We think that in this way we measure the part of labour costs resulting from employment protection that have to be internalised by the employer. Figure 5.6 shows the relation between the level of employment protection and the share of these non-wage labour costs in the employer’s total labour cost. The evidence slightly supports the hypothesis, with higher non-wage labour costs found in sectors with higher levels of employment protection (correlation coefficient is 0.44). For example, in government the share of labour costs related to employment protection is 5.8 percent, while in trade this is just below 2 percent.

Figure 5.6: Employment protection and non-wage labour costs by sector in the Netherlands, 2005



Source: Statistics Netherlands (2007).

6 CONCLUSION

In this paper we explored the provisions on employment protection in collective labour agreements. Dutch labour law allows variation on the sector level, even at the expense of the worker, resulting from collective bargaining between the employers and the trade unions. The evidence, summarised in Table 6.1, shows that there is substantial variation between the sectors with respect to employment protection provisions. The employer's period of notice is equal or longer than national legislation for short-term contracts (shorter than 5 years) increasing the level of employment protection for workers on such contracts. The period of notice is generally equal or shorter than national legislation for longer running contracts, lowering the level of employment protection. The observed trial periods for permanent contracts are not differently arranged in collective labour agreements, noted that only a shorter trial period is allowed. For short-term temporary contracts, however, most collective labour agreements provide longer trial periods, lowering the level of employment protection for workers on such contracts. Finally, with respect to the use of temporary contracts, we found that the interval period in between two temporary contracts in order for them to belong to a sequence (with specific law applying to it) is shorter in some sectors, increasing the level of employment protection. With respect to the maximum number and duration of a sequence of temporary contracts, both higher and lower levels of employment protection are observed in some sectors. So even within the sector, on the company level, there is some variation in employment protection legislation.

Table 6.1: Summary findings on deviation from national law of sector level employment provisions

	Employer's period of notice				Trial period perm/temp	Use of temporary contracts		
	0-5 year contract	5-10 year contract	10-15 year contract	15+ year contract		Interval period	Maximum number	Maximum Duration
Agriculture	+	0	-	-	0 / 0	+	0	0
Industry	0	0	-	-	0 / -	0	0	-, +
Construction	+	-	-	-	0 / -	0	+	+
Trade	0	-	-	-	0 / -	+	-, +	+
Transport	0	-	-	-	0 / -	0	0	0
Commercial services	0	-	-	-	0 / -	0	+	+
Government	+	+	0	-	0 / -	0	0	0
Education	+	+	0	-	0 / -	0	-, +	-, +
Health care	+	0	-	-	0 / 0	+	0	0

- indicates that the level of employment protection is lowered by the observed sector provisions compared to the national level; + indicates that the level of employment protection is increased by the observed sector provisions compared to the national level; 0 indicates that no deviation from national law is observed.

Next, using these findings, we tested some hypotheses on the relation between employment protection legislation and collective bargaining on the one hand and labour market flexibility on the

other hand. Table 6.2 summarises our main findings. When looking at the relation with collective bargaining first, we do find only minor support for our hypotheses. Higher union density is indeed positively related to higher levels of employment protection. Yet we do not find the expected negative relation between the level of employment protection and extra-statutory unemployment insurance or wages. In fact, for both hypotheses, the reverse is found. Extra-statutory unemployment insurance is used as a complement to employment protection, even given the relatively generous national level of unemployment insurance. As for the wage effect, the idea that well protected insiders have more room to bargain for higher wages seems to be supported by our sector level analysis.

Table 6.2: Summary findings on the hypotheses tested in this paper

Hypotheses on employment protection and collective bargaining:		
1	Positive relation between union density and level of employment protection	Support found
2	Negative relation between level of employment protection and extra-statutory unemployment insurance	Reverse found
3	Negative relation between level of employment protection and hourly wages	Reverse found
Hypotheses on employment protection and labour market flexibility		
4	Negative relation between level of employment protection and hiring/firing rates	Support found
5	Positive relation between level of employment protection and use of temporary work	Reverse found
6	Positive relation between level of employment protection and employer's labour costs	Support found

In addition, when looking at the relation with labour market flexibility, we find some support for our hypotheses. Higher levels of employment protection so seem to be related to lower hiring and firing rates, *i.e.* with lower levels of labour market mobility. In addition, the higher levels of employment protection are also related to higher levels of non-wage labour costs for the employer, though the correlation is not as strong as with the hiring and firing rates. Finally, we do not find support for the hypothesis that higher levels of employment protection lead to an increased share of workers on temporary contract, in fact the reverse is supported by our data.

These results contribute to the literature, especially since most of the relations were not shown on the sector level before. The fact that higher levels of employment protection are found on the sector level is a little bit surprising given the (current) public debate on the reform of the Dutch system of employment protection. This debate fully focuses on the national legislation and employers and trade unions cannot agree on how to change this. Employers oppose against the system, stating that it is too restrictive, while on the other hand, they agree with even stricter provisions on the sector level. When no outcome is found on the national level, future collective bargaining could perhaps become more targeted on employment protection provisions at the sector level.

REFERENCES

- Addison, J.T., Teixeira, P. (2001), The economics of employment protection, IZA Discussion Paper no. 381, Bonn: Institute for the Study of Labor.
- Aidt, T., Tzannatos, Z. (2002), Unions and collective bargaining. Economic effects in a global environment, Washington: The World Bank.
- Bertola, G., Boeri, T., Cazes, S. (2000), Employment protection in industrialised countries: the case for new indicators, *International Labour Review*, vol. 139, pp.57-72.
- Bentolila, S. and Bertola, G. (1990), Firing costs and labour demand: how bad is eurosclerosis? *Review of Economic Studies*, vol. 57 (3), pp. 381-402.
- Blanchard, O., Tirole, J. (2004), The optimal design of unemployment insurance and employment protection: a first pass, NBER working paper no. 10443, Cambridge: National Bureau of Economic Research.
- Booth, A. (1995), The economics of the trade union, Cambridge: Cambridge University Press.
- Deelen, A., Jongen, E., Visser, S. (2006), Employment protection legislation: lessons from theoretical and empirical studies for the Dutch case, CPB Document no. 135, The Hague: Netherlands Bureau for Economic Policy Analysis.
- Faith, R.L. and Reid, J.D. (1987), An agency theory of unionism, *Journal of Economic Behavior and Organisation*, vol. 8, pp. 39-60.
- Freeman, R.B. and Medoff, J.L. (1984), What do unions do? New York: Basic books.
- Hartog, J. (1999), Wither Dutch corporatism? Two decades of employment policies and welfare reform, *Scottish Journal of Political Economy*, vol. 46 (4), pp.458-487.
- OECD (2004), Employment protection regulation and labour market performance, in *Employment Outlook 2004*, Paris: OECD.
- SER (2006), Over de SER, www.ser.nl, The Hague.
- Schreuder, K., Tijdens, K. (2004), Codeboek Ducadam Dataset – een statistisch bestand van de FNV CAO Databank, AIAS Working Paper no. 24, Amsterdam Institute of Advanced Labour Studies, University of Amsterdam.
- Schils, T. (2007), Distribution of responsibility for social security and labour market policy, Country report the Netherlands, AIAS working paper no. 49, Amsterdam: Amsterdam Institute of Advanced Labour Studies.
- Statistics Netherlands (2007), Statline, online statistic database, statline.cbs.nl, Voorburg/Heerlen: Statistics Netherlands.
- SZW (2004), De Wet Flexibiliteit en Zekerheid: een onderzoek naar de mate waarin en de wijze waarop in de CAO's van 2004 is afgeweken van de ¾ bepalingen, October 2004, The Hague: Ministry of Social Affairs and Employment.
- Visser, J. (2006), Union membership statistics in 24 countries, *Monthly Labor Review*, January 2006.
- WRR (2007a), Investeren in werkzekerheid, WRR-report no. 77, The Hague.
- WRR (2007b), Arbeidsflexibiliteit en ontslagrecht, WRR-verkenning no. 14, The Hague.

APPENDIX: CALCULATION OF SECTOR LEVEL EPL INDICES

We do not replicate the full calculation method of the OECD indicator in this section, we only pay attention to the four items that are found to vary between the sectors: period of notice, trial period, maximum number of temporary contracts and maximum total duration of a series of temporary contracts. For example, the OECD uses the following coding frames for the employer's notice period (only relevant parts shown here):

At 9 months tenure:	Notice period < 0.4 months = 1
	Notice period < 0.8 months = 2
At 4 years tenure:	Notice period < 0.75 months = 1
	Notice period < 1.25 months = 2
At 20 years tenure	Notice period < 1 months = 0
	Notice period < 2.75 months = 1

The OECD corrects for the fact that only half of the cases go via the public dismissal route and hence the national score is calculated as follows. At 9 months the notice period is 1 month, summarised by a factor 0.5 for the mentioned correction yields an average notice period of 0.5 and a corresponding score of 2. Repeating this for the notice period at 4 and 20 years tenure, the total score sums to 4 using national legislation (Table A1). When using linear extrapolation, the total score using national legislation is much lower, 2.202. To calculate the sector level scores, we used the average notice period based on the CLA-provisions, and again the method of linear extrapolation is used. The scores for the three other items are acquired in a similar way, whereby the OECD coding frames are as follows:

Trial period:	> 2.5 = 4
	> 1.5 = 5
	< 1.5 = 6
Maximum number of temporary contracts:	> 4 = 2
	> 3 = 3
	> 2 = 4
Maximum duration of sequence of temporary contracts: no limit = 0	> 36 months = 1
	> 30 months = 2

Table A1 shows the sector averages used and the scores per item. The overall score is a weighted total of the 18 items in the OECD indicator and we followed the OECD weighting scheme (see OECD (2004) for details. The version I indicator is without the provisions for collective dismissal and the version II indicator is including those provisions.

Table A1: Input for sector based employment protection indicator

	National	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
<i>Employer's notice period</i>										
At 9 months	1	1.25	1.09	1.32	1.02	1.06	0.99	1.74	2.04	1.33
At 4 years	1	1.25	1.12	1.37	1.02	1.06	1.09	1.79	2.04	1.33
at 20 years	3	2.5	2.79	2.11	2.79	3.01	2.09	2.64	2.37	2.51
score regular	4	4	4	4	4	4	4	6	6	4
score extrapolated	2.202	2.539	2.335	2.595	2.181	2.32	1.99	3.551	4.015	2.695
<i>Trial period for workers on permanent contract</i>										
Average	2	1.59	1.71	1.68	1.89	1.71	1.67	1.35	1.18	1.6
score regular	5	5	5	5	5	5	5	6	6	5
score extrapolated	4.5	4.91	4.79	4.82	4.61	4.79	4.83	5.1	5.21	4.9
<i>Maximum number of temporary contracts in a sequence</i>										
Average	3	2.99	3.03	2.9	3	3.02	3.07	2.95	3.07	3
score regular	3	3	3	4	3	3	3	4	3	3
score extrapolated	3	3.01	2.97	3.1	3	2.98	2.93	3.05	2.93	3
<i>Maximum total duration of sequence of temporary contracts</i>										
Average	36	36	39	34	36	36	34	36	38	36
score regular	1	1	1	2	1	1	2	1	1	1
score extrapolated	1	1	1	1.33	1	1	1.33	1	1	1
<i>Version I indicator</i>										
score regular	2.182	2.182	2.182	2.287	2.182	2.182	2.245	2.334	2.272	2.182
score extrrapolated	2.119	2.144	2.132	2.168	2.123	2.132	2.143	2.179	2.187	2.147
<i>Version II indicator</i>										
score regular	2.319	2.319	2.319	2.406	2.319	2.319	2.37	2.445	2.393	2.319
score extrapolated	2.266	2.287	2.277	2.307	2.269	2.277	2.286	2.316	2.322	2.289

[1] = Agriculture, [2] = Industry, [3] = Construction, [4] = Trade, [5] = Transport, [6] = Commercial services, [7] = Government, [8] = Education, [9] = Health care.

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**AMSTERDAMS INSTITUUT
VOOR ARBEIDSSTUDIES**

Universiteit van Amsterdam

**Plantage Muidergracht 4
1018 TV Amsterdam
the Netherlands**

tel +31 20 525 4199

aias@uva.nl

fax +31 20 525 4301

www.uva-aias.net