WORK LIFE IN THE NETHERLANDS

Irene Houtman (editor)

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Preface

The nature of work is changing, not only in the Netherlands but throughout Europe. There is a growing demand for different types of products and services. These demands are influenced by technological developments and innovations, but also by globalization, which indicates the integration of national and regional economies. Under the influence of economic pressures, (international) competition between commercial organizations increased and extensive outsourcing of activities, mainly to low-wage countries, has led to a change in the type of business operations in which those companies engaged in. It is highly possible that this globalization has led to a flexibilization of the work process, with more part-time employment, temporary employment and independent contracting staff. Another effect may resulted in a changed labour market with an increased demand for staff in services and reduced employment opportunity in industry and agriculture. These changes occur against a background of a greying workforce in the Netherlands as well as in Europe. All in all we would expect a considerable change in the quality of work and health of workers. Studying these changes and their impact on the quality of work, health and productivity of both the worker and the organization is the core of the work at TNO Work & Employment.

TNO Work & Employment - with about 150 employees – is a national center of knowledge on working life issues in the Netherlands. TNO as an organization – with about 4000 staff members- is the largest independent research and consultancy organization in the Netherlands, receiving structural, however partial, funding from the Dutch Government for innovative research and developments. In consultation with the Ministry of Social Affairs and Employment, TNO Work & Employment seeks to develop new approaches to improve the quality of working life in a healthy, sustainable and productive organization. It supports the Dutch government as well as public organizations and the business community.
Its major fields of research are the quality of work and health, social innovation and human capital, sustainable employment and sustainable productivity. TNO Work and Employment is a WHO Collaborating Center on Occupational Health, the Dutch representative in the Partnership for European Research in Occupational Safety and Health (PEROSH) and national correspondent for the European Working Conditions Observatory (EWCO; Eurofound), as well as member of the European Association of National productivity Centers (EANPC).

This book is an update of the first edition of 'Worklife in the Netherlands', published in 2006, and reflects the major research areas of TNO Work & Employment. It presents recent work performed by researchers from TNO Work and Employment on topics that recently were or still are an issue for debate in the Dutch media, politics or a main topic in the national research agenda. The book starts out with a presentation of trends in the quality of work based on both Dutch and European data sets, providing a European

benchmark for the Netherlands on quality of work. In a second chapter the focus is more on the development of health of the Dutch workforce, whereas the third chapter taps into the topic of sustainable employability. The fourth chapter presents the current status of the occupational health services in the Netherlands and future prospects on this topic are discussed. Chapter five pays attention to the quality of work and employment conditions of flex workers, a group of workers which appears to be growing particularly in the Netherlands. Chapter six focuses on the long history of government spending cuts and its consequences for the quality of work and productivity, and particularly addresses the developments in the public sector. The subject of the seventh chapter is 'knowledge work', which appears to be an emerging, although not often well defined topic. One who thinks this a purely academic debate is wrong, since this topic has emerged as a policy debate in countries of the EU and in the Netherlands, the Foreign National Employment Act was revised in 2009, making it easier for 'knowledge workers from abroad' to come and work in the Netherlands. The final chapter addresses workplace innovation in the Netherlands which is considered to be a prerequisite to achieve the EU 2020 objectives of smart, sustainable and inclusive growth.

With this update of 'Worklife in the Netherlands', I am confident that we present the reader a broad picture of interesting trends, research findings and conclusions as well as some forecasts related to the quality of work and employment in the Netherlands. I am proud the book is published and hope it will further stimulate international collaboration and discussion on the future of this important research area.

Prof. dr. Paulien Bongers
Director Work and Employment

Chapter 1 Trends in the quality of work in the Netherlands: a European comparison[1]

Irene Houtman & Seth van den Bossche[2]

Summary

This paper describes trends in the quality of work in the Netherlands, comparing the situation in the Netherlands with that in other European countries. Globalization, technological innovation and an employment market shift towards the service sectors are hypothesized to be the main drivers of these trends.

Ongoing intensification of work continues to be seen in Europe as a whole, but has leveled out in the Netherlands. Until 2000, the Netherlands led the rankings in terms of work pressure. The Netherlands now occupies a place in the EU-mid-field.

The number of Dutch employees holding a temporary contract of employment has continued to increase since the 1990s. Recently, there has been a decline in perceived job security.

The average number of working hours has remained constant, or has slightly fallen, possibly due to the emergence of the services sector and greater awareness of the physical and environmental risks in the workplace. Shift work has remained reasonably constant. Social support from supervisors and co-workers is high and has recently shown a further increase.

The number of Dutch employees engaged in computer work has continued to increase and exceeds the European average. The same holds true of staff who 'telework', i.e. work from home or a location other than the traditional office. In the Netherlands, computer work is generally associated with a good quality of work, although the percentage of employees at risk of musculoskeletal problems is rising because many spend six hours or more at the computer each day.

The (perceived) quality of work in the Netherlands is significantly higher than the European average. The only caveat is that violence and harassment in the workplace are at a relatively high level, due to the large services sector with its frequent client contacts. Although the incidence of physical violence in the workplace is rising throughout Europe, recent data from the Netherlands suggests that the rate of increase has stabilized.

Key words: Trends, quality of work, Netherlands, Europe

1 This chapter is a mixture of two publications: Houtman & Van den Bossche (2010) and Hooftman et al, (2012)

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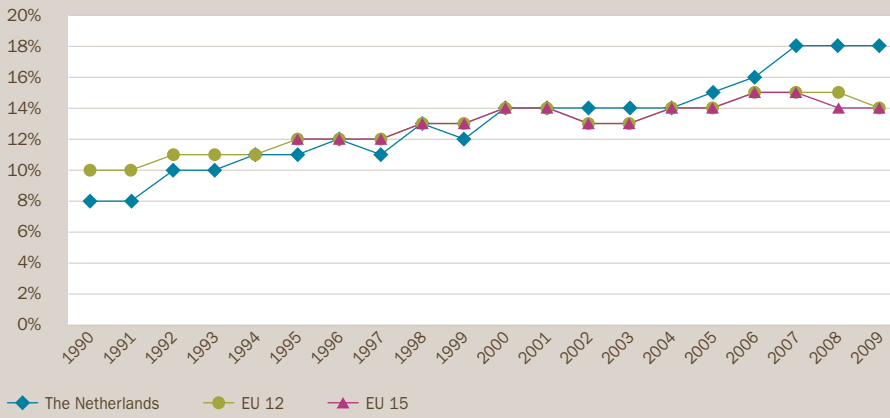
1.1 Introduction

The nature of work is changing, not only in the Netherlands but throughout Europe. There is growing demand for different types of products and services, while the organizational structure of work processes and the tools and resources used are also changing. In general terms, there are three causative factors.

The first is ongoing globalization, a term which refers to the integration of national and regional economies. It has led to increased competition between commercial organizations, to a shift in the type of business operations in which those companies are engaged, and to extensive outsourcing of activities, primarily to the low-wage countries. In a highly regarded book, Robert Flanagan (2006) examines the effects of globalization on working conditions (hours, remuneration and safety) and employees' rights (forced labour, child labour, gender equality). He concludes that there is no empirical evidence to support the contention that globalization has worsened labour conditions.

FIGURE 1.1 **Employees in the Netherlands the EU12 and EU15 holding a temporary contract of employment, as a percentage of the total workforce, 1990-2009**



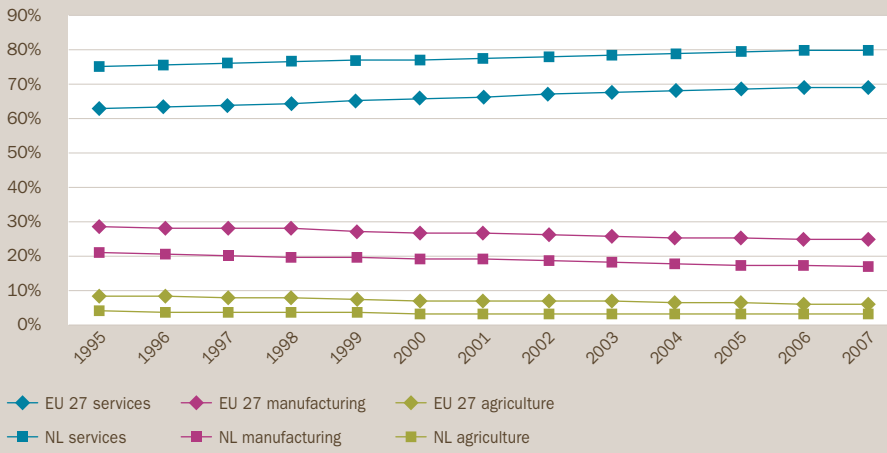
SOURCE: Eurostat/Labour Force Survey

It is possible to contend that globalization has led to a flexibilization of the work process, with more part-time employment, temporary employment and independent contracting of staff (as reported by Houtman, et al., 2008; Kawachi, 2008; EU-OSHA, 2007). Figure 1.1 confirms that there has indeed been a significant increase in the number of employees holding temporary contracts. In 1990, the figure for the Netherlands (8%) was somewhat lower than the European average (10%). By 2009, however, it had risen to 18%, compared to the European average of 14% of the total workforce. It is the employer who gains the benefit of temporary contracts in the form of greater flexibility and, in many cases, lower personnel costs. For the employees themselves, however, the effect is decreased

job security and less protection from both the unions and labour law, as De Cuyper et al. (2008) and Kawachi (2008) suggest.

The second key development is termed the tertiarization of the labour market, manifested in increased demand for staff in the services sector and reduced employment opportunity in industry and agriculture. In fact, this development became apparent in the early years of the twentieth century but in recent decades may well have been reinforced by globalization, since the outsourcing of manual labour to the low-wage countries left only, or predominantly, the service economy. This labour market shift can be seen at both the national and the European level (Peña-Casas and Pochet, 2009; European Agency, 2007). Figure 1.2 illustrates the shifts in the Dutch and European labour market since 1995. We see increased employment opportunity in both the commercial and non-profit services sectors, i.e. in banking, financial services, consultancy, etc. and in health care, education and public administration. The common factor is that all services involve some degree of contact with clients, a point to which we shall return later in this paper.

FIGURE 1.2 **Labour market shifts in the Netherlands and the EU 27, 1995-2007**



SOURCE: EUROSTAT/LABOUR FORCE SURVEY

The third key development is the emergence of the computer and the internet, which has led to many changes and innovations in work processes. Many forms of manual work have become obsolete and staff must now offer different skills and qualifications. Moreover, we have seen the introduction of 'new work', a term which amongst others refers to telework, i.e. working from home or a location other than the traditional office. There are many work activities which can now be conducted regardless of time or location: while travelling on the train, at home and – if we are to believe the television commercials – on some distant exotic beach or in the middle of a tropical rainforest. This

results in a blurring of the border line between 'working' and 'private life'. Work can take place outside the traditional working hours as well as at home or when travelling. This is a new development and one which can impinge on the need for rest and recuperation, or interfere with personal commitments.

As yet, there is little hard evidence to show the influence of globalization, tertiarization and computerization on the quality of work. Further research is needed. Nevertheless, we are able to formulate a number of expectations or projections, based on the existing research literature, quantitative data and the opinions of international experts.
First, ongoing globalization will lead to further intensification of work, further restructuring, and a growing decrease in perceived job security. There will be even more employees with a temporary contract of employment, while yet more people will find employment through staff ('temp') agencies or will work 'on call', as and when their services are required by the employer.
The growing importance of the services sector is expected to lead to a decline in physically demanding work and an increase in computer working. In those professions which have frequent contact with members of the public (e.g. customers, patients, students or passengers), there could be an increased risk of violence and harassment. Of course, this is not only due to tertiarization itself, but is also part of a general social trend whereby everyday standards and values, particularly that of respect for others, are being eroded.
New work is linked to the increase in computer work and the possibilities offered by modern information and communication technology. There is likely to be a further increase in the number of people who work from home or at some location other than the traditional office, doing so at times other than the traditional 'nine to five'. As a result, it will become more difficult to achieve a good work-life balance. Although employees will enjoy greater autonomy, the demands of their work in terms of complexity and volume may also be greater, perhaps leading to longer working hours. At the same time, there will be more opportunities for learning and personal development.

Alongside the three factors which are changing the nature of work itself (globalization, tertiarization and computerization), changes can also be seen on the 'supply side': the employees themselves. The average age of the workforce is now higher (due to population ageing), there is a greater proportion of female employees, there is greater ethnic and cultural diversity, and the average educational level is rising (Bijl et al., 2009; Sanders et al., 2010). Employees (and potential employees) will be required to offer different skills, competences and coping capacities.

Using European data, we are able to make a direct comparison between Dutch workers and those in other EU member states. In doing so, the key questions are:
1. What trends can be seen in the quality of work as perceived by Dutch workers and their counterparts elsewhere in the EU?
2. What is the Netherlands' position within Europe in terms of working conditions?

This paper examines how the quality of work has developed in the Netherlands further to the trends outlined above. Our conclusions are based on the national and international monitoring data currently available. We then go on to discuss the developments in labour conditions based on the following classification:

1. Psychosocial factors such as pressure of work, intensification, autonomy, opportunities for personal development and social relationships in the workplace.
2. Ergonomic factors (physically strenuous work, pushing, lifting, pulling, static strain) and environmental factors (noise, pollution, hazardous conditions).
3. Working with various forms of employment contract and job security.
4. Working hours, in terms of the duration of the working day or week, as well as the time of day at which work is conducted. We therefore also consider shift work and unsocial hours, overtime, telework and the life-work balance.

It is perhaps appropriate to consider why trends in the quality of work are of any significance. One reason is that a poor quality of work leads to more health problems, absenteeism and long-term employment incapacity. Another point to which attention has recently been devoted (Ybema et al., 2009) is that the quality of work affects the employee's willingness and ability to work until or beyond the current statutory retirement age. This paper does not examine trends in the health of the Dutch labour force in detail. However, the National Survey on Working Conditions (Klein Hesselink et al., 2009) and data derived from various demographic surveys conducted prior to 2002 (Houtman et al., 2004) reveal that the physical and mental health of Dutch employees has remained stable. We do not have access to information about the status of those who have been forced to discontinue working for health reasons. Although the average rate of absenteeism through illness continues to show a gradual decline (see also Klein Hesselink et al., 2009, Koppes et al., 2010), this may be due to stricter controls and the financial impact of absenteeism rather than being any indication of a healthier workforce. Studies in which employees are monitored over a longer period suggest that certain aspects of the quality of work, including workload, time pressure and lack of autonomy, contribute to absenteeism due to psychological problems (Häusser et al., 2010; Stansfeld & Candy, 2006), to musculoskeletal complaints (Bongers, Kremer & Ter Laak, 2002), and also play a part in cardiovascular disease and the associated mortality (Kivimäki et al., 2012). Health aspects aside, government and society now place increasing importance on full employment participation, whereby everyone who is able to work is encouraged to do so.

1.2 Methodology

This paper relies on several data sources. The trends in the Netherlands itself are derived from the National Survey of Working Conditions (Koppes et al., 2010). This survey, known by the abbreviation NWCS, is conducted by TNO in association with Statistics Netherlands (CBS). In recent decades, CBS has devoted specific attention to the quality

of work in its regular demographic surveys, the LSO, DLO and POLS[3]. In 2003, following the introduction of the NWCS, which is concerned solely with the quality of work), most questions and indicators relating to this area were removed from POLS. The NWCS began as a semi-annual (two-yearly) survey, but since 2005 has been conducted annually among a representative sample of Dutch employees. It excludes the self-employed. Since 2008, the respondent sample has been selected from the national insurance database. In 2003, the net response was approximately 10,000 employees. Following an expansion of the sample size, the average net response since 2005 has been approximately 23,000. The selected respondents are sent a printed questionnaire which they can complete and return by post. The questionnaire is also available online.

Given the relatively short history of the NWCS, this paper also draws upon data relating to trends in the quality of work prior to 2003, as derived from the DLO or POLS surveys, where such data is directly comparable to that derived from the NWCS. At the time of these earlier surveys, the trends were systematically presented and discussed in the annual publication Trends in arbeid ('Trends in work') which was last published in 2004 (Houtman et al., 2004).

Our comparison of Dutch trends with those elsewhere in Europe relies on the European Working Conditions Survey (EWCS), which has been conducted in all EU member states every five years since 1990. In every year other than 2000, the EWCS sample size has been approximately 1,000 respondents (both employees and self-employed persons) in each country. The EWCS 2000 had a larger sample of approximately 1,500 respondents in each country. The respondents are selected at random and interviewed 'face to face'. For the purposes of this paper, we base our comparison on the figures which relate to the EU 15 countries[4], since three full sets of data are available for this group: 1995, 2000 and 2005. Where relevant, we also refer to the EU12 data of the 1990 survey. (In subsequent years, there is very little difference between the data relating to the EU12 and that for the EU15 countries. In fact, there is considerable overlap.)

Given the large respondent group in each case, virtually all differences may be considered statistically significant. For this reason, no significance indicators are included in the tables.

3 The LSO (LeefSituatie Onderzoek, translated on the CBS website as 'Living Conditions Survey') was first conducted in 1974 and thereafter at three-yearly intervals until 1989, when it became an annual survey. In 1991 it was renamed the 'Ongoing Living Conditions Survey' (DLO). Its form was further amended in 1997, when it was decided to select and approach respondents throughout the year. It was therefore renamed the 'Permanent Living Conditions Survey' or POLS. Like its predecessors, POLS relies on a representative random sample (n=3,000 to 6,000) of respondents. For further information see www.cbs.nl.

4 The EU12 countries are Belgium, Denmark, France, Germany, Greece, Italy, Ireland, Luxembourg, the Netherlands, Portugal and the United Kingdom. In 1995 they were joined by Finland, Sweden and Austria to form the EU 15.

1.3 Results

1.3.1 Trends in psychosocial factors

Pressure of work and autonomy

The 1990s showed an ongoing increase in the pressure of work. Many reports, especially European publications, cite a strong intensification of work as one of the 'emerging risks' of the era. Dutch analyses, e.g. Houtman et al. (2004) and Smulders (2008) use the LSO, DLO and POLS surveys to demonstrate that work pressure increased rapidly between 1977 and 1997, a period of twenty years, showing a 1% increase in almost every successive year. By the turn of the century, however, this trend had abated.

In the period up to 2010, the developments in work pressure and autonomy affecting Dutch employees showed a rather different pattern to that seen in the other EU15 countries (see Table 1.1). In the other EU-countries, there was an ongoing increase in work pressure almost throughout this whole period, both in terms of speed and deadlines. There is some indication of a slight flattening off in 2010. In the Netherlands, the increase in work pressure continued until 2000, whereupon a stabilization and even a slight decrease was noted. While the Netherlands was at the top of the European rankings in this respect in the final years of the twentieth century, it was then overtaken and now occupies a position somewhere around the EU-average.
The EWCS includes questions about the autonomy that employees enjoy in deciding how they are to perform their work. Can they decide the order of activities, the method to be used or the speed at which they should work? The Dutch worker scores higher than the European average in this respect Some 80% of workers state that they are able to decide or influence how a task is to be performed, against an average of 70% in the rest of Europe. Other questions on autonomy show the same picture of the Netherlands against Europe.

Tabel 1.1: Trends in psychological job demands, autonomy and skill discretion in the Netherlands and Europe, 1990-2010

	1990	1995	2000	2005	2010
PSYCHOLOGICAL JOB DEMANDS					
Working fast (% very high)					
NL	58	70	75	61	62
EU-15	47*)	54	56	61	61
Working with tight deadlines (% very often)					
NL	36	43	65	61	60
EU-15	50*)	56	59	62	64
AUTONOMY					
Being able to choose or change order of tasks (% yes)					
NL	74	81	79	79	80
EU-15	62*)	66	65	64	67
Being able to choose or change working method (% yes)					
NL	–	81	82	73	72
EU-15	–	73	71	68	68
Being able to choose or change one's working speed (% very often)					
NL	76	80	81	75	78
EU-15	64*)	73	70	69	69
Workpace is dependent on others (% yes)					
NL	–	–	–	65	76
EU-15	–	–	–	69	75
SKILL DISCRETION/LEARNING OPPORTUNITIES IN ONE'S WORK					
Learning new things (% very high)					
NL	–	80	81	84	78
EU-15	–	77	71	70	69
Complex work (% very often)					
NL	–	61	63	65	–
EU-15	–	60	56	59	–
Monotonous work (% very often)					
NL	–	34	28	23	25
EU-15	–	44	39	42	45

SOURCE: EWCS; *) = EU-12

Tabel 1.2: Trends in psychological job demands, autonomy, skill discretion, social support and violence and harassment (all employees, except where mentioned otherwise), 2005-2009

	2005	2006	2007	2008	2009
PSYCHOLOGICAL JOB DEMANDS					
Time pressure (2 items; % yes o none of both items)	–	–	71	73	73
Job demands (4 items; % yes = >2.5 on a scale of 1-4)	–	–	29	29	28
AUTONOMY					
Lack of autonomy (5 items; % no autonomy at all, or 'no' on all five items)	–	–	31	29	28
SKILL DISCRETION					
Is your work varied? (% yes)	–	–	71	72	65
Does your work demands that you learn new things? (% yes)	–	–	46	51	45
Does your work demands creativity? (% yes)	–	–	60	61	56
Cognitive task demands (3 items; % yes = >2,5 on a scale of 1-4)	–	–	82	79	77
SUPPORT					
Social support management (4 items; % yes = >2.5 on a scale of 1-4)	–	–	69	71	72
Social support co-workers (4 items; % yes = >2.5 on a scale of 1-4)	–	–	93	93	93
VIOLENCE AND HARASSMENT					
Last 12 months physical violence by clients, patients, pupils or passengers etc (% yes)					
Women	9	8	8	9	9
Men	6	5	4	4	4
TOTAL	7	6	6	6	6
Idem, physical violence by supervisor or colleagues (% yes)					
Women	0,3	0,5	0,2	0,3	0,3
Men	1	1	1	1	1
TOTAL	1	1	1	1	1

SOURCE: NWCS 2005-2009

In Table 1.2, we see that in the Netherlands time pressure and the requirements of the task itself remained relatively stable during the period 2007 to 2009. The intensification of work is often examined alongside autonomy (or the lack thereof). According to Karasek's 'Demands-Control' model (Karasek and Theorell, 1990) a high pressure of work (either in terms of time restraints or complexity) combined with a lack of autonomy forms a risk to health and well-being. As Table 1.1 and 1.2 illustrate, the lack of autonomy reported in the Netherlands fell slightly from 31% in 2007 to 28% in 2009. Work pressure aside, a lack of autonomy will itself have negative effects for both the employee and the organi-

zation, being associated with high absenteeism and an increased risk of various health problems (Häusser et al., 2010).
The identified trends in work pressure are virtually identical for both male and female employees. However, men report a perceived lack of autonomy more often than women. It is possible that the nature of the profession plays a role. Sectors such as construction and manufacturing tend to have a higher proportion of male employees, and opportunities to influence the nature of the work in such sectors are clearly more limited.

Learning and personal development

One aspect of work that Karasek and Theorell (1990) link with autonomy and control is the opportunity to develop new knowledge and skills while being at work. This aspect is also relevant to the current discussions about learning in the workplace and the conditions that work must meet if it is to ensure the sustainable employability of workers.
Table 1.2 shows no straightforward trend in the national figures for the period 2007 to 2009. It appears that 2008, the year in which the financial crisis took hold, saw some decline in the development opportunities in terms of less varied work, less opportunity to learn new skills and apply personal creativity. Subsequent surveys will have to confirm whether this trend is ongoing.

The CBS national surveys conducted prior to 2003 included a number of questions relating to development opportunities, or the lack thereof in the form of particularly monotonous, routine work activities. During the period 1994 to 2002, development opportunities were reasonably stable (Houtman et al., 2004). Approximately 22% to 26% of the Dutch workforce reported a low level of development opportunity, while a stable 7% stated that the nature of their work was monotonous and routine (Houtman et al., 2004). There is a significant gap (from 2002 to 2007) in the information about this aspect of the quality of work. Nevertheless, the figures for those years in which information was indeed gathered remain reasonably stable, especially when we allow for the possible effects of recent recessions.

Information regarding learning and development opportunities in the European context is provided by the EWCS: see Table 1.1. Here we see that learning opportunity and the complexity of work in the Netherlands showed no clear trend between 1995 and 2010, while monotony decreased somewhat.

Social support at work: violence and harassment

An entirely different aspect of the psychosocial pressure of work is the employee's relationships with other people, including colleagues, supervisors, managers or 'third parties' in the form of customers, patients, students, passengers, etc. Interaction with such 'third parties' is a typical indicator of work in the services sector. Table 1.2 includes the trends in social support and in violence and harassment, as measured by the NWCS survey. It would appear that the level of social support offered by managers and colleagues is relatively high in the Netherlands and showed a slight increase during the period 2007 to 2009.

Physical violence on the part of customers, patients, passengers or students remained reasonably stable between 2005 and 2009 (see Table 1.2). Female staff is more likely to encounter such violence than its male counterparts. The health care sector is particularly notable for the (risk of) physical assault: at least 22% of employees report that they have encountered some form of physical violence in the past year (Koppes et al., 2010). Physical violence on the part of managers, supervisors or colleagues is extremely rare, being reported by only 1% of employees. The majority of victims is male.

The EWCS does not devote specific attention to social support, although some questions do relate to violence and harassment in the workplace. Future scenario analyses (EU-OSHA, 2007; Houtman et al., 2008) identified violence as an 'emerging risk'. The European data does reveal that the incidence of physical violence by clients, patients, passengers and students is above average in the Netherlands. This is considered to be partly due to the fact that the Netherlands has a relatively large services sector in which staff has more frequent contact with such third parties, and in which the likelihood of aggression and violence is therefore somewhat higher. The European data (not shown in the figure) reveals that physical violence in the workplace increased by 3% between 1995 and 2005. In the Netherlands, the increase was even more marked. In 1995, physical violence was reported by 3% of respondents. By 2000, this figure had risen to 9%. In 2005, however, the number of respondents reporting physical violence had fallen to 7%. It was a pity that in the 2010 EWCS-survey very different questions were asked on violence and harassment, prohibiting trend analyses.

1.3.2 Trends in physical and environmental factors

Questionnaire-based studies such as the EWCS and the NWCS are of course able to identify only those physical and environmental risks of which the respondents themselves are aware. They are not able to provide information about exposure to certain (often environmental) hazardous substances (biological or chemical agents, nano-particles, etc.) or radiation workers are unable to perceive of or detect in the environment (air or substance they contact with). Accordingly, this paper does not report on this type of risk.

Compared to employees elsewhere in Europe, Dutch employees are less likely to engage in physically strenuous work which involves lifting heavy loads or maintaining an unnatural posture. Similarly, they are less likely to be exposed to high levels of noise. Once again, this is partly due to the fact that the Netherlands has a services-based economy with relatively little employment in industry or agriculture (see also Figure 1.2). Even when we consider the sectors such as construction and manufacturing in terms of the more 'traditional' health and safety risks, we see that employees in these sectors fare somewhat better than most of their counterparts elsewhere (Bakhuys Roozeboom et al., 2008).
Nevertheless, there are a number of risks which some Dutch workers face on a (very) regular basis, thus bringing them into line with the European average. In particular, this is the case for repetitive movements, perhaps due to the intensive use of computers in the Netherlands.

Tabel 1.3: Trends in ergonomic and ambient risks in the Netherlands and in Europe, 1990-2005.

	1990	1995	2000	2005	2010
Working in an unfavourable posture (% very often)					
NL	24	28	30	25	25
EU-15	42*)	44	45	44	47
Lifting heavy loads (% very often)					
NL	21	25	27	22	23
EU-15	30*)	32	36	34	33
Repetitive movements (% very often)					
NL	–	57	66	61	60
EU-15		56	57	62	64
Working in protective clothing (% very often)					
NL	–	24	19	26	39
EU-15	–	24	28	32	38
Noise in work (% very often)					
NL	19	24	22	20	18
EU-15	32*)	26	28	29	28

SOURCE: EWCS; *) = EU-12

The figures for the Netherlands show a decrease in the physical risk of work since 2005, with less physical strength required, fewer posture problems reported and less repetitive work (see Table 1.4). These trends are in line with expectations and reflect the growing importance of work that requires the processing of knowledge and information rather than that which entails the more traditional physical and environmental risks.
In terms of physical risks, the overall trends are broadly similar for both men and women. A number of gender-related differences can nevertheless be seen. Female employees are far less likely to be engaged in hazardous activities, and less likely to operate heavy machinery which exposes them to vibrations. However, the number of women who report that they must apply (considerable) physical strength in their work, maintain an unnatural posture or make repetitive movements is broadly similar to the number of men who do so (see Table 1.4).

1.3.3 Trends in contracts of employment and job security

In the Netherlands, the number of employees who have a temporary contract of employment has more than doubled over the past twenty years (see Figure 1.1). In 1990, temporary employees accounted for 8% of the total working population, a figure somewhat below the European average of 10%. By 2009, the proportion of temporary employees in the Netherlands had reached 18%, far exceeding the European average of 14%.

Tabel 1.4: Trends in ergonomic load and job(in)security, 2005-2009

	2005	2006	2007	2008	2009
ERGONOMIC LOAD					
Using force in your work (% yes)					
Women	44	43	38	40	38
Men	50	48	44	46	43
TOTAL	47	46	41	43	41
Working in an unfavourable posture (% yes)					
Women	–	–	37	36	34
Men	–	–	39	38	38
TOTAL	–	–	38	37	36
Working with repetitive movements (% yes)					
Women	–	–	57	55	54
Men	–	–	58	58	57
TOTAL	–	–	58	57	56
Dangerous work (% yes)					
Women	12	13	–	17	–
Men	36	35	–	33	–
TOTAL	25	25	–	26	–
In work using tools, aparatus or vehicles that cause vibrations or shaking of the body (% yes)					
Women	–	–	7	7	7
Men	–	–	29	28	28
TOTAL	–	–	19	19	18
JOB INSECURITY					
Risk of losing one's job (% yes)					
Women	–	–	15	16	19
Men	–	–	18	19	26
TOTAL	–	–	17	17	23
Worry about keeping one's job (% yes)					
Women	–	–	16	17	21
Men	–	–	17	19	24
TOTAL	–	–	16	18	23

SOURCE: NWCS 2005-2009

The NWCS confirms that there has been a reduction in the number of permanent (or indefinite) contracts of employment (Smulders & Goudswaard, 2010). This trend is, not surprisingly, linked to a decrease in perceived job security which has been exacerbated by the recent recession (as clearly illustrated by Table 1.4). In 2007 and 2008, approximately

one in six Dutch employees expressed concern about their employment status, feeling at risk of losing their job. In 2009, almost one in four reported similar misgivings.

1.3.4 Trends in 'new work': working hours, computer work, telework and the work-life balance

If we compare working hours in the Netherlands to those in the rest of Europe, we see that the Dutch employee has a relatively short working week (Table 1.5). The average Dutch worker works 4.5 hours at work less than the average European worker. This is due in part to the large (and growing) number of part-time workers in the Netherlands. Gallie (2005) suggests that trend explains why the Netherlands no longer leads the European rankings in terms of the pressure of work.

Tabel 1.5: Trends in working times and place of work in the Netherlands and in Europe, 1990-2005

	1990	1995	2000	2005	2010
Working hours in most important job					
NL	36	35	33	33	–
EU-15	41 *)	40	38	37	–
Part time workers (%)					
NL	31	35	41	46	48
EU-15	13 *)	16	18	20	21
Working with computers (% > 25% of their time)					
NL	–	54	62	72	67
EU-15	--	39	42	50	55
Work-home relationship (% not very/not at all favourable)					
NL	–	–	13	15	9
EU-15	–	–	19	19	19

SOURCE: EWCS; Labour Force Survey; *) = EU-12

The Dutch employee is usually contracted to work an average 31 hours per week (Table 1.6). However, there is a significant proportion of employees (20-30%) who work overtime on a regular basis. Among male employees, at least one third regularly works overtime. Moreover, the number of hours they work in excess of the contracted minimum is higher than among female employees.

The number of computer workers in the Netherlands is higher than the European average. According to the EWCS, computer use in the Netherlands increased from 42% in 1990 to 67% in 2010, at which time the EU15 average was just 55%. In the Dutch data, almost 80% of Dutch employees used the computer in the course of their work (see Table 1.6). Of these, approximately one in four do so for six hours or more each day.

Working with computers is often associated with 'the new way of work', i.e. the ability to work anywhere and at any time. It is also associated with learning opportunities in the workplace. Klein Hesselink et al. (2009) demonstrates that computer work is indeed linked to a high pressure of work, but also to considerable autonomy, development opportunity and more varied work, with fewer of the traditional physical and environmental risk factors. The increasing computerization of work may therefore be seen to represent improved quality of work. It is possible that the growth of the services sector also plays some part in this respect, an aspect which calls for further research.
There is, however, a downside to this trend in that it is long-hours computer usage, i.e. for more than six hours a day, in which the greatest increase can be seen (Table 1.6). Previous research has concluded that working at a computer for six hours a day (for men) or four hours (for women) is associated with an elevated risk of musculoskeletal complaints (Blatter et al., 2000).

Tabel 1.6: Trends in computer- and telework, working times and work-home balance, 2005-2009

	2005	2006	2007	2008	2009
WORKING TIMES AND WORKING OVERTIME					
Number of hours of work a week according to contract					
Women	25	26	26	26	26
Men	36	36	37	36	36
TOTAL	31	31	32	32	31
Structurally working overtime (% yes)					
Women	22	22	19	22	21
Men	33	34	32	33	30
TOTAL	28	29	28	28	26
Number of hours working overtime a week					
Women	5	4	4	4	4
Men	9	7	8	7	7
TOTAL	7	5	6	6	6
COMPUTER- AND TELEWORK					
Hour/day work with the computer (men and women together)					
no computer work (%)	23	22	23	20	21
1-6 hour computer work per day (%)	57	57	55	56	55
More than 6 hour per day computer work (%)	20	21	22	24	24
Telework (using the computer, at home or elsewhere, working at the site of the contractor (% yes)					
Women	–	–	9	10	11
Men	–	–	13	14	15
TOTAL	–	–	11	12	13

	2005	2006	2007	2008	2009
IRREGULAR WORKING TIMES					
Shift work (% yes)					
Women	14	15	14	15	16
Men	15	14	15	15	16
TOTAL	15	15	15	15	16
Working in te evening or night (% yes)					
Women	46	46	45	45	45
Men	57	57	56	56	55
TOTAL	52	52	51	51	51
Working in the weekend (% yes)					
Women	49	50	49	49	50
Men	58	58	57	58	58
TOTAL	54	54	54	54	55
WORK-HOME RELATION					
Missing or neglecting family activitities because of work (% yes)					
Women	51	–	50	49	48
Men	56	–	54	53	53
TOTAL	53	–	52	51	51
Missing or neglecting work activities because of family responsibilities or activities (%yes)					
Women	25	–	26	27	26
Men	30	–	31	30	31
TOTAL	27	–	29	28	29

SOURCE: NWCS 2005-2009

Table 1.6 presents data relating to irregular working hours in the Netherlands. The more traditional forms of irregular working hours, such as shift work or 'unsocial hours' (evenings, nights and weekends) would appear to have remained extremely stable during the period 2005 to 2009.

The emergence of the computer and various new developments in telecommunications technology have made it possible to work almost anywhere and at any time. This can have major consequences in terms of the time actually devoted to work-related activities and the life-work balance. As shown in Table 1.5, the number of employees who 'telework' increased throughout Europe between 2000 and 2010, and that teleworkers were already well represented in the Netherlands. More recently, during the period 2007 to 2009, approximately 11 to 13 % of Dutch employees work from home or some location other than the traditional office on at least one day a week (see Table 1.6).

Finally, we consider the life-work balance. The European data for the period 2000-2010 in Table 1.5 shows that the number of Dutch employees reporting a satisfactory life-work balance is somewhat higher than the European average[5]. This may be due in part to the culture of part-time work.
Working fewer hours may help the employee to recover from the pressure of work, and from work-family conflicts or other private commitments. However, it may also be that the temporary worker, in the tome he/she works extremely intense in order to meet demands imposed upon him/her.
Greater flexibility in working practices, as provided by telework, may be responsible for the levelling-out of perceived work pressure, but may also account for the increase in overtime working seen in the last ten years. It is possible that 2009 will prove to be the year in which the full effects of the recent crisis become apparent. It is, as yet, too early to state whether this is indeed the case.
In the most recent period (2005 to 2009), we see a trend which suggests that the negative impact of work on the employee's private life has stabilized. This applies to both male and female employees (Table 1.6). Nevertheless, some 50% of employees still report that work does have some negative influence on their (extended) family activities. Somewhat fewer report a negative impact on their domestic situation. The fact that men report a more work-life imbalance in both directions may be due to the fact that men generally work longer hours, both because of their contractual obligations and because they perform more regular overtime.

1.4 Conclusions and discussion

In the introduction to this paper, we stated that globalization, the growing importance of the services sector and various technological developments may be expected to bring about a number of changes in the quality of work. There is empirical evidence, in the form of Dutch and European statistics, which confirms that many (but not all) such changes are already underway. In the Netherlands, for example, the marked intensification has now abated. In the latter years of the twentieth century, we saw a steady increase in work pressure in terms of time, speed and complexity. This rising trend then levelled off, whereupon work pressure has since remained relatively stable.
The expected intensification of work is therefore clearly visible in the data relating to Europe as a whole, but not in that relating solely to the Netherlands. It is not entirely clear why this should be the case. It is possible that the Netherlands has reached a 'ceiling' and that other countries are now catching up, or in many cases overtaking us. Based on the research conducted by Gallie (2005), which establishes a link between the high rate of part-time working in the Netherlands and the stabilization or decrease in work pressure, the slight decrease in the number of hours' overtime working reported during the period 2005 to 2009, from an average of seven hours per week to six, may also go some way towards explaining why Dutch employees no longer feel that the pressure of

5 It should be remembered that the European statistics also include self-employed persons.

work is rising. In addition, Maume and Purcell (2007) indicate that economic developments in the US accounts for perceived intensification by about three quarters.

We currently know even less with regard to the parallel developments in autonomy, i.e. the employee's ability to influence his or her own working activities, largely because this is an aspect to which earlier CBS surveys devoted little or no attention. However, a rising trend can be seen between 1994, when the surveys did introduce one question about autonomy at work, and 2002 (Houtman et al., 2004). Nevertheless, national and international studies present contradictory findings. Research in the Netherlands suggests a more or less continuous increase in autonomy since the mid-1990s. Danish research shows the same picture until 2000 (Burr et al., 2003), but a study by Pejtersen and Kristensen (2009), who examined the period between 1997 and 2005 using a slightly different form of survey, reports a decrease in autonomy. The international data presented in this paper shows only a slight fall in perceived autonomy in the Netherlands during the period 1995 to 2005 (see Table 1.1). For now, we must assume that the Dutch NWCS provides more reliable information about aspects of autonomy than the EWCS, since the former's respondent sample is more frequent, even yearly since 2005, as well as much larger and probably more representative. One complicating factor with regard to the Dutch national datasets is that the CBS surveys examined autonomy for only a short period and show a break in the established trends between 2003 and 2007. Since 2007, the NWCS has shown a consistent upwards trend, albeit slight, and may be regarded as thoroughly reliable for the reason stated above. We hope that the 2010 European Working Conditions Survey (EWCS) will throw more light on the matter to assist in the interpretation of the differences between the Dutch and international data, not only in terms of autonomy but in various other aspects of the quality of work,

A clear trend can be seen in both the Netherlands and Europe, indicating a decrease in monotonous, routine work and a concomitant increase in 'learning new things' (Table 1.1). Here too, Dutch workers seem to be reaping the benefits to an even greater degree than their counterparts elsewhere. It may be assumed that more varied work which enables workers to acquire new knowledge and skills will do much to ensure long-term employability, something which is extremely important in terms of the future labour market. However, the Dutch statistics suggest that the recent recession has interrupted this favourable development. Hopefully, it has not halted altogether. Although becoming visible only in 2009, the decline in development opportunity extends across various indicators, including the number of training courses provided by employers (Koppes et al., 2010).

The increasing importance of the services sector brings a greater number of employees into contact with clients, patients, students, passengers, etc. In the Netherlands, there has nevertheless been no marked increase in the percentage of employees who report having experienced violence at work. It would seem that the correlation between the growth of the services sector and the risk of violence is not as strong as previously thought, or is influenced by other factors. However, if we analyse the reports on violence, we find that

there is indeed some increase in those sectors which involve frequent contact with 'third parties', such as health care, public administration and the hospitality industry. The incidence of violence in these sectors is relatively high. For example, almost 20% of health care employees report having been assaulted during the past year, against just 1% of employees in general industry (Koppes et al., 2010).

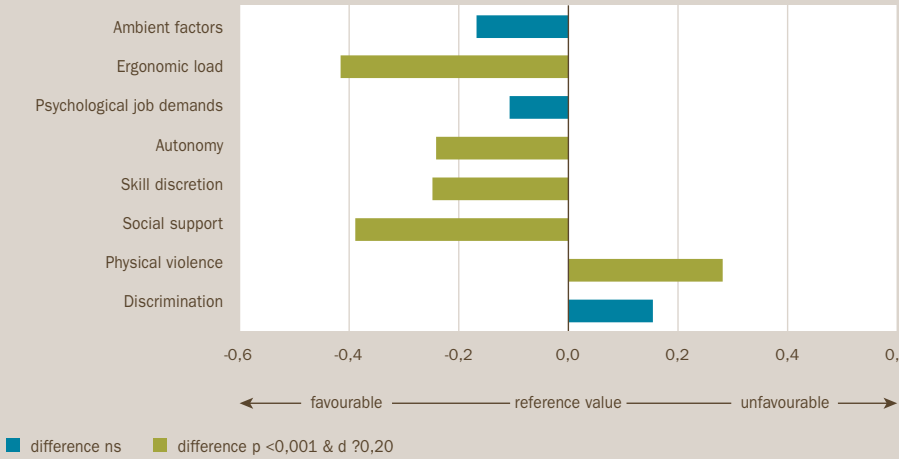
The introduction of 'new working practices', based on the emergence of computers and communications technology, is particularly noticeable in the Netherlands. We lead the European field in terms of computer use and telework, with both developments showing an ongoing upwards trend. Computer work is also associated with a good quality of work, particularly in terms of variety and complexity, as well as opportunities for learning and development. While the pressure of work may be greater, there is also considerable autonomy and less exposure to the 'traditional' physical and environmental risks (Klein Hesselink et al., 2009). It should be noted that this association is also due to the nature of the work that computerization has made possible, which calls for mental agility rather than physical strength. A more detailed analysis would be useful.
The downside of this trend that employees now spend more hours a day at the computer: the number of people who spend six or more hours a day at the keyboard continues to grow. Research has established that this presents an elevated risk of musculoskeletal problems. For women, the 'safe limit' is even lower, at four hours per day (Blatter et al., 2000).

The recent recession has played a clear role in virtually all trends. In the Netherlands, for example, there was a marked decrease in perceived job security between 2007 and 2009.

We have noted that the Dutch workforce is becoming more diverse and now includes a greater proportion of women. The average age of workers is rising and workers tend to be better educated. Space precludes us from considering all these aspects in detail. Nevertheless, we should remark that some indicators on working conditions show clear gender-related differences. Most notable are those concerned with violence and harassment in the workplace, and the environmental risks. Nevertheless, such gender-related differences have little or no effect on the overall trends. There only is an increase among women but not among men who report that they are required to perform hazardous work. It remains unclear whether this can be explained by the fact that men and women have traditionally performed different types of work, and that the sectors which involve hazardous activities are now recruiting more women.
Men and women do, to a large extent, perform different types of work and this often explains the differences in the reported level of occupational risk. In addition, women are more likely than men to have other commitments alongside work – the home and family – for example, whereupon they may consciously opt for a 'lighter' job which involves less responsibility and influence, but also less pressure. The observed trends do not suggest that working women represent a growing 'high-risk' group.

Finally, we consider the Netherlands' position in the European context. This comparison reveals that Dutch employees rate their work as much less physically strenuous than those workers elsewhere (see Figure 1.3). The Netherlands also scores very favourable in terms of autonomy, development opportunities and social support at work. Working in the Netherlands therefore appears to be less of a burden, both physically and mentally, than elsewhere in Europe. The sole exception is the risk of physical violence, which is indeed a problem in the Netherlands. The latter finding is not a distortion due to the fact that the services sector is quite large in the Netherlands, since a comparison at sector level shows the same picture, and even within the health care sector, physical violence is perceived to be relatively high in Dutch workers as compared to the rest of the EU workers (figure 1.3).

FIGURE 1.3 **Working conditions in the Netherlands compared with those in the rest of Europe, 2005**



BRON: EWCS, 2005; n NL = 1001; n EU27 = 25,613; EU27= mid-line

In considering the decrease in physically strenuous work, we refer to Johnson (2004) who observes a similar trend in the United States but also notes that the physical requirements of the 'heavy' professions remain at the same level. This could mean that there are specific high-risk groups who are unwilling or unable to work until or beyond statutory retirement age. Such groups include the 'blue collar' manual workers with little formal education and few qualifications (Johnson, 2004).

In general, the Netherlands' strengths and weaknesses in terms of the quality of work can provide valuable input for the discussions about employment participation and the amendment of the statutory retirement age.

Overall, we can conclude that several aspects of working conditions in the Netherlands are showing a positive development. Attention must nevertheless be devoted to the number of employees who are required to spend six or more hours a day at the computer, and the relatively high proportion of the workforce in certain specific sectors who face the risk of assault. Within the European context, however, the trends in all other indicators of the quality of work show that Dutch employees enjoy a very strong position.

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Chapter 2: How healthy are Dutch employees?

John Klein Hesselink and Wendela Hooftman

Summary

A relatively large group of employees (38%) in the Netherlands suffers from a chronic illness, condition or disability. Of these, approximately half state that their health has a negative impact on their ability to work. Nevertheless, the vast majority of Dutch employees state that their health is 'good' or 'extremely good'. This is reflected in the low absence figures. The absence percentage shows a further fall in 2009. This is largely due to a decrease in the average sickness duration: in particular people appear to return to work sooner than in the past. The number of people in receipt of disability benefit continues to fall, although the rate of decrease in 2008 and 2009 was somewhat slower than in the preceding two-year period. An increasing number of employees wish to continue working until the statutory retirement age, currently 65.

Dutch employees are already protected by a significant body of health and safety regulations. Nevertheless, many see opportunities for further improvement, particularly in terms of work pressure, stress, musculoskeletal complaints of the arm, neck and shoulders (Repetitive Strain Injuries; RSI), work of an emotionally taxing nature, and work which is physically strenuous. Adaptations to the work situation to accommodate individual requirements are now more common, but here too more can be done. Employees state that at least twenty per cent of absenteeism is work-related. Both physical and psychosocial factors are significant in this regard. Moreover, reports of accidents and occupational diseases which are directly attributable to health and safety conditions in the workplace remain at a high level.

Efforts to address working conditions are often based on the Health & Safety catalogue which are being introduced in an increasing number of sectors. The challenge is to ensure that the principles set out in the catalogues are translated into an effective policy and practical measures.

2.1 Introduction

In Chapter 1, we noted that the average Dutch worker enjoys a reasonably high quality of work compared to the European worker, the only exception being a relatively high risk of violence and harassment at work. In this chapter, we consider the overall health of the Dutch employee. It must be remembered that an individual's state of health is not only influenced by the type of work he or she performs but relies on a number of personal

characteristics, including age, education, and socio-economic status. We therefore begin with a general consideration of these characteristics before offering an account of occupational health, absenteeism and disability in the Netherlands.
The chapter concludes with some remarks about the prevention of work-related health problems. The Netherlands Employer Work Survey (NEWS) includes questions about the measures taken by employers to reduce or eliminate the risks which may lead to an employee becoming unable to work, either on a short-term or long-term basis. Similarly, the National Working Conditions Survey (NWCS) asks employees themselves about the type of measures they would like to see in place. We then compare and contrast the two perspectives in the context of the trends described here and in Chapter 1. However, our first question must be, "who is the Dutch employee?"

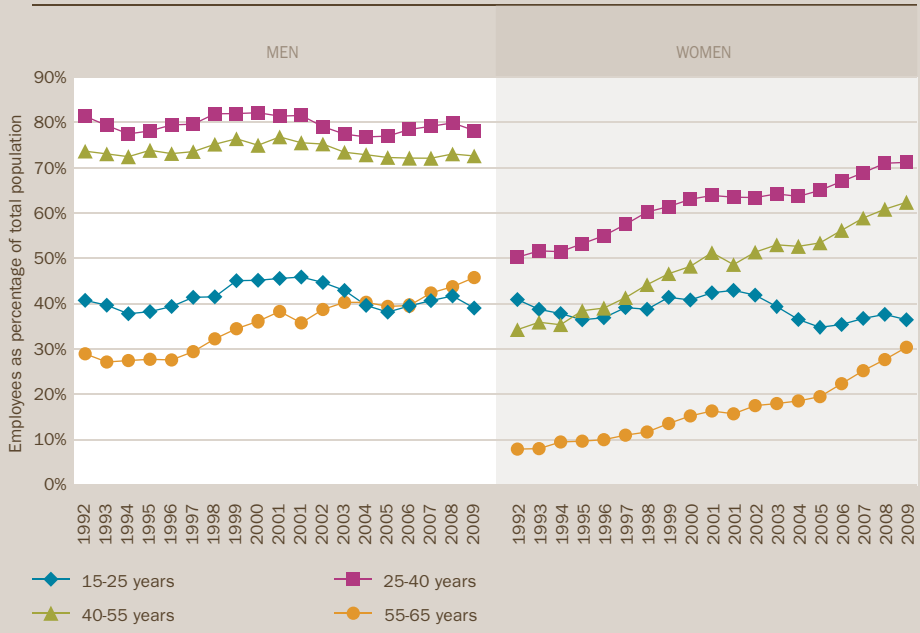
2.2 Who is the Dutch employee?

In 2009, the average Dutch employee is 40 years old, is qualified to an Intermediate Vocational Diploma level or equivalent, works in the profit services sector and is more likely to be of Dutch origin rather than a member of the ethnic minorities. Of course, this 'average' employee does not exist. Nevertheless, a description of this fictional character will provide a useful starting point when examining the overall working population of the Netherlands. This section therefore outlines who the typical Dutch employee is and where he works.

Age, gender and ethnicity

In past decades, the average age of the Dutch workforce was somewhat lower than at present. This was largely due to early retirement, whether planned or due to increased drop out of employees into the disability benefit system.

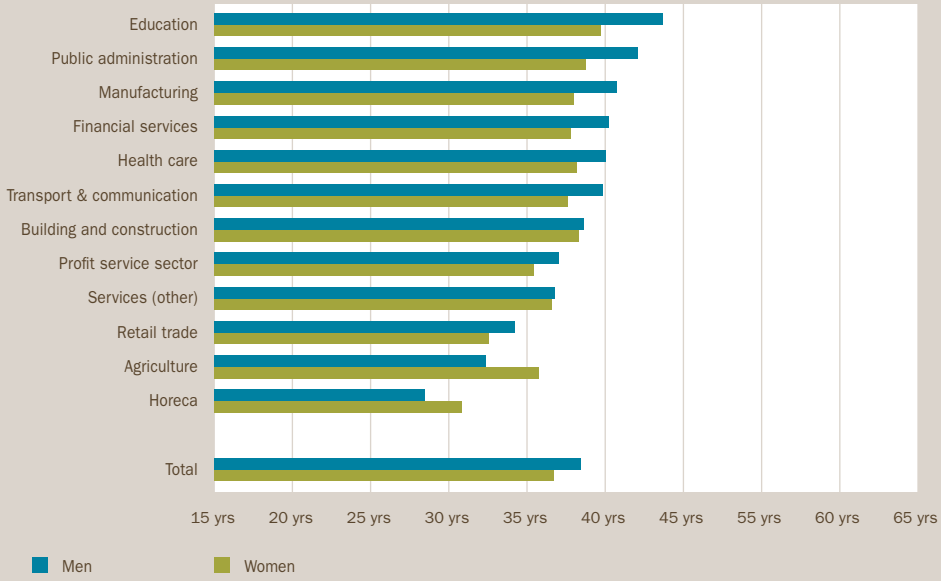
FIGURE 2.1 **Trends in employment participation in four age groups, by gender**



SOURCE: CBS StatLine/Statistics Netherlands

Figure 2.1 shows that employment participation among men has remained stable since the early 1990s, while that among women has risen. An increasing number of older people of both sexes are either joining the workforce or remaining in employment for longer. Not only is the Dutch employee older, 'he' is more likely to be a 'she'. In 2009, 47% of employees was female. Employment participation among women has continued to rise steadily since 1992, with the proportion of women coming ever closer to that of male employees, i.e. a 50/50 split.

FIGURE 2.2 Average age of male and female employees per sector

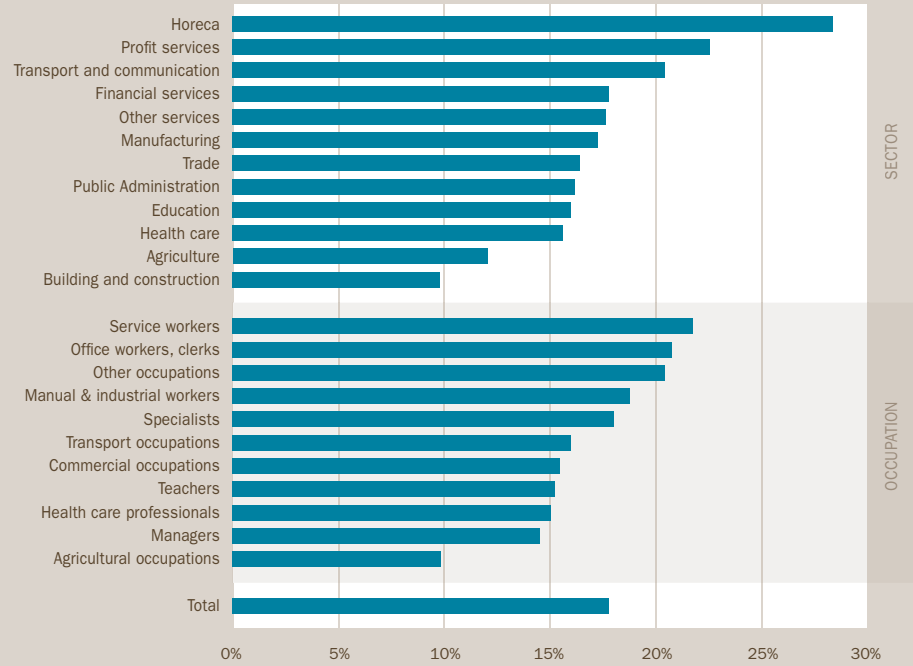


SOURCE: NWCS, 2009

The average age of employees varies greatly from one sector to another. Figure 2.2 offers a summary of the average age of employees in twelve sectors, as reported in 2009. The average age is highest in education, public administration and in manufacturing. It is lowest in trade, agriculture, and in the hotels and restaurant sector (horeca).

The vast majority of Dutch employees is of 'native Dutch' origin, with only some 18% nationals and non-nationals with a foreign background (see Figure 2.3). This percentage is somewhat lower than the percentage of employees with a foreign background in the general population. Slightly over 50% of the non-native employees are from non-Western countries. Among those who are from western countries, 40% are first-generation migrants. Among the non-Western employees, between 60% and 70% are first-generation migrants, depending on the country of origin. These percentages have shown little change in recent years.

FIGURE 2.3 Proportion of non-native employees per sector



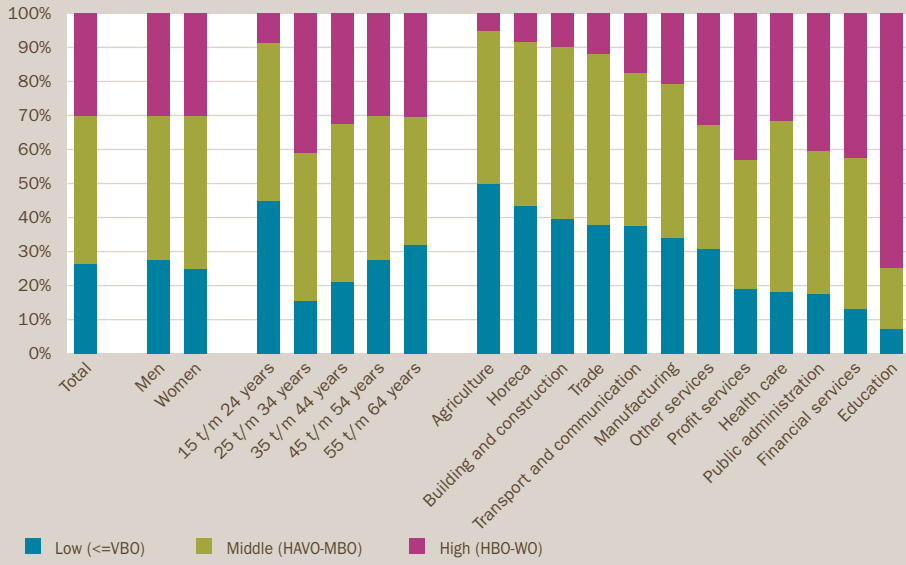
SOURCE: NWCS, 2009

Employees of non-Dutch origin are well represented in the horeca, followed by the profit services sector and the transport and communication sector. This is particularly true with regard to the workers of non-Western background. The construction industry has a relatively low proportion of ethnic minority employees, as does the agricultural sector.

Education and qualifications

The majority of employees have completed a secondary school education (see Figure 2.4). Men are slightly more likely to have a somewhat lower level of education, which may be due to the fact that more boys drop out of school before gaining a proper or primary diploma and are also more likely to drop out of vocational training courses (CBS, 2010). The statistics show a significant proportion of young male employees with only a basic level of education, but this is because some are still studying alongside work and have yet to obtain the qualifications they aim for.

FIGURE 2.4 Educational level of employees by gender and sector



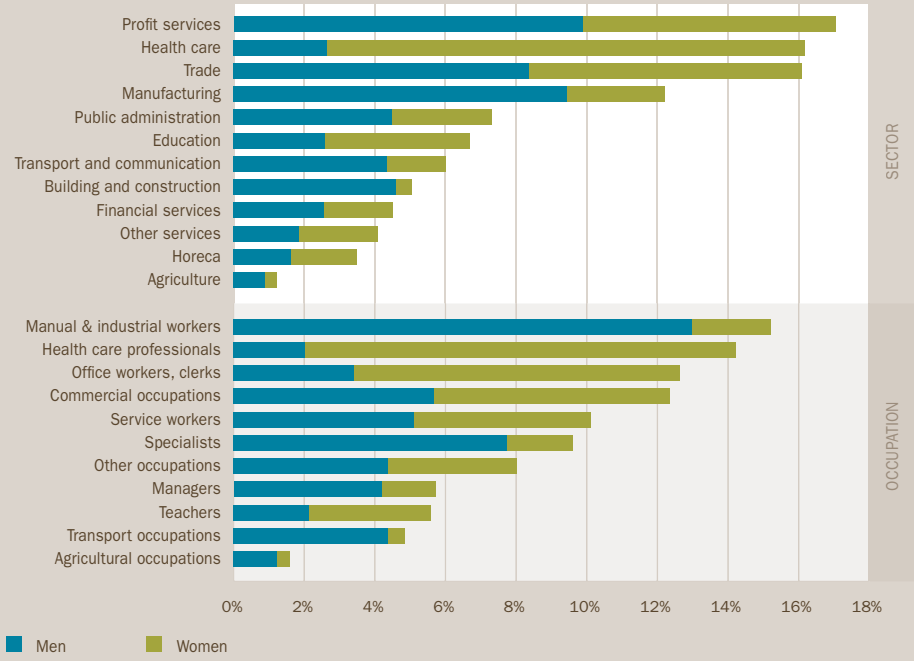
SOURCE: NWCS, 2009

There are significant differences between sectors in terms of level of education and qualifications. In the horeca, construction, trade and transport and communications sector, employees generally have a lower level of education, while in education, financial and other private services and health care there is a relatively high proportion of higher educated employees.

Sectors and professional groups

The period since the Second World War has seen significant changes in terms of where and how the Dutch employee works. The percentage of the workforce engaged in agriculture or industry has shown a marked decrease, while other sectors, most notably services, have shown a marked increase in employment opportunities. As stated in Chapter 1, the Netherlands now has a services-based economy. This is well illustrated by Figure 2.5, which shows a summary of the sectors and professions in which Dutch employees work. In 2009, the profit services sector, health care and trade accounted for almost half of the labour market.

FIGURE 2.5 **Distribution of male and female employees among the sectors and profession**



SOURCE: NWCS, 2009

Certain sectors show marked differences in the proportion of male to female employees. For example, women are particularly well represented in the health care sector, while men continue to make up most of the workforce in manufacturing.

The Netherlands' services-based economy is also illustrated by the breakdown of professional groups. The largest groups are the industrial and related professions (15% of all employees), the health and social services professions (14%), the administrative professions (13%) and the commercial professions (12%). Here too, significant differences in the relative numbers of men to women can be seen.

Conclusions

Recent decades have seen an increase in the number of women in employment. People, particularly those in the older age groups, now tend to remain in employment for longer. We must ask whether these trends are likely to continue. In any event, the employment participation statistics in Figure 2.1 demonstrate that there remain opportunities to increase the overall number of people in employment, particularly through the inclusion of male employees aged 55 and above, and female employees aged 25 and above. The Netherlands can therefore be seen to have great untapped employment potential.

2.3 Is the Dutch employee a healthy employee? How long will he be willing and able to continue working?

It is important that employees remain in good health, both for the employees themselves and their employers. From the employer's perspective, sickness absenteeism can result in significant costs with little or no return. This section offers a summary of the current state of health of the Dutch working population. It examines not only health itself, but also the potential health effects which are attributable to work and working conditions.

Health status

The vast majority of Dutch employees (91%) considers their health to be 'good', 'very good' or 'excellent'. Approximately 8% describes their state of health as 'moderate' and less than 1% describes it as 'bad'. However, this does not mean that these employees are entirely free of health-related problems. Some 38% of the workforce suffers from a chronic illness, condition or disability, and of these almost half state that their health prevents them from performing their work as they would wish. Thus we see that even those with a chronic illness or disability do not necessarily describe their health as 'poor'. There are few differences between sectors in terms of employees' perceptions of their own health.

Absenteeism

The Netherlands has seen a marked reduction in absenteeism through illness over the past decades (see Figure 2.6). According to figures from Statistics Netherlands, the absenteeism rate in 1990 was 8%. In 2000 it had fallen to 5.6%. In 2004, the absenteeism rate showed a further decline to 4.3% and has remained relatively stable ever since.

Sickness absence policy in the Netherlands has been changing from about 1992 to 2004. Since then, the employer is obliged to pay wages during the first two years of sickness absence. Workers without an employer are granted a benefit for a maximum period of two years under the Sickness Benefit Act. According to the provisions of the Health and Safety Law ('Arbowet') and the Gatekeeper Act, employers are obliged to pursue an active absenteeism policy; a part of this policy is absenteeism counseling. The employer must ask a certified company doctor or occupational health physician of the official Occupational Health Service (arbodienst) for advice. Employees have to actively cooperate with the employer and make an effort to resume work as soon as possible. Partial work resumption is stimulated.
Adapted from: www.oecd.org/els/disability

FIGURE 2.6 Absenteeism rate for the period 2000 to 2009

SOURCE: CBS Statline and NWCS 2005-2009

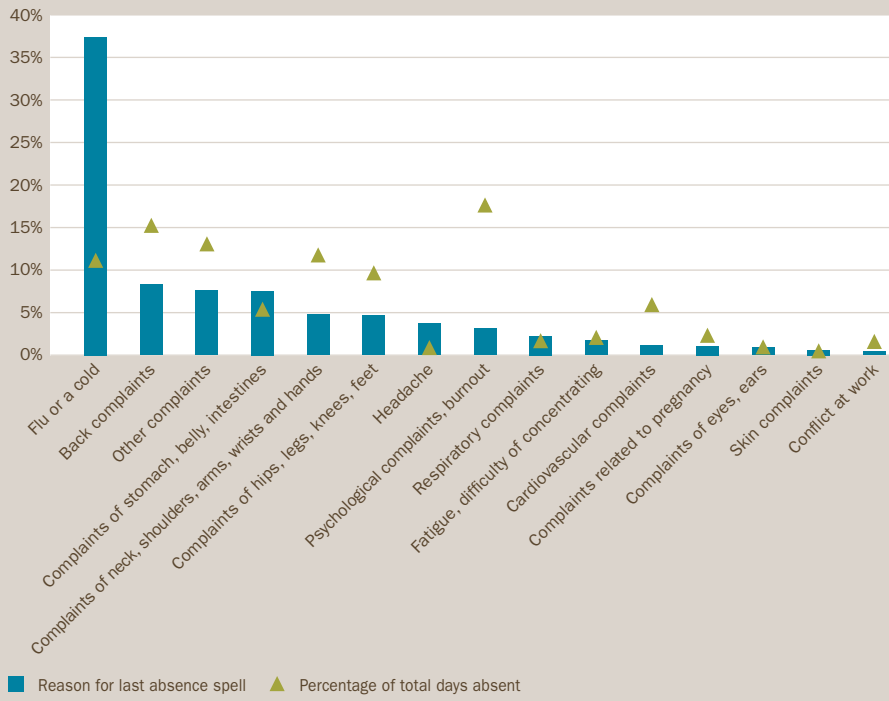
Both the NWCS (Figure 2.6) and the Health and Safety in Company Survey by the Labour Inspectorate (AI Monitor Arbo in Bedrijf) show an absenteeism rate of 4% for the year 2004[6]. In 2005, the NWCS shows a rate of 4.8%. The decrease in the period to 2009 is due to the reduction in the average absence duration. In 2005, employees reported absent 1.3 times per year on average, whereas the average duration of the absence spells was 8.7 (working) days per year. By 2009, the frequency had fallen to 1.1 times a year and the duration to 7.2 days.

Reasons for reporting absent

In many cases, employees take sick leave for reasons which are entirely unrelated to work: general illness or an accident occurring during leisure activities, for example. The flu is a particularly common reason for absence from work, accounting for over one third of all periods of sick leave (Figure 2.7). Gastro-intestinal complaints ('a tummy bug') are also very common.

6 National figures on absenteeism in the Netherlands are measured differently by different organizations. Accordingly, there can be discrepancies between their findings. In the remainder of this section, we rely exclusively on the data derived from the National Working Conditions Survey.

FIGURE 2.7 **Health problem in the most recent period of absenteeism**



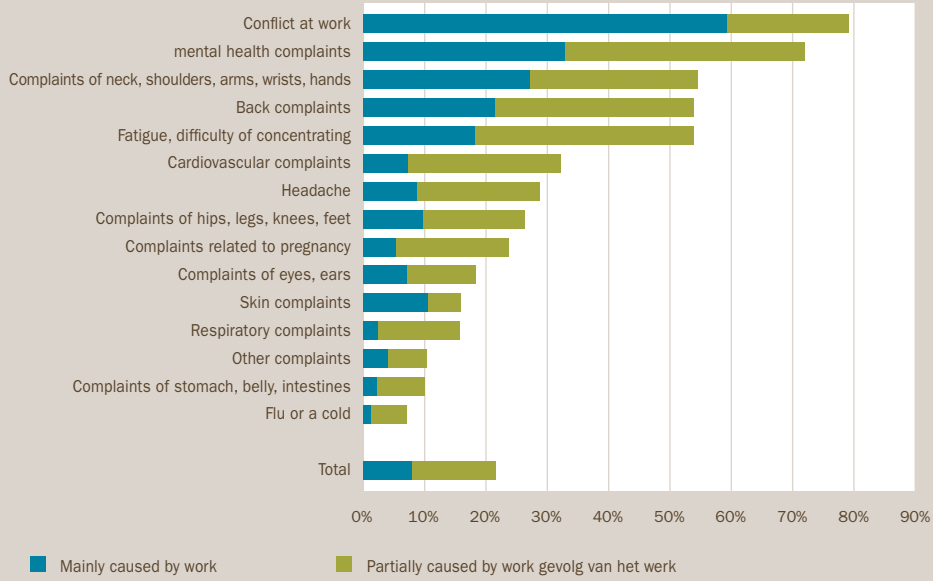
SOURCE: NWCS, 2009

The most common reasons for taking sick leave account for relatively short periods of absence. An employee with the flu, for example, will be away from work for an average of three days. Fortunately, the complaints which account for longer periods of sick leave are the less common conditions such as mental health problems, cardiovascular disease and back complaints. If we examine the duration of sick leave rather than the frequency, a different picture emerges. Just over one in six days of absence (18%) are due to mental health problems, while only 11% are due to the flu.

The work-relatedness of absenteeism

Mental health and physical strain at work can lead to absenteeism. On average, employees attribute 22% of the complaints which cause them to report absent to their work (Figure 2.8). Employees aged over 55 are slightly more inclined to do so, the rate among this group being 25%. This may be because this group has been exposed to the causative factors for longer. Not all conditions are attributable to work in equal measure. Conflicts in the workplace are generally considered a work-related reason for reporting sick. Mental health problems and (musculoskeletal) complaints affecting the upper body are also more frequently considered to be work-related.

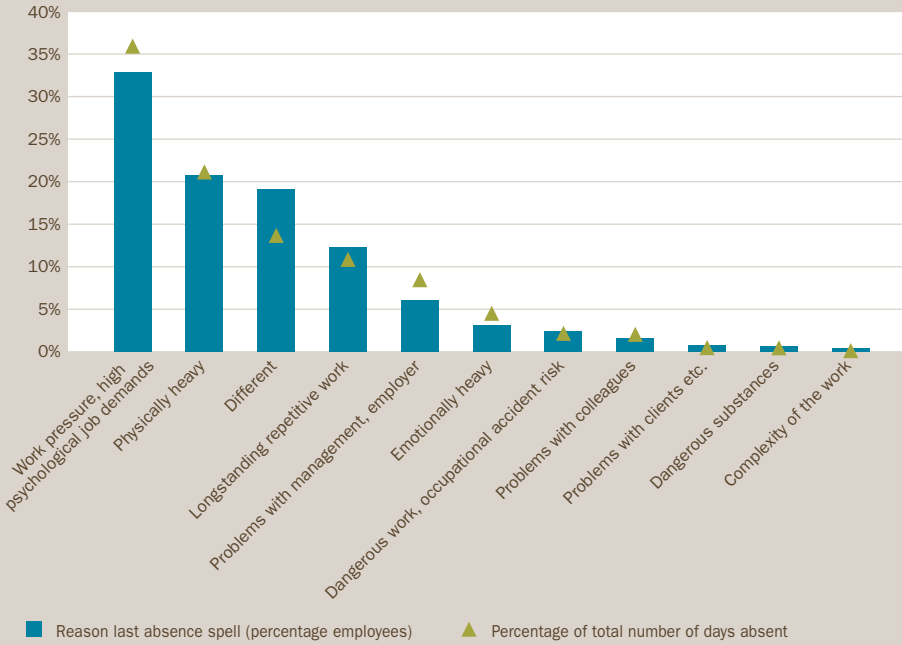
FIGURE 2.8 **Sel-reported work-relatedness of most recent absence spell**



SOURCE: NWCS, 2009

According to employees, longer periods of sick leave are often attributable to the work itself. The percentage of employees reporting work-related reasons varies from 16% among those who are absent for one week or less, to over 50% among employees who are absent for 65 days or longer. The average duration of sick leave attributed to work is just over 25 days, which is considerably longer than the 8.6 days for non-work-related reasons.

FIGURE 2.9 **Reason for the most recent work-related period of sick leave**



SOURCE: NWCS, 2009

One in three employees state that the pressure of work or work-related stress have caused their absenteeism (Figure 2.9). Work which is considered too strenuous is responsible for 20% of work-related absenteeism. Although such absenteeism is often assumed to be due to the physical nature of the work, psychosocial risk factors can be seen to be at least equally significant.

Disability for work

In 2009, a total of approximately 600,000 people in the Netherlands received a disability benefit. Women more often than men receive a disability benefit for the first time, and the number of new claims increases in direct proportion to age. Employees aged 55 and above are less likely to receive partial benefits than those aged between 35 and 54, the older age group being placed immediately on full benefits. The most common diagnoses for those who enter the disability benefit system are mental health problems, musculo-skeletal problems and cardiovascular disease.

As of 2006 a new disability insurance scheme (WIA) has replaced the WAO (the 'old' disability scheme). The WAO was introduced in 1967 as a unique approach to cover 'earnings' loss due to long term disability. The Dutch government has replaced the 'old' disability Insurance Act (WAO) with the Work and Income (Employment Capacity) Act (WIA). The WIA, like the WAO, makes no distinction between social risk and occupational risk. The WIA consists of two statutory provisions: (1) the Regulation governing income protection for individuals registered as wholly and permanently disabled (IVA), and (2) the Regulation governing the re-employment of partially disabled individuals (WGA).
Source: www.oecd.org/els/disability

FIGURE 2.10 Trends in current disability benefits for employees

SOURCE: UWV 2010

Figure 2.10 shows that the number of people who receive a disability benefit fell further in 2009 (compared to 2008).The decrease had been ongoing since 2003, with the most marked reduction in 2005 and 2006 which coincided with the introduction of the WIA. The number of people entitled to disability benefits continued to fall since 2005. The overall rate of decline is however levelling off because the number of people awarded benefits under the WIA has been higher than expected.

Accidents at work

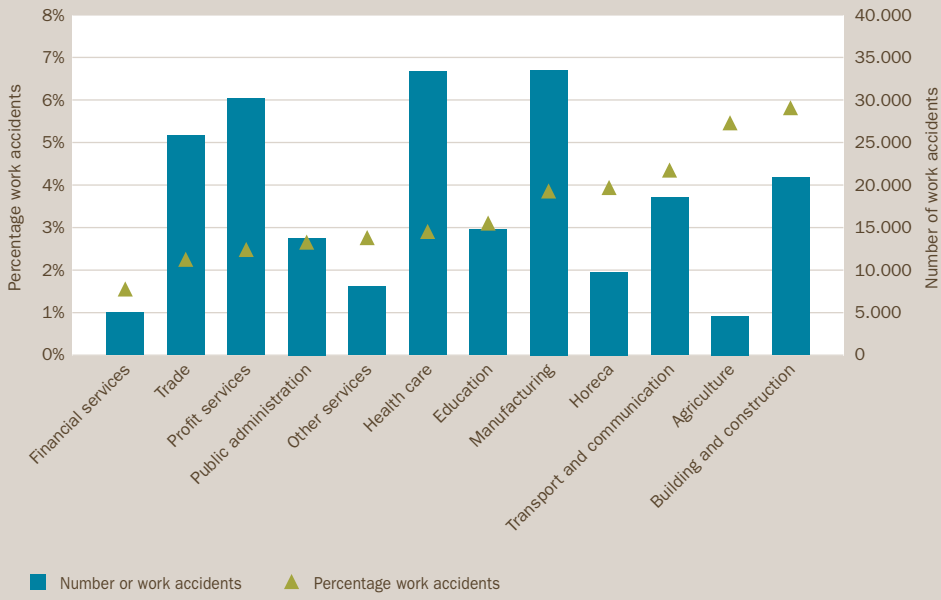
In 2009, 3.1% of employees reported an accident at work which resulted in physical injury and time off work[7]. However, not all accidents necessitated sick leave. Some 7% of employees report that they have been involved in an accident during working hours

7 This figure relates to work-related accidents, including road traffic accidents, which cause physical injury and/or emotional distress and lead to at least one day's absence from work. It excludes road traffic accidents on the way to or from work.

which led to physical injury and/or emotional distress, but not all found it necessary to take time off work. Most accidents involve cuts, abrasions or bruising caused by contact with equipment or a fall. Physical injury was reported by 77% of employees involved in an accident, while emotional distress was reported by 30%. The sectors which account for the most work-related accidents are manufacturing (33,500) and health care (33,300). However, the risk of accident is greatest in the building & construction sector (5.8%: see Figure 2.11).

Since 2005, the number of employees involved in a work-related accident leading to time off work has fluctuated between 3.1% and 3.4%, without any clear upward or downward trend. Accordingly, we may conclude that the number of accidents has stabilized in recent years. However, the Work Accidents Monitor (Venema et al., 2010) concludes that trends are visible in the number of serious accidents, i.e. those which lead to injury requiring hospital treatment or, in the worst case scenario, death. Between 2000 and 2008, the number of fatal accidents fell by 5% per year, while the number of accidents resulting in hospital admission rose by 16% over the period as a whole.

FIGURE 2.11 **Work-related accidents by sector**



SOURCE: NWCS 2009

Conclusions

The analyses in this section demonstrate that the health of the Dutch workforce is generally extremely good. The majority of employees rate their own health as being 'good' to

'very good'. However, there is a relatively large group of people (38%) who suffers from a chronic illness, condition or disability, and a relatively large group (18%) finds its ability to work effectively hampered by their own state of health. The majority of employees is satisfied with their work and working conditions.

The overall percentage of sickness absenteeism slightly fell further in 2009, largely due to a reduction in the average duration of each period of absence, with employees returning to work more quickly than in the past (NWCS). The number of employees claiming disability benefits also continues to fall, although the rate of decline was noticeably slower in 2008 and 2009 than in the preceding two-year period.

Do these findings indicate that nothing further needs to be done to protect or promote the health of the Dutch working population? The answer is, of course, no. According to the employees themselves, some 20% of work-related absenteeism is directly attributable to conditions in the workplace. Psychological and physical causes are both significant factors, which indicate that there is ample opportunity for employers, employees and their representative bodies to implement measures which will further reduce absenteeism. Measures addressing the duration of sick leave in particularly should be considered, whereby employees are actively encouraged to return to work as soon as possible.
Reports of accidents at work and occupational illnesses remain high. By definition, all have a direct link with the health and safety situation in the workplace, whereupon improvements are clearly possible.

2.4 How do Dutch employees view current health and safety measures and other OSH-efforts?

The government imposes legislative requirements and offers incentives at various levels. The requirements exist to protect employees against the negative consequences of work, while incentives exist to help employers meet the costs associated with absenteeism, including the social cost of lost productivity. It is the employer who bears primary responsibility for ensuring that all necessary measures are in place.

2.4.1. Health and Safety measures from the employers' perspective

Companies frequently rely on the support of external consultancies or other organizations which will take on the tasks for which the companies themselves have insufficient time or expertise. There are many intermediary organizations which operate in the field of health and safety and which assist employers in regulating absenteeism. We return to consider the role and influence of these organizations in Chapter 4. In this section we limit ourselves to a brief description of what they can do on behalf of employers. In particular, we focus on the employers' perception and assessment of their various activities.

Health and Safety measures

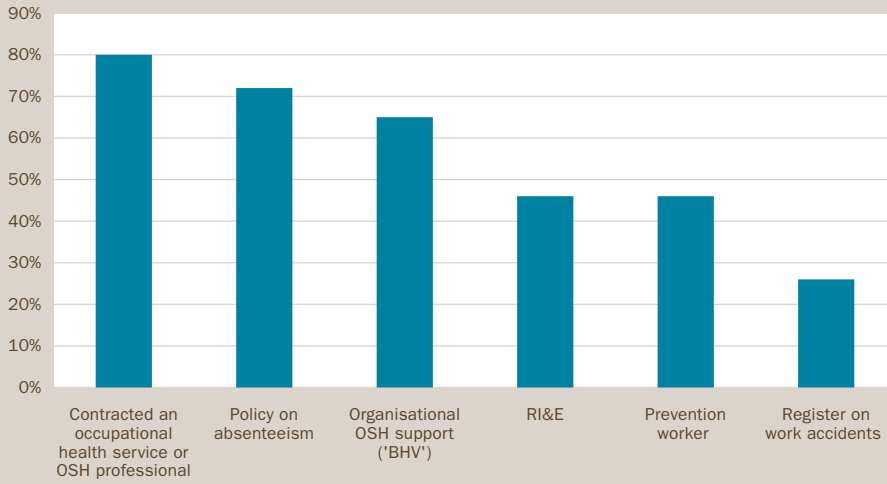
Employers are required by law to implement Health and Safety measures to prevent their employees becoming sick or sustaining injuries, and to ensure that those who do can return to work as quickly as possible. One statutory requirement is that employers must engage the services of a Health and Safety expert to oversee or advise on:

- supervision and counselling for employees on sick leave;
- the Risk Inventory and Evaluation (RI&E);
- medical examinations for new appointees and Occupational Health Examinations; (PAGO).

Employers are also expected to:

- implement a formal policy on absenteeism;
- appoint an in-house emergency response team (which will undergo some training in first aid) and at least one member of staff in charge of prevention measures;
- maintain a record of all accidents sustained by employees in the course of their work.

FIGURE 2.12 Percentage of companies which have implemented the statutory Health and Safety measures



SOURCE: Al-monitor 2010

Figure 2.12 shows that the majority of employers have indeed contracted an occupational health service or the services of a Health and Safety expert. Almost three in four (71%) have entered into a contract with an occupational health service (although this number is falling) while a further 9% have arranged for some other form of support, perhaps by appointing one or more internal Health and Safety experts.

Absenteeism policy

Similarly, the majority of organizations have an absenteeism policy, with such policies being increasingly formalized. By 2009, 43% of companies had recorded the policy in writing. Only 29% relied solely on verbal agreements, compared to the 46% which did so in 2004. The formalization has also had an effect in terms of the supervision and counselling of staff on sick leave. No fewer than 78% of the employers contact the absent employee within one week.

RI&E

Almost half of all employers (46%) surveyed in 2009 had conducted a Risk Inventory and Evaluation (RI&E). The majority of current RI&E documents are subject to regular review and updating, although slightly fewer than in previous years.

In-house emergency response team

All employers are required to appoint an in-house emergency response team and at least one prevention representative. The size of the team and the number of prevention representatives depend on the size of the organization concerned. In 2009, 65% of all employers had appointed an in-house emergency response team, a percentage which had remained relatively stable since 2005. The organizations which have not yet appointed such a team are often to be found in the profit service sector, transport and communications, agriculture, financial institutions and the horeca sector. In 42% of companies (usually the very small organizations) the employer himself has assumed the role of emergency response representative.

Prevention representatives

By 2009, 46% of all Dutch employers had appointed one or more members of staff to be responsible for prevention activities. The 'prevention representative' is an expert member of staff who supports the employer in the management and improvement of Health and Safety. A slight variation in the percentage of companies with one or more prevention staff can be observed. In 2006, prevention staff were assigned by 53% of organizations surveyed, by 2007 this figure had fallen to 48% and in 2008 it was 49%.
Since 1 January 2007, an employer with fewer than 25 employees is permitted to assume the role of prevention representative himself. In 2009, fewer than half (44%) of the companies with no more than 25 employees were found to have appointed a prevention representative, while over half of the companies which had, the role was filled by the employer himself.

Accident register

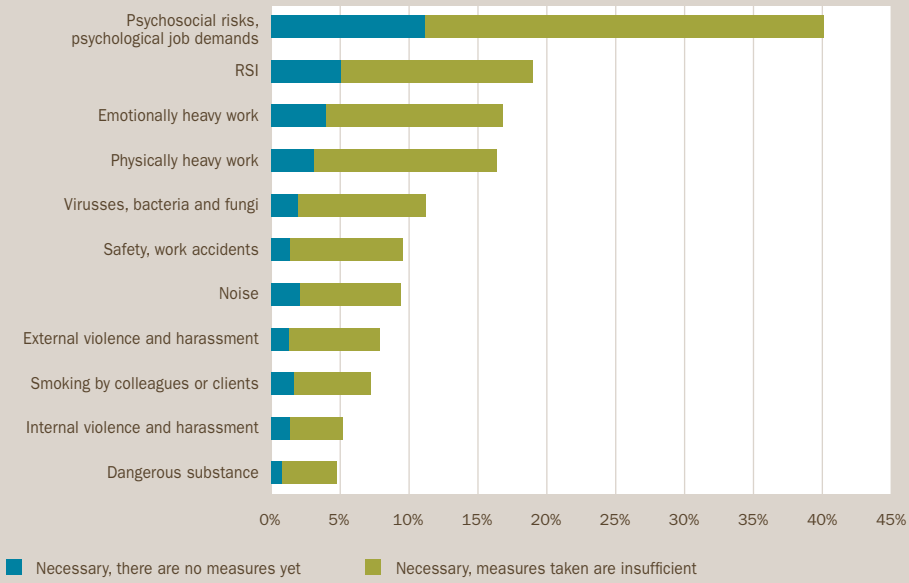
Strictly speaking, the accident register is not a measure to prevent accidents, since it comes into play only after the event. Nevertheless, it is appropriate to mention it here since every employer is required by law to record serious accidents in the workplace to the Labour Inspectorate. In 2009, 26% of all Dutch companies maintained a written accident register. Larger organizations are more likely to do so than their smaller counter-

parts. The companies which fail to keep a register are largely found in the horeca sector, agriculture, financial services and the miscellaneous services sector.

2.4.2 Health and Safety measures from the employees' perspective

The NWCS includes questions which gauge employees' views of the Health and Safety measures implemented by their employers.

FIGURE 2.13 Do you consider it necessary for your employer to implement (additional) measures to address the following work-related risks?



SOURCE: NWCS 2009

Employees consider measures addressing work pressure and work-related stress to be the most urgently needed (Figure 2.13). This is either because no measures are yet in place (11%) but more often because the measures taken are seen as inadequate or insufficient (29%). The next most urgent categories are those of musculoskeletal complaints of the upper body (arms, neck and shoulders), Repetitive Strain Injuries (RSI), emotionally taxing work and physically strenuous work respectively. Because the desirability of measures depends on the nature of the risks in the workplace, Table 2.2 offers an overview of risks in specific sectors and the percentage of employees in those sectors who consider further measures to be necessary.

Table 2.2: Which type of measures do employees consider (further) to be necessary by sector

	TOTAL	CONSTRUCTION	AGRICULTURE	TRANSPORT / COMMS	MANUFACTURING	HEALTH CARE	HORECA	TRADE AND COMMERCE	MISC. SERVICES	PUBLIC ADMIN.	PROFIT SERVICES	EDUCATION	FINANCIAL SERVICES
Work pressure/stress	40%	▼	▼	▲		▲	▼	▼	▼	▲	▼	▲	
RSI	19%	▼	▼	▲		▼	▼	▼		▲	▲		▲
Emotionally taxing work	17%	▼	▼		▼	▲	▼	▼	▼		▼	▲	
Physically strenuous work	16%	▲		▲	▲	▲	▲	▲	▼	▼	▼	▼	▼
Noise	9%	▲	▲	▲	▲	▼		▼			▼		▼
Viruses, bacteria etc.	11%	▼	▼	▲	▼	▲		▼			▼	▲	▼
Smoking by colleagues or clients	7%					▲					▼		▼
Violence and harassment/ (internal)	5%			▲	▲			▼		▲	▼		▼
Safety, accident prevention	10%	▲		▲	▲					▼	▼	▼	▼
Violence and harasment (external)	8%	▼	▼	▲	▼	▲	▼	▼		▲	▼	▲	▼
Hazardous substances	5%	▲	▲		▲	▼		▼		▼	▼	▼	▼

SOURCE: NWCS 2009

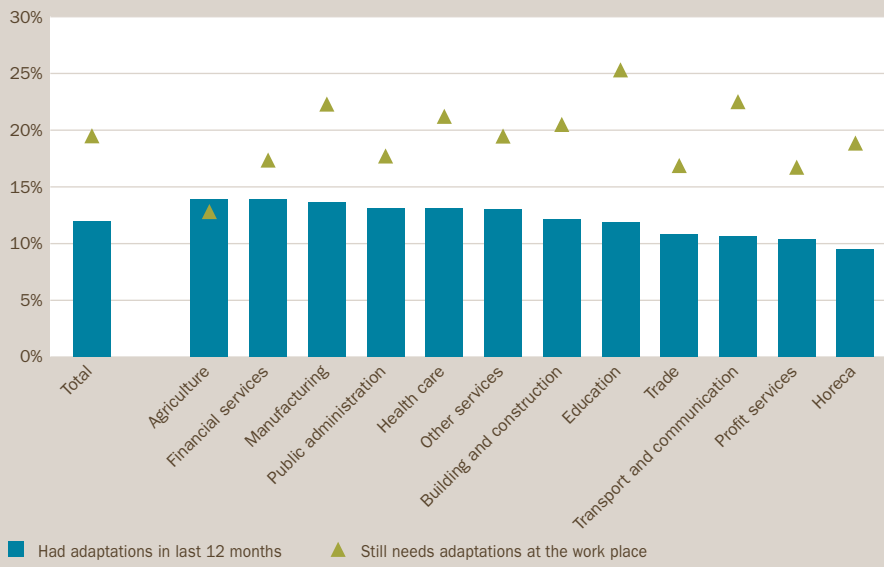
▲: A relatively high number of employees consider measures to be necessary
▼: A relatively low number of employees consider measures to be necessary

It is evident that the nature of the desired measures is directly related to the work activities conducted in a particularly sector. The sectors which involve a high (or higher) degree of physically strenuous work are grouped on the left of the table. Here, employees are most likely to consider measures which address physical strain to be necessary. In sectors in which the pressure of work is high, such as education, an above average number of employees call for measures to address this particular risk factor. The sectors in which a relatively large number of employees see many risks to be addressed are transport and communication, health care, education, manufacturing and building & construction.

Individual adaptations to the work or workplace

Alongside general measures which affect all employees in a company, department or a specific professional group, there are circumstances in which it is appropriate to implement measures in the form of adaptations to the work or workplace in order to accommodate individual health-related requirements. Such measures may include specially adapted furniture or equipment, or an adjustment of the functional requirements of the employee's job. If an employee is unable to continue working in his current position due to health reasons, retraining may be an option.

FIGURE 2.14 **Percentage of employees for whom adaptations to the work or workplace have been made in the past twelve months further to individual health-related requirements, and percentage of employees for whom such adaptations are still required**



SOURCE: NWCS 2009

Figure 2.14 shows that one or more adaptations have been made to accommodate the requirements of 12% of the workforce. The most common adaptations are those to furniture (6%) and to working hours (3%). The sectors in which such adaptations are most common are agriculture and financial services. However, not all employees who actually need such adaptations have had their requirements met in full. Almost 20% of the employees surveyed stated that adaptations to their work or workplace are required immediately or will be required in the foreseeable future. Most adaptations relate to furniture (8%) and the volume of work (6%). The sectors education, transport and commu-

nication and manufacturing are those in which employees most frequently indicate the need for adaptations to accommodate health-related requirements.

Health and Safety catalogues

One significant measure is the introduction of Health and Safety catalogues in 2007. Sectors and individual companies are encouraged to produce a catalogue which will then be assessed by the Labour Inspectorate. The number of approved catalogues is growing rapidly. In October 2008 there were 20. By 1 November 2009 this number had risen to 78. A recent study found that no fewer than 142 had been approved by the Labour Inspectorate by 1 November 2010 (Van Vliet & Venema, 2011). Between them, these catalugues cover the activities of approximately 51% of the total working population. However, there appears to be some room for improvement in terms of their application. The company monitor on 'Arbo and bedrijf' 2009 reveals that only slightly more than 3% of employers actually have a copy of the Health and Safety catalogue in their possession. These companies employ 16% of all employees. Moreover, the evaluation of the 'Health and Safetly catalogues reveals that the risks associated with physical strain are the prime focus (30% of all risks), followed at some distance by those relating to the workplace itself (21%) and the tools and equipment in use (17%). Psychosocial risks are addressed by significantly fewer catalogues: only 9% (Van Vliet and Venema, 2011).

Conclusions

Employees acknowledge that Dutch companies and other organizations have already implemented many measures to address Health and Safety in the workplace, but find that further measures are necessary, particularly with regard to work pressure and work-related stress, RSI, emotionally taxing work and physically strenuous work. Adaptations to the work or workplace are frequently made to accommodate individual requirements, but more remain necessary. Many sectors have produced a Health and Safety catalogue. It is up to the organizations within those sectors to translate the contents of the catalogues into an effective policy to address Health & Safety and absenteeism.

2.5 Concluding remarks

How good – or bad – is the current Health & Safety situation in Dutch organizations? One possible conclusion is that much has been done but much remains to be done. In short, the work situation and working conditions continue to demand close attention from employers, employees, their representative bodies and, ultimately, the government.

What is the government's role in this respect? At one time, it regulated and legislated many aspects – some would claim too many. Since the 1980s, successive governments have opted to devolve greater responsibility to the direct stakeholders: the employers and employees themselves. Companies in all sectors have implemented a large number of measures, and yet employees state that even more measures are needed, particularly with regard to work pressure and work-related stress. The current status of the Health & Safety

catalogues suggests that there is still ample opportunity to implement further measures, many of which are urgently needed.

An important point is that an increasing number of people will be required to join the workforce and remain in employment for longer in order to compensate for the effects of an ageing work force. As Figure 2.1 suggests, participation in the labour market can indeed be greatly increased. There is a significant amount of labour market potential which is currently remaining untapped. Moreover, it is clear that there are major differences between the sectors in terms of the age and educational level of the people they employ. Accordingly, participation to the labour market must be encouraged in a number of different ways according to the sector concerned. People have very different motives for entering the labour market and to continu working. It is important to achieve a good match between education, professional requirements and the requirements or preferences of the employers in the different sectors. By bringing labour market supply in line with demand, it will be possible to allow even more people to participate in the employment process. Those people must be trained to meet the demands of the various sectors, but at the same time the sectors must take a far broader view of the type of people they wish to recruit.

Measures intended to reduce the number of people who rely on disability benefit and the raising of the statutory retirement age will undoubtedly increase labour market participation, but they will also have an impact on the overall health of the workforce. There will be a greater number of employees who are not in perfect health, and many who suffer from actual health complaints or disabilities. They will nevertheless be expected to remain in work for longer. We must therefore ask what can be done to ensure that work itself causes no adverse health impact, and what can be done to make work more attractive to all. These questions are addressed in the following chapter.

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Chapter 3: Sustainable employability

Wendela Hooftman & Cees Wevers

Summary

Recent decades have seen a marked increase in employment participation, particularly among women and the more senior age groups. Many employees are asking themselves whether they are willing and able to work until or beyond retirement age, and increasingly the answer is yes. The percentage of employees who state the intention of continuing in employment, and who believe that they will be able to do so, has risen from 13% in 2005 to 26% in 2009.

However, not all employees are willing to work beyond retirement age, and some will be unable to do so. Unskilled workers at the lower end of the labour market are less likely to state a desire to continue in employment and are often not given an opportunity to do so. These are generally younger employees with a low level of education, often working part-time under a 'flexible' contract. They are to be found predominantly in the horeca sector, construction and health care. In these sectors, the main consideration is that employees are not able to continue working, while in public administration, financial services and for profit services, the restriction is that many do not wish to do so.

There is a clear link between working conditions on the one hand and the ability and willingness to continue in work on the other. Traditionally, attention has been devoted to the physical and ergonomic aspects of working conditions and to the hours an employee is required to work. However, the psychological and emotional working conditions also play a role. The relationship between working conditions and the willingness or ability to continue working also depends greatly on age. Where the work is of a hazardous nature or requires the employee to maintain an uncomfortable posture, there is a much closer correlation between age and the ability to continue working. The same holds true for work which must be completed under time pressure or is emotionally taxing. The relationship with age is less evident in the case of work which involves repetitive movements. Work which offers a low level of autonomy has little or no relationship with the willingness to continue working among those aged under 35, but in the older age group the correlation is very marked – more so than for any other risk factor. It is therefore prudent to ensure that older employees have the autonomy they desire if they are to be retained in employment.

Employees who regard their own state of health as less than perfect are generally less willing, and frequently unable, to continue working until retirement age. Nevertheless, the influence of health alone is limited. Other factors, such as working conditions, are far more relevant in terms of the ability to carry on working.

There is an impending shortage of labour. More people must therefore be brought into the workforce and they must stay in employment for longer. According to Statistics Netherlands (CBS), by 2030 almost a quarter of the Dutch population will be aged 65 or above. Population ageing, and more recently the shrinkage of pension funds caused by the financial crisis, clearly demonstrate that it is necessary to get as many people as possible into work and to retain their services for as long as possible. For many years, both the government and employers have tried various methods to promote employment participation. Particular attention has been paid to female employees, many of whom work part-time, and to the older age groups. In 2007, the government appointed a Commission on Employment Participation to examine ways to bring even more people into the labour market. One of its recommendations for the short term was to encourage employees to continue working until the current statutory retirement age of 65, i.e. to discourage early retirement (Commissie Arbeidsparticipatie, 2008). The government has since proposed raising the statutory retirement age to 67, which demonstrates the importance it attaches to retaining employees for longer, possibly well beyond their 65th birthday. We frequently hear the term 'sustainable employability' in this context, whereby the focus has been on whether Dutch employees are willing and able to continue working for longer in a healthy and productive way.
The discussions about raising the statutory retirement age were quickly followed by a discussion about whether it would actually be possible for everyone to continue working longer (Smulders et al., 2009). In the case of employees engaged in heavy physical work or work with high psychosocial demands, it cannot be taken for granted that they will actually be able to do so. Unless the work is adapted to take account of the employee's abilities, working until retirement age will be extremely difficult, and working beyond retirement age even more so. To promote sustainable employability, it is therefore important to ensure that the nature of the work is such that employees are able to perform it even at a more advanced age. Working conditions which are too arduous can give rise to various health complaints, whereupon the employee will be forced to withdraw from the employment process far earlier than desirable.

In this chapter, we first examine the concept of 'sustainable employability', presenting a model which shows the relevant indicators and determinants. We then go on to consider two key questions:

1. What aspects determine an employee's willingness and ability to remain in work for longer?
2. What measures are now being taken to encourage employees to remain in work for longer?

This chapter is based on data derived from the National Working Conditions Survey (NWCS), the subsequent NWCS Cohort Study, the National Employers Work Survey (NEWS) and a number of recent studies.

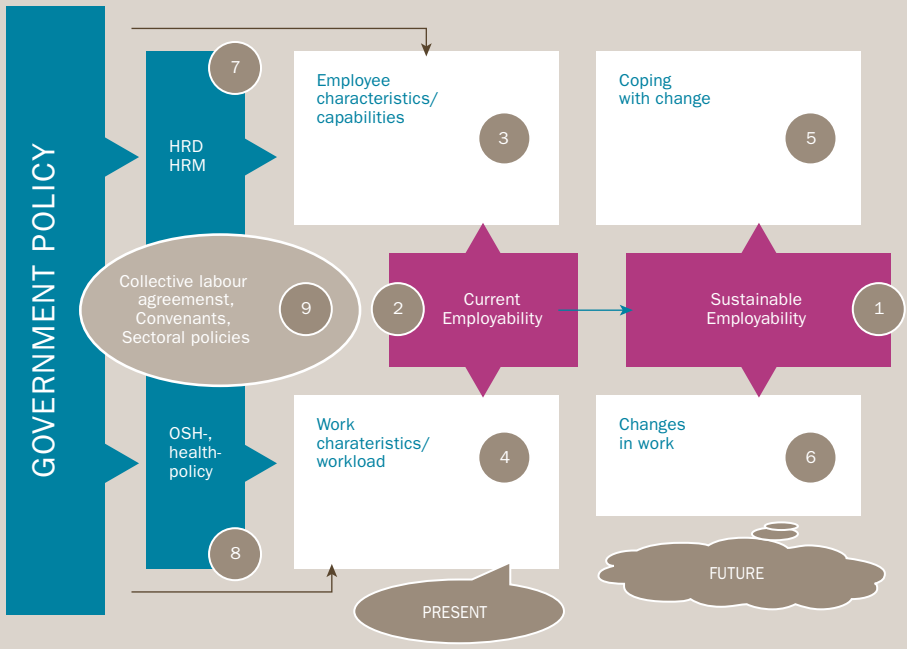
3.1 A model of sustainable employability

What is 'sustainable employability'? It is something of an umbrella term but it can be defined as 'the ability and motivation to work longer (potentially until retirement and beyond) in a healthy and productive way. The literature offers several other possible definitions. However, the main indicators of sustainable employability are the willingness to continue working until retirement age, the ability to continue working, and actually doing so in practice. The word 'sustainable' refers not only to a person's current employability, but also – and especially – to his or her future employability. Current employability is largely determined by the requirements of the work and the individual's ability to meet those requirements. Future employability is a question of the employee's ability to adapt to changing job requirements. At the organizational level, various factors will help or hinder this process:

- An effective Health and Safety policy
- An effective Human Resource Management (HRM) and Human Resource Development (HRD) policy
- A health policy geared towards ensuring sustainable employability, e.g. by monitoring the individual's abilities over time and offering (re-) training opportunities where appropriate.

Sustainable employability can also be influenced at the sectoral and national levels. Figure 3.1 presents a monitoring model for sustainable employability, showing the interrelationships between the main indicators and determinants (Wevers et al., 2010).

FIGURE 3.1 Monitoring model for sustainable employability



SOURCE: Wevers et al, 2010

3.2 The current and future employability of Dutch employees

We now consider the employability of the workforce in greater detail. First, we examine the current level of employment participation, based on national data, and then we look at future employability based on data derived from the NWCS: who is willing to work until the age of 65 and who is able to do so? We distinguish five employee categories:

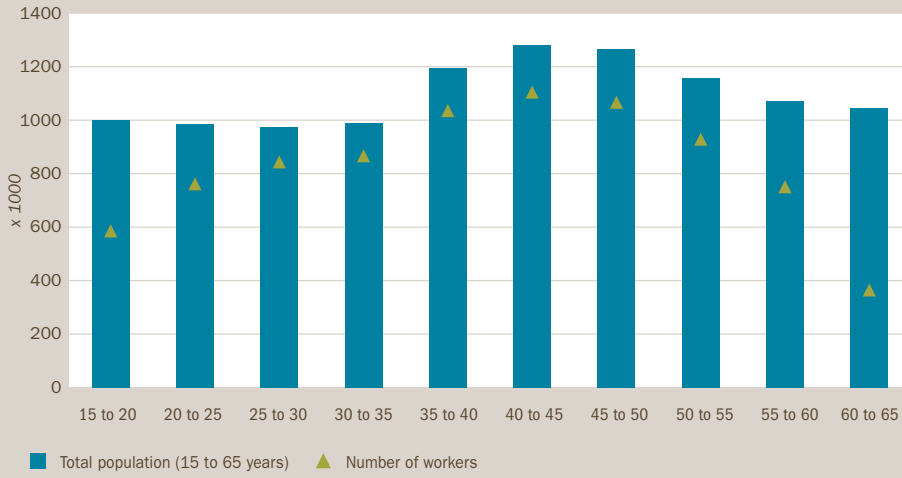
1. *Unwilling* to work until retirement and *unable* to do so in the current job
2. *Willing* to work until retirement but *unable* to do so in the current job
3. *Unwilling* to work until retirement but *able* to do so
4. *Willing* to work until retirement and *able* to so in current job
5. *Does not know* whether he/she would be able to work until retirement in the current job.

Willingness and *ability*[8] to continue working until the statutory retirement age are both indicators of sustainable employability, but they are of course not the same thing. Similarly, to be both *willing* and able to continue in employment is not the same as actually *doing* so.

Current employment rate

The Netherlands has a high employment rate. Over 75% of the total Dutch population is in gainful employment (Figure 3.2). However, there are differences in the employment rate according to gender and age. Men are more likely to be in employment than women, while participation first rises and then falls as age increases. Peak participation is achieved at a relatively early age, being highest (87%) among the 30 to 35 age group, with a gradual decline thereafter. A similar trend can be seen among both men and women, although peak participation among women is in the 25 to 30 age group. After the age of 55, the employment rate decreases sharply and even more so after the age of 60. Only 35% of people aged between 60 and 65 are still in employment.

FIGURE 3.2 Percentage of population (aged 15 – 65) in employment, 2009



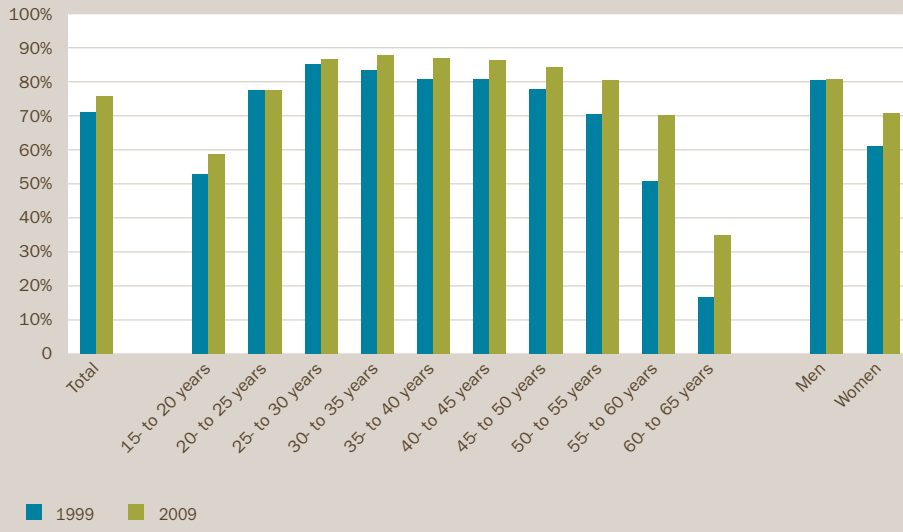
SOURCE: CBS StatLine

For some years, the Dutch government has encouraged people to work and to remain in employment for longer. Its efforts seem to have been successful. In 1991, only 71% of the total population was in employment. By 2009, this figure has risen to 76%. The increase has largely been seen in those groups which previously had a relatively low employment

8 In this chapter, 'ability' refers to the individual's own perception of whether he will be capable of working until or beyond retirement age, and whether he will have the opportunity to do so. For the sake of simplicity, we have opted to use the single word 'ability' (or 'able', as appropriate).

rate: women and the members of the more senior age groups. Among women, employment participation rose from 61% to 71%, while among the 60 to 65 age group it more than doubled, from 16% to 35%. The largest increase is to be seen among women in the older age groups. Among women aged 55 to 60, the employment rate doubled over the course of a decade (as shown in Figure 3.3) but in the 60 to 65 age group it grew threefold, from 9% to 27%. However, despite the marked increase in employment rate, there remains considerable untapped employment potential in these senior age groups (Otten et al., 2010). Around half of all people working at the age of 50 are no longer in employment by the time they reach the age of 65.

FIGURE 3.3 **Participation rate in 1999 and 2009, by age and gender**



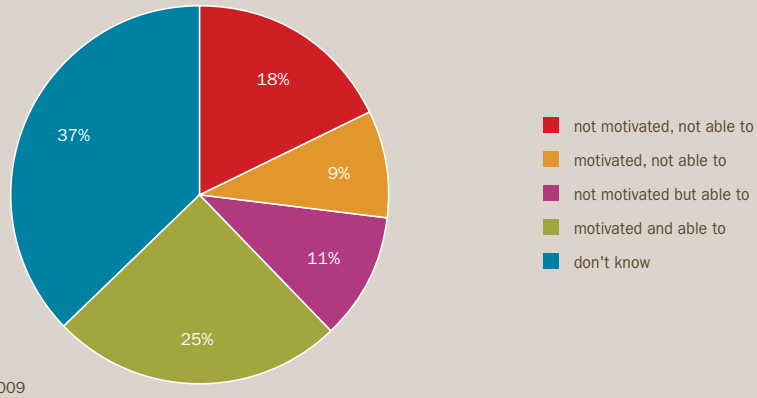
SOURCE: CBS StatLine

Future employability

The attention paid to continued employment has raised employees' awareness of whether they are willing and/or able to work until or beyond retirement age[9]. In 2009, 63% of employees surveyed stated that they knew whether they would be willing to do so, and whether they would be able (Figure 3.4). In 2005, only 57% had given the matter the necessary thought. We see that employees are indeed more willing and able to continue working until retirement age. Over the course of five years, the percentage of employees who stated that they would be both willing and able to work until retirement age doubled from 13% to 26%. Over the same period, the percentage stating that they would not be willing and/or able to work until retirement age fell from 24% to 18%.

9 See also Arbobalans 2007/2008 and Arbobalans 2009

FIGURE 3.4 Willingness and ability to continue working until retirement age



SOURCE: NWCS 2009

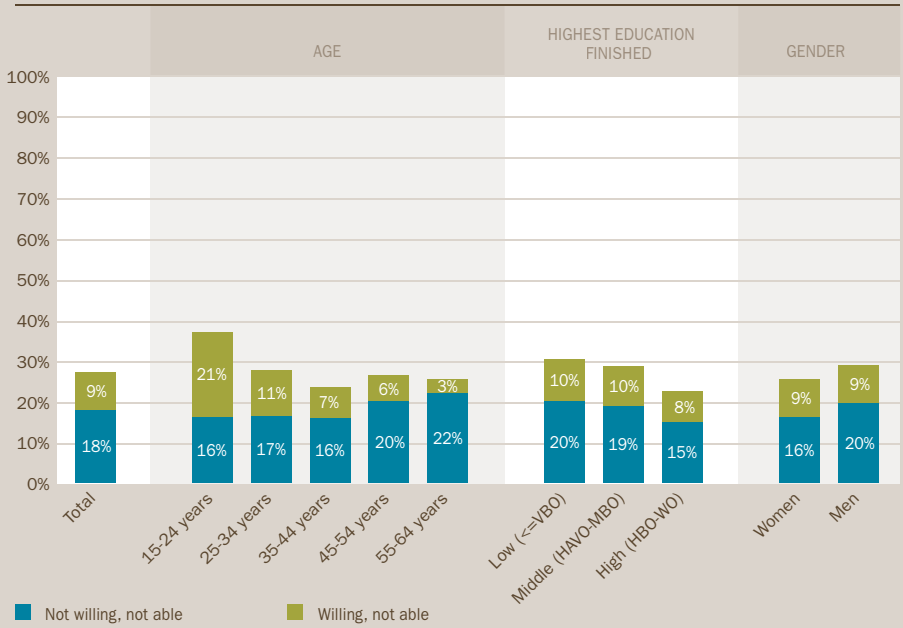
Even so, by no means all employees are both willing and able to continue working (Figure 3.5). Those with a lower standard of education are more likely to state that they are unable or unwilling to do so. This is partly because these employees are not able to look so far ahead. They expect their job security to decrease in the future, and are less optimistic in this regard as compared to those with a higher level of education. Financial considerations are also likely to play a part. In general, unskilled workers have a lower income whereupon it is more difficult to make provisions for early retirement.

In general, women are more likely than men to state that they expect to have to combine work with family commitments in the (near) future. They are uncertain what effect this will have on their long-term employment participation (Souren, De Vries & Houtman, 2010).
Among those employees who already know whether they are able and willing to work longer, there is almost no difference between men and women. However, men are more likely to state that they will be able to continue in employment but are not willing to do so.

Even employees under 25 state that they will be unable to work until retirement age. This may largely be the case because they are being asked about their current employment. Older employees are more likely to have a permanent job and will not be inclined to 'move on' so frequently, if at all. Younger employees, by contrast, are often in a temporary or part-time flexible job in which they can earn money to finance their studies, or which serves as a first step on the career ladder. Such jobs often have less favourable working conditions, terms of employment and benefits. However, the younger employees participate in many job changes, and in many cases each new job will represent work of a different nature. Being unable to continue working in their current job does not therefore

mean that these young people will not be able to work until retirement age in some other job or sector.

FIGURE 3.5 **Inability to continue in employment, by personal characteristics**



SOURCE: NWCS 2009

In which sectors do the employees who will be unable to work until retirement age currently work?

The horeca, building & construction and financial services sectors are notable for the relatively high number of employees who are either unwilling or unable to work until retirement age (Table 3.1). However, the sectors face different problems and obstacles. In public administration and financial services, for example, the main limitation is that the staff is not willing to continue working until or beyond retirement age. In horeca, building & construction and health care, the main problem is that employees are not able to do so.

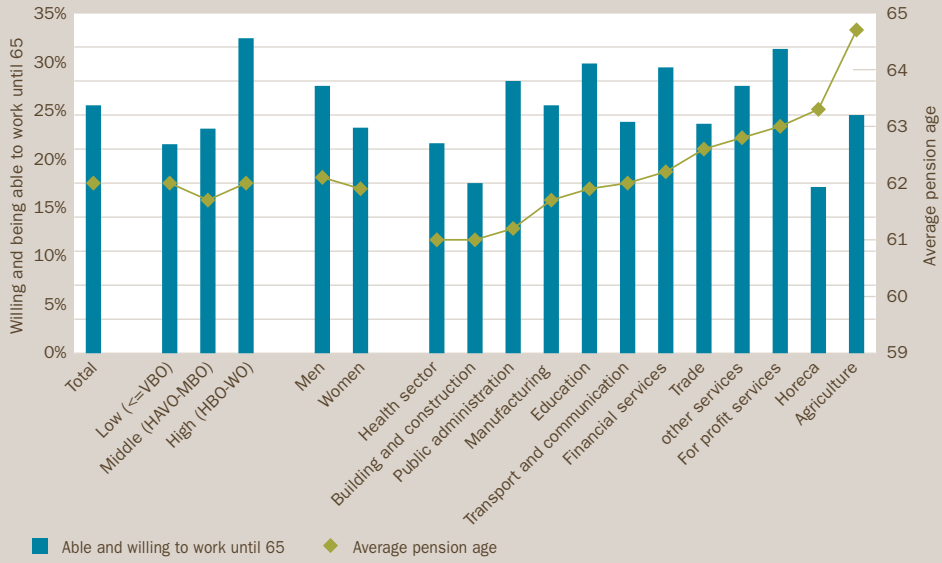
Table 3.1: Willingness and ability to continue in employment by sector

	NOT ABLE, NOT WILLING	NOT ABLE, WILLING	ABLE, NOT WILLING	ABLE AND WILING	DON'T KNOW
TOTAAL	**18%**	**9%**	**11%**	**26%**	**37%**
Education	17%	7%	8%	30%	39%
Agriculture	13%	12%	6%	25%	43%
Other (misc.) services	15%	10%	10%	28%	38%
Profit services	13%	8%	14%	31%	34%
Health and welfare	20%	10%	6%	22%	43%
Trade and commerce	16%	12%	10%	24%	38%
Manufacturing	21%	7%	13%	26%	34%
Transport and communications	20%	10%	11%	24%	36%
Public administration	18%	7%	16%	28%	31%
Financial services	16%	8%	17%	29%	30%
Horeca	20%	20%	6%	17%	37%
Construction	31%	7%	11%	18%	33%

SOURCE: NWCS 2009

As noted above, being willing and able to continue working is not the same as actually doing so. Although there has been a gradual increase in the number of employees stating that they are willing and able to work for longer, there has been no concomitant increase in the average retirement age, which remained at 61 throughout the period 2000 to 2006. A slight increase to 62 was seen in 2007, when the statutory provisions for early retirement with (partial) release of pension were withdrawn, and has remained stable ever since (Arts & Otten, 2010). A recent study concludes that, on average, employees stop work over eighteen months earlier than they had originally planned (NIDI, 2010). Although employees with a high level of education are more likely to state the intention of remaining in employment until the age of 65 than those with intermediate or basic qualifications, in practice we see little or no difference in the actual retirement age (Figure 3.6). The sectors in which employees are more likely to state that they are willing and able to work longer do have a higher average retirement age than others. Nevertheless, while employees in the horeca sector are often unwilling to continue working, the average retirement age in the sector remains high. In public administration we see the opposite: employees state a willingness and ability to continue working, yet the average retirement age is relatively low.

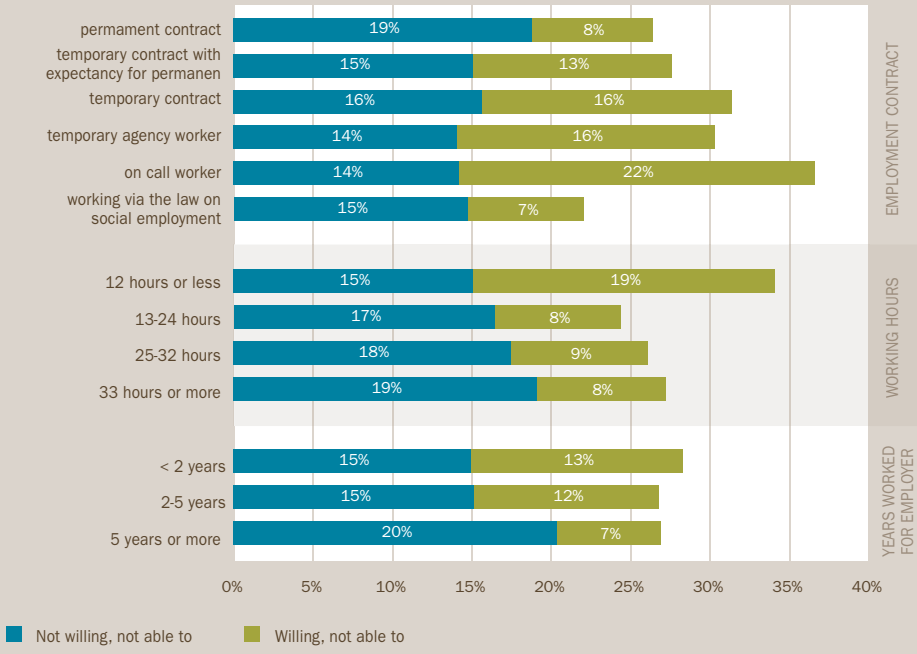
FIGURE 3.6 **Willingness and ability to continue in employment against average retirement age, 2008**



SOURCE: NWCS 2009 and CBS StatLine

The willingness and ability to continue to work until 65 is not related to the size of the employer organization, but is linked to the employee's job or position (Figure 3.7). Those working on a casual 'on-call' basis and part-time employees who work less than 12 hours a week are more likely to have problems in terms of the ability to continue in employment. Over half of this group states that they are indeed willing to work until the age of 65 but will not be able to do so. This is due to the age effect. It is mainly young people who work on a casual or part-time basis. An age-related effect can also be seen if we consider the number of years that a person has been in employment. Employees with a longer working history (who we may assume will therefore be older) are more likely to state that they are both unwilling and unable to continue working until the statutory retirement age of 65.

FIGURE 3.7 **Inability to continue working until statutory retirement age, by characteristics of job**



SOURCE: NWCS 2009

Overall, employees at the lower end of the labour market, i.e. young people with a basic level of education and a flexible contract, are less likely to state a willingness and ability to work until statutory retirement age.

3.3 Age and the (adverse) effects of work

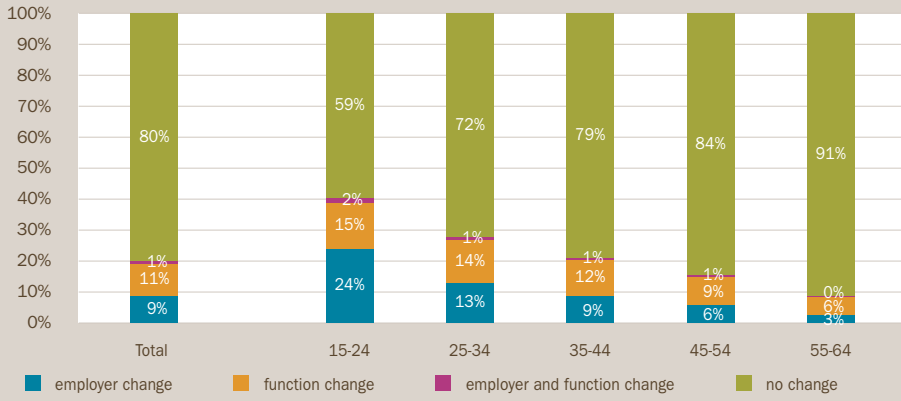
In this section, we examine the extent to which aspects such as the quality of work and satisfaction with the terms and conditions of employment affect older employees' decision to withdraw from the labour market. We shall also examine whether those who have left employment have done so because they are unable to continue in employment or are unwilling to do so.

A change of employer or function

Although older employees are more likely to suffer the adverse effects of work (see previous chapter), there is no evidence to suggest that they are more likely to seek alternative, lighter employment. The NWCS cohort study, in which 10,000 respondents who initially took part in the NWCS 2007 were once again surveyed a year later, revealed that an aver-

age of one in five employees had changed employer or taken up a new position with the existing employer during the previous twelve months. Older employees are very much less likely to do so than their younger counterparts (Figure 3.8). In the very youngest age group, almost 40% of employees had changed jobs, compared to less than 10% of the older respondents.

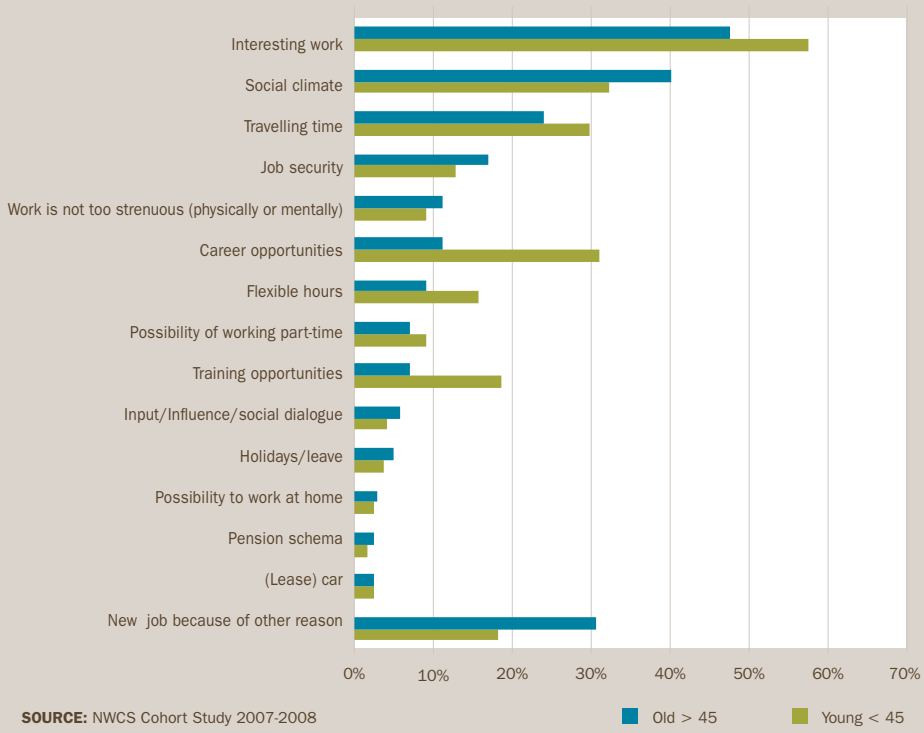
FIGURE 3.8 Changes of employer or position, by age



SOURCE: NWCS 2008

When considering a change of employment, the aspects uppermost in the employee's mind are how interesting the new work is, the working atmosphere and the salary. Although no major differences can be seen between the older and younger age groups in terms of the importance they attach to working conditions and the (contractual) terms of employment (Figure 3.9), these aspects do play a role when considering a change of employment, and that role is different in each group. The content of the work, salary and the opportunities for training and career development are more important to younger employees than to their older counterparts. The older employees attach slightly less importance to how interesting the work is, although this remains one of the main reasons for changing jobs. The working atmosphere and salary are important, as is travelling time to and from the workplace. However, job security is a prime consideration for this age group. A relatively large number of older employees state that they had 'other reasons' for wishing to change employment (Figure 3.9).

FIGURE 3.9 **Important considerations when seeking new employment, by age.**

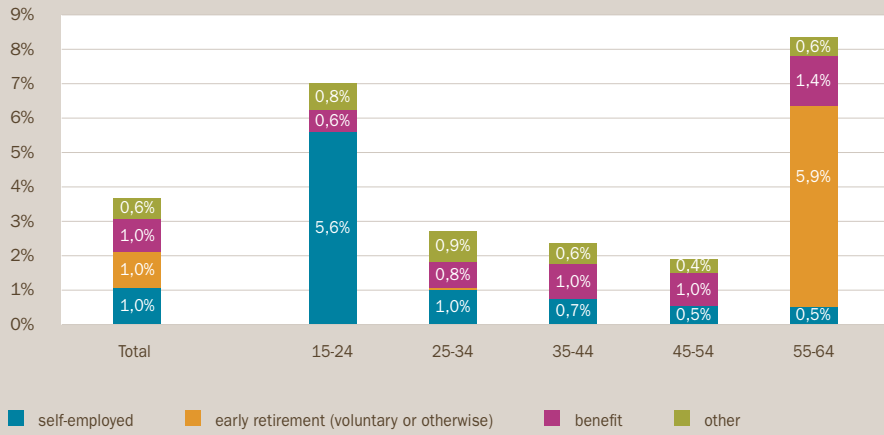


SOURCE: NWCS Cohort Study 2007-2008

Leaving the employment process

The foregoing confirms that younger people have different motives for seeking a new job than older employees. But what motives underlie the decision to leave the employment process altogether? The NWCS Cohort Study reveals that just under 4% of respondents in NWCS 2007 were no longer in employment one year later (Figure 3.10). However, it cannot be assumed that all had stopped working altogether. A significant proportion, particularly in the under-25 age group, had opted to work on a self-employed basis or to study full-time. These employees are therefore not classified as having 'withdrawn' from the employment process. The actual percentage of employees who discontinued work altogether is actually just over 2.5%. Reasons cited include: early retirement with (partial) pension rights (39%), in receipt of benefits further to unemployment or disability(38%) and 'other reasons' (22%). The latter category ('other reasons') includes those employees who stopped working without any entitlement to social security benefits. The reasons for stopping work vary greatly according to age. In the oldest age groups (age 55 and over), three out of four employees stop work because they are able (or are required by the employer) to take early retirement, while the majority of younger employees cite 'other reasons'.

FIGURE 3.10 Proportion of employees no longer in employment after twelve months, by reason



SOURCE: NWCS Cohort Study 2007-2008.

Determinants of withdrawal from employment process

It appears that older employees who take early retirement devote considerable thought to this decision (Figures 3.11 and 3.12). Of those employees who took early retirement in 2008, a relatively large proportion had stated only a year earlier that they were willing to continue working until the age of 65, but the number who considered themselves able to do so was in line with the average. Employees who left the employment process because they became entitled to benefits were more likely to have stated an unwillingness to continue working until statutory retirement age, and also were far more likely to have said that they would be unable to do so.

FIGURE 3.11 **Willingness to work until 65 and withdrawal from employment process one year later, older employees**

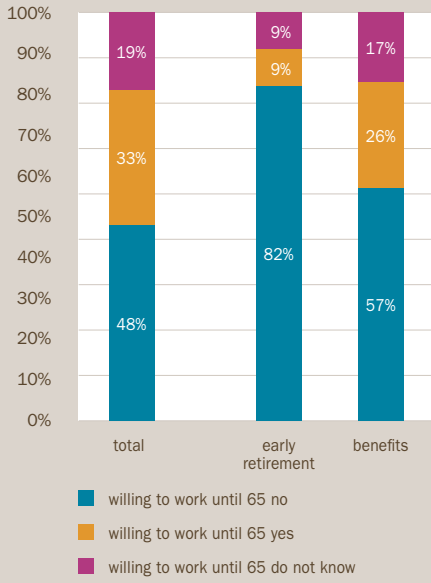


FIGURE 3.12 **Ability to work until the age of 65 and withdrawal from employment process one year later, older employees**

SOURCE: NWCS Cohort Study 2007-2008.

The main determinants of the withdrawal from the employment process due to early retirement are demographic characteristics (predominantly age) and the characteristics of the work itself, such as a long period spent in the current position or a restructuring process. The influence of restructuring suggests that early retirement is sometimes used as a sort of redundancy scheme for excess personnel. As shown in Table 3.2, causal factors for withdrawal because of (mainly disability or unemployment) benefits are different to those of early retirement.The main difference being that in the case of benefits the decision to stop working is likely to be due to health problems or the social climate in the workplace, neither of which is a cause of the decision to take early retirement. Conen et al. (2009) demonstrate that, when faced with the need to reduce staff numbers, employers do indeed have a strong preference for dispensing with the services of older employees by means of early retirement (74% are in favour or strongly in favour of doing so.) The next most popular option is a reduction in working hours (70%), followed by incentives for voluntary departure (67%). Far less popular are redundancies based on the desired age distribution within the organization (45% in favour) or on the last-in-first-out principle (23%).

Table 3.2 Individual determinants of withdrawal from the employment process among older employees

		EARLY RETIREMENT	BENEFITS
Demographic characteristics	Age 60+	▲	-
	Age 55-59	-	▲
	Female	▲	-
	Partner not in employment	▲	-
Work characteristics	Temporary contract		▲
	Long period in current position	▲	-
	Major restructuring	▲	-
	More social support from colleagues	-	▼
	Managerial responsibilities	▲	-
	Inappropriate conduct	-	▲
Health	Burnout	-	▲
	Long period(s) of sick leave in 2007	-	▲
	General poor health	-	▲

SOURCE: Ybema, Geuskens & Oude Hengel, 2009

▲ significantly higher likelihood of withdrawal,
▼ significantly lower likelihood of withdrawal
– no significant influence

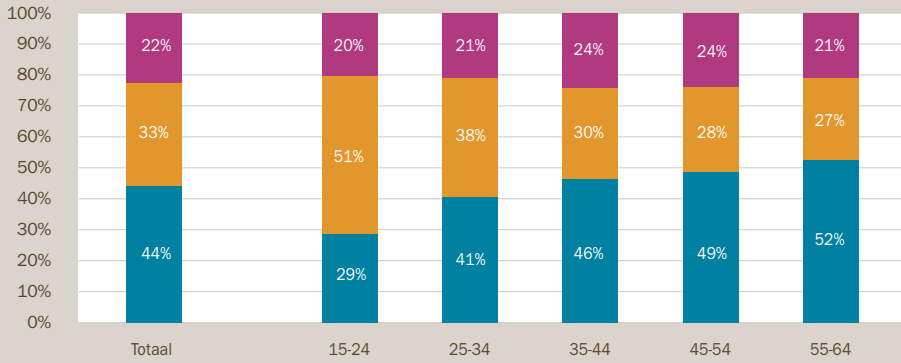
3.4 Older employees and the willingness and ability to continue in employment

As stated in the previous section, approximately 8% of all employees aged between 55 and 64 withdraw from the employment process each year. In the context of the government's efforts to promote employment participation among this age group, it is interesting to investigate the extent to which these older employees state a willingness and ability to continue working until statutory retirement age. The percentage of older employees who stated that they would be able to do so rose from 41% in 2005 to 50% in 2008. It must be noted that the question referred specifically to the current job or function ("Do you think you will be able to continue your current work until the age of 65?"). Among the older age group, we see an even greater increase in the number of respondents who are willing to continue working until statutory retirement age, from 21% in 2005 to 36% in 2008 Figure 3.15.

Older employers are more likely to believe that they will be able to continue work in their current position than their younger counterparts (Figure 3.13). Here too, there may be a degree of 'healthy worker selection', i.e. those employees who do not believe they will be able to continue in a given position until retirement age may already have found alternative employment, or left the employment process altogether. Of all employees regardless

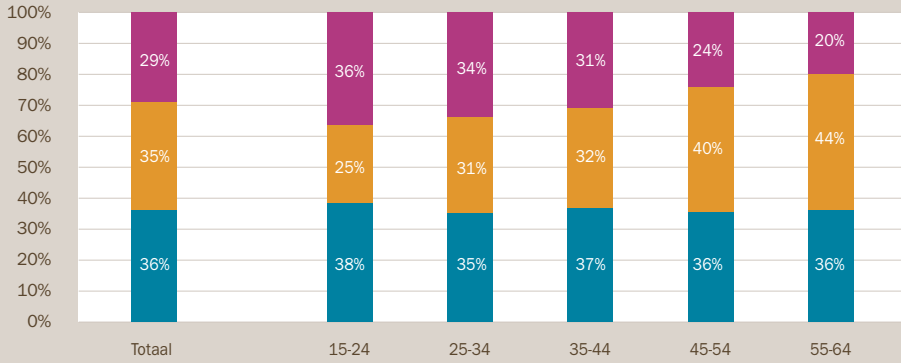
of age, 44% believe they will be able to continue working until the age of 65. It is interesting to note that 20% of the respondent population answered 'don't know' to this question. This percentage is virtually the same for all age groups.

FIGURE 3.13 Being able to work until 65th



SOURCE: NWCS Cohort Study 2007-2008.

FIGURE 3.14 Willing to work until 65th



SOURCE: NWCS Cohort Study 2007-2008.

Figure 3.14 shows that the percentage of employees who state a willingness to work until the age of 65 is broadly similar in all age groups. However, the number of employees who state that they are not willing to do so is higher in the older age groups, where we see a lower percentage of 'don't knows'. Clearly, the older employees have given thought to the matter and arrived at a decision.

Of course, not all older employees who are willing to continue working in their current position will be able to do so, and vice versa. In Figure 3.15 we see that, of the older employees who are unwilling to continue working until retirement age, the largest group is made up of those who believe they will be unable to do so, at least in the current function. However, this group has decreased in size over time: in 2005 it accounted for over half (54%) of all older employees. By 2008, just 39% were both unwilling and unable.
Approximately one quarter of older employees are unwilling to continue working even though they consider themselves able to do so. The size of this group has remained reasonably stable 3.in recent years.
The group of employees who is willing but unable to continue work, at least in the current job, is still by far the smallest, although it has grown from 6% in 2005 to 11% in 2008. The group of older employees who are both willing and able to continue work has also shown substantial growth, from 15% in 2005 to 25% in 2008.

FIGURE 3.15 **Trends in the willingness and ability to work until statutory retirement age, employees aged 45 to 64.**

SOURCE: NWCS 2009

If older employees are to be encouraged to continue working for longer, it is important to identify the factors which determine a person's willingness and (perceived) ability to do so. Whether employees believe that they will be able to continue working until the age of 65 depends in part on their health, but also on the working conditions and the demands of the job (Ybema, Geuskens & Oude Hengel, 2009). Older employees who are required to undertake physically strenuous work, who face high work pressure, or who receive little social support from their managers and colleagues are less inclined to believe that they can 'stay the course' than those who are not exposed to these risks. Although there are no clear differences between the sectors in terms of the ability to work until retirement age, there are differences between professional groups. Health care professionals and teachers

in particular are less likely to consider themselves able to continue in the same function until the age of 65. At present, these professions include many employees between the ages of 60 and 64. In terms of the contractual conditions of employment, satisfaction with regard to the opportunity to determine one's own working hours appears to be a significant determinant of the ability to continue working.

Although health is also a significant determinant of the degree to which older employees believe that they will be able to continue working until the age of 65, it has far less significance in terms of their willingness to do so. The main exception is 'burnout'. Inappropriate conduct (harassment, bullying, etc.) on the part of colleagues or superiors will also affect the willingness and perceived ability to remain at work. (Ybema, Geuskens & Oude Hengel, 2009).

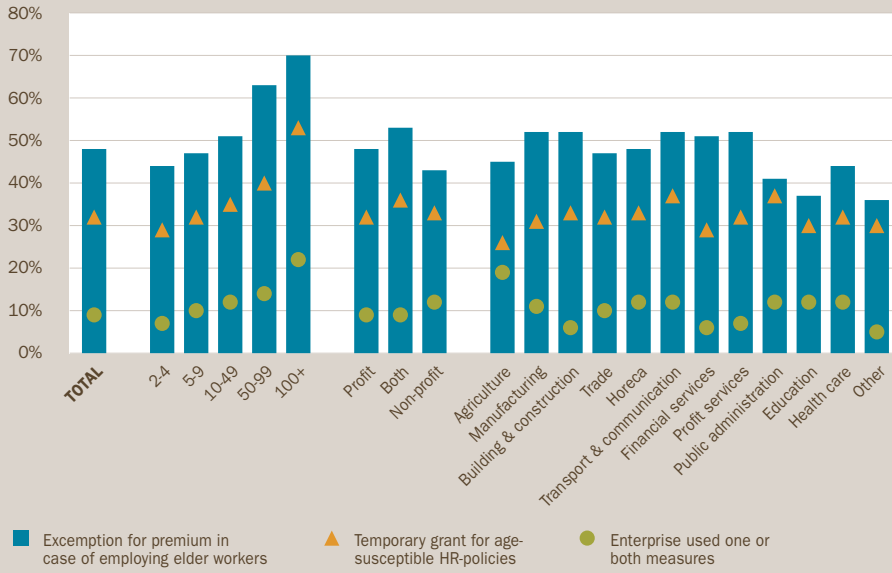
As the number of older employees who state that they would be willing and able to work until the age of 65 increases, so does the demand for physically and mentally less strenuous work which will enable them to do so. The percentage of employees expressing a desire for lighter work rose from 34% in 2005 to 40% in 2008 (NWCS 2005-2008; Ybema, Geuskens and Oude Hengel, 2009). It may be assumed that these people are currently working in the 'heavier' professions. The demand for lighter work therefore remains a determinant of the degree to which employees believe that they will be able to work until retirement age.

3.5 Age and measures

In the past, national government has implemented a number of measures to encourage older employees to remain available to the labour market for longer. In the mid-1990s, the statutory provisions for early retirement with release of pension were gradually phased out, making it more financially attractive (or essential) to carry on working. Similarly, social security legislation has undergone a radical overhaul whereupon far fewer employees are able to stop work and claim disability benefit. Measures have also been implemented at sectoral level. A recent study reveals that the number of Collective Labour Agreements (CAOs) which include provisions for an 'age-aware personnel policy' increased markedly between 2006 and 2009. It is also more common for the agreements to include 'career shift' provisions specifically aimed at older employees (Beeksma & De la Croix, 2009).
In this section, we focus on the measures taken by individual employers, examining the relationship between the age of the employee and the measures which companies take to retain staff until retirement age (see also Ybema et al., 2009).

The National Employers Work Survey (NEWS) includes two questions about the government schemes intended to facilitate the recruitment of older staff. Respondents are asked whether they are familiar with these provisions and whether they have made use of either or both. The response percentages are shown in Figure 3.16.

FIGURE 3.16 **Percentage of Dutch employers aware of the two (government) provisions intended to facilitate the recruitment of older employees, and percentage of employers who have made use of one or both provisions.**



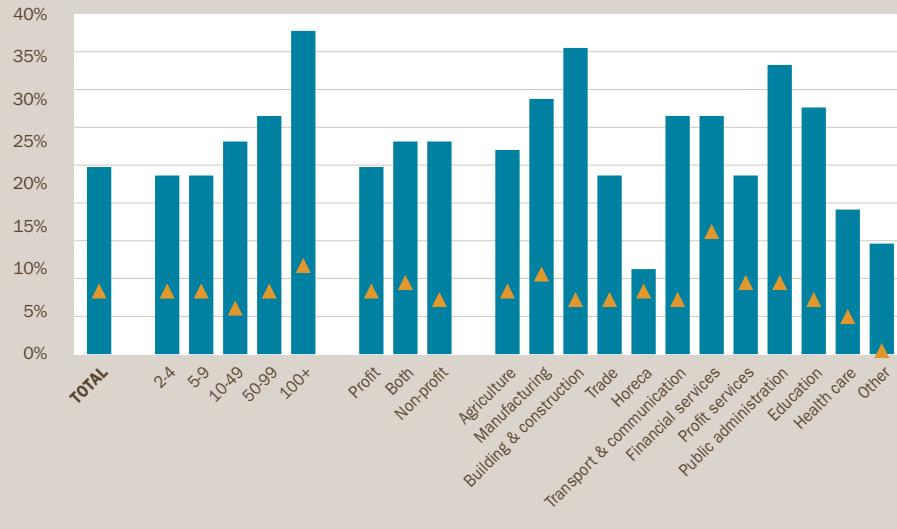
SOURCE: NEWS 2008

Almost 50% of Dutch employers are aware of the fiscal arrangements whereby the employers' national insurance contributions are waived in respect of older employees. Larger organizations are more likely to be aware of this provision than smaller organizations. There are no significant differences between sectors.

Of the employers who are aware of one or both provisions, 9.4% have actually made use of them. This represents 4.6% of all employer organizations in the Netherlands. This would seem to be a reasonable 'score', particularly when we remember that not all companies will have vacancies to be filled. Larger organizations are more likely to have used the provisions than smaller companies. Those employers who have indeed made use of one or both provisions were also asked to state how important they consider them to be in recruiting older personnel. Overall, 47% stated that the provisions are 'important' or 'very important'. In this respect, we see an inverse relationship with the size of the organization: it is the smaller companies who are more likely to consider the arrangements to be important. Employers in the retail trade and in the horeca are most likely to do so. For employers in health care and miscellaneous services, the provisions are less important.

The NEWS survey also asks respondents whether they consider it important that employees continue to work until the age of 65, in terms of maintaining the required staffing level, and whether it is important for employees to continue working beyond the age of 65.

FIGURE 3.17 **Percentage of employers who consider it important for employees to work until and beyond the age of 65**



SOURCE: NEWS 2008

Work until 65 | Work beyond 65

Approximately 22% of employers state that it is important for employees to continue in work until the age of 65 in order to maintain the organization's required staffing level (Figure 3.17). The percentage is slightly higher than average in the non-profit sector, and notably higher in the case of larger organizations, particularly those in education, industry and the public sector. Some 8% of employers consider it important that employees continue to work beyond statutory retirement age, most notably in the financial services sector.

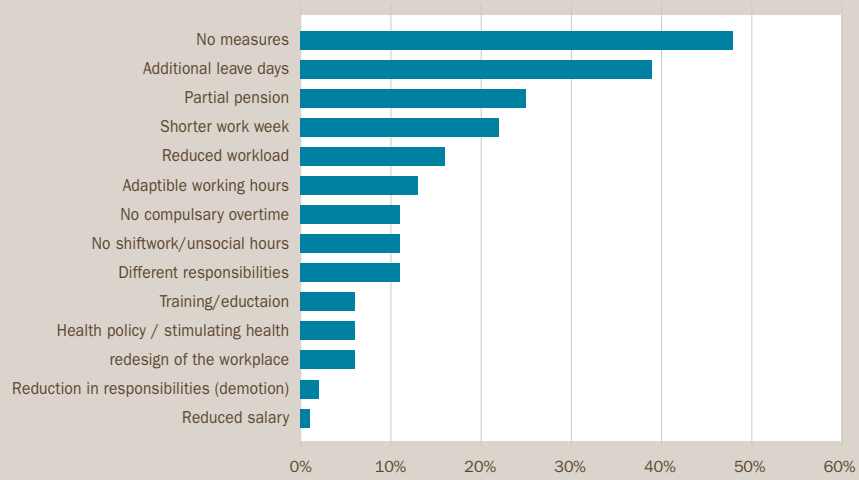
The Netherlands Interdisciplinary Demographics Institute (NIDI) conducted a study (Conen et al. 2009) in which a sample of employers was asked whether they would actively encourage employees to continue to work until the age of 65 if the employers are currently or about to face a shortage of personnel (see Figure 3.18). The employers were approached with this question on several occasions over a number of years. The 2008 survey was conducted in the first half of the year, before the effects of the financial crisis were apparent. As we see from Figure 3.18, employers were more likely to try to retain

older staff before the crisis: one in three employers claimed that they had or would take steps to do so. In 2009, notably fewer employers considered the retention of older staff to be important. Nevertheless, even in the current economic climate, the number of employers who would encourage staff to work longer is higher than in the years before the crisis.

FIGURE 3.18 **Percentage of employers who state that they would encourage employees to continue working until the age of 65 if the organization faced an (impending) staff shortage.**

SOURCE: Conen, Van Dalen and Henkens (NIDI) 2009

FIGURE 3.19 **Percentage of organizations whith ten or more employees which implement measures to encourage and/or enable staff to continue working until or beyond the age of 65**



SOURCE: NEWS 2008

Based on the NEWS data (see Figure 3.19), we may conclude that slightly more than 50% of Dutch organizations with ten or more employees would implement measures to encourage and enable staff to continue working until or beyond the age of 65. One of the most common measures is a reduction in working hours. About 40% of employers give older employees additional leave, while slightly more than 25% offer the opportunity to work part-time with partial pension rights.

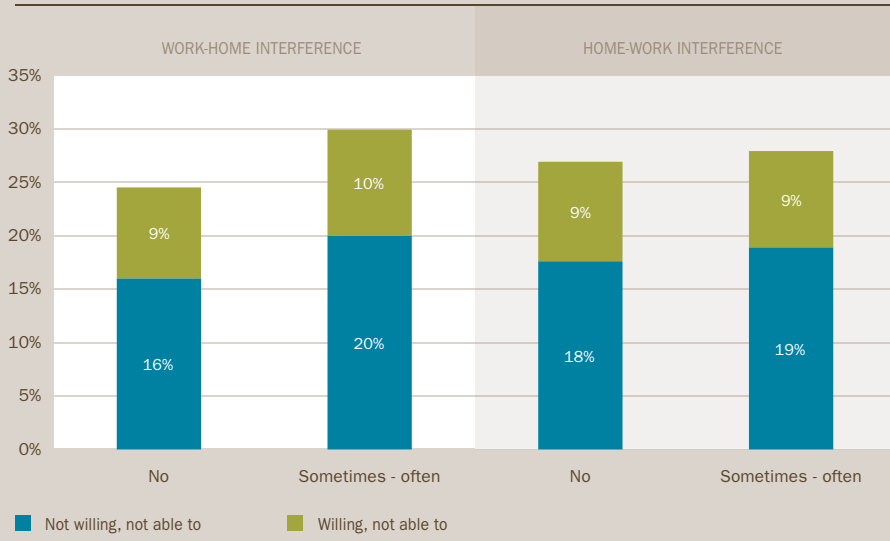
A shorter working week is another relatively popular measure. Between 10% and 15% of employers have implemented measures to reduce the employee's workload, allow shorter or more flexible working times, or exempt the employee from shiftwork or overtime. Very few employers state that they would reduce the employee's workload and responsibilities by means of a demotion and/or reduction in salary. Measures to encourage participation in training or education courses are also relatively uncommon.

3.6 The work-life balance

One means to encourage people to continue working until retirement age is to allow them to do so from home, i.e. to 'telecommute' (see Wiezer et al., 2010). Older employees who can work at home are often more willing to continue working for longer. While there are advantages to working at home, there are also disadvantages due to the less distinct barrier between work and private life. It is easier for employees to decide where and when

they will work, but they can also be contacted by their employer at any time, even when they do not wish to be disturbed. As a result, work may interfere with private life or vice versa. This applies not only to telecommuters: slightly over a third of all employees report that they have missed family activities or neglected their family responsibilities due to work ('work-home interference'). This inevitably has consequences in terms of the willingness and ability to continue working until retirement age. Employees who have experienced difficulty in maintaining an appropriate work-life balance are more likely to have thought carefully about whether they are willing to continue working. The decision is not always in favour of doing so. These employees are also more likely to state that they will be unable to work until retirement age (Figure 3.20), particularly if work has already interfered with their private life to any significant degree.

FIGURE 3.20 **Willingness and ability to continue work, as influenced by the life-work balance**



SOURCE: NWCS 2009

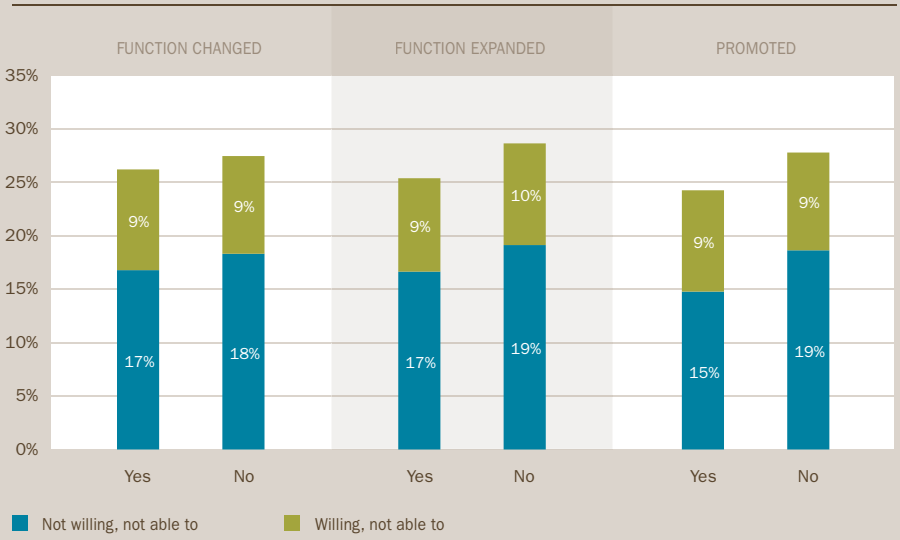
3.7 Training and a change of function

Another measure seen as a means of encouraging staff to remain in work for longer is to offer them training and education opportunities. Training throughout the career ('lifelong learning') enables employees to maintain their knowledge and skills at the required level, whereupon they will be able to adapt more readily to the ever-changing demands of their work. Their employability will be enhanced, not only within the existing employer organization but on the employment market as a whole. There will be a greater likelihood of

finding appropriate work in later life. Employees who have attended a training course in the past two years are more likely to state that they are willing and able to continue working for longer. This effect is even greater when the course is external rather than internal.

A change of function within the organization can also have a positive influence, in that employees who regularly move from one department or position to another do not become 'rusty' but remain flexible and fully deployable. However, a change of function or even a promotion seems to have little effect in terms of the willingness and ability to continue working (Figure 3.21). A slight increase can be seen among more mobile employees, but the difference is not statistically significant. This may be because the underlying data relates only to promotions and changes of function within the past two years, while those throughout the employee's career actually determine his or her overall employability.

FIGUUR 3.21 Willingness and ability to work until retirement age, as influenced by changes of function and promotion



SOURCE: NWCS 2009

3.8 What is more important: working conditions or health?

Working conditions, the contractual terms of employment and health are all factors which influence the ability to work until retirement age. Moreover, they are interrelated; they form a complex whole. It is nevertheless appropriate to examine their relative importance. Which factor plays a greater part in determining the employee's ability to remain in work: working conditions or health?

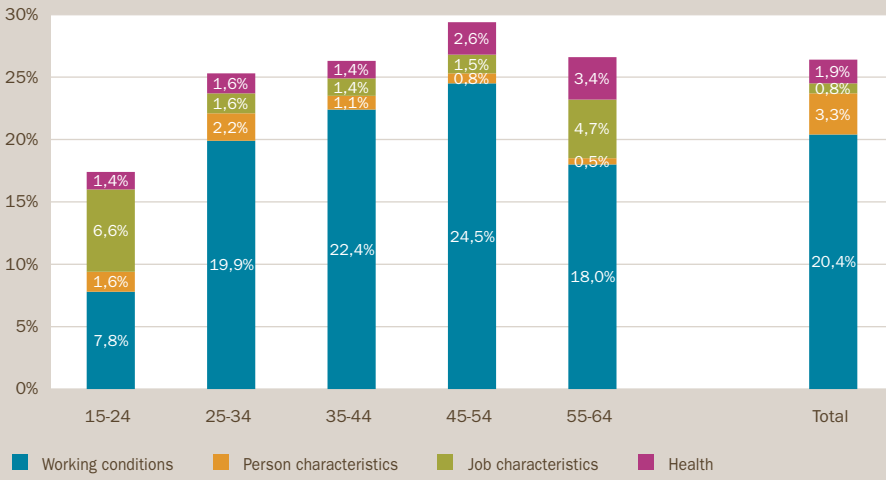
To answer this question, we must examine the extent to which the employee's answer to the question "will you be able to work until the age of 65?" can be predicted on the basis of working conditions, the nature of the work and its requirements, personal characteristics and health[10]. We must also consider whether the answer will be influenced by other factors (including pure chance). Just over 26% of the stated ability to continue working can be predicted on the basis of the factors listed above (Figure 3.22). Almost three quarters is therefore dependent on other factors, or none at all.

The ability to work until retirement age is most difficult to predict in the youngest age groups. This is hardly surprising, since it will be many years before they actually reach the age of 65 and will make many decisions, both conscious and unconscious. Moreover, the work-related risks to which younger employees are exposed are unlikely to have a significant effect on their ability to continue in employment in later life. In the case of the 45 to 54 age group, it is indeed possible to predict the ability to work until retirement age with a greater degree of accuracy. Almost 30% of the inability to do so is determined by working conditions, the nature and requirements of the work, personal characteristics and health.

In all age groups, working conditions form the best predictor of the ability to continue working until retirement age. The influence of this factor increases in direct proportion to age, peaking within the 45 to 55 age group. The influence of health appears to be limited, although it too increases with age. Among the oldest age group, health characteristics are significantly more important than personal characteristics such as gender and education.

10 Because a large proportion of employees in the youngest age groups did not answer the questions relating to terms and conditions of employment, it was not possible to include this factor in the model.

FIGURE 3.23 **Relative importance of diverse factors in predicting the ability to continue working until retirement age**



SOURCE: NWCS 2009

Both working conditions and health influence the ability to continue working, but working conditions are a far more significant factor. Although much attention is now being given to reducing the physical burden of work for older employees, the data shows that psychosocial and emotional working conditions also play an important role in determining the ability to continue in work. It should however be noted that the various categories of working condition are not of equal overall importance, and that they do not affect all employees to the same degree.

3.9 Conclusions

In the face of ageing of the workforce, it is desirable (in the interests of the national economy) for employees to remain in the workforce as long as possible, preferably until statutory retirement age. As noted r, there is still much untapped employment potential and it is possible, at least in theory, to achieve a significantly higher employment participation rate. In this chapter, we have demonstrated that a greater number of employees are now able to continue working until the age of 65 or beyond. Similarly, more people – but by no means all – are now willing to work until statutory retirement age. This chapter has also demonstrated a clear discrepancy between what employees say they will do and what they actually do when the time comes. Of those employees who stated in the past that they would be willing able to continue working until the age of 65, many nevertheless opt

to withdraw from the employment process somewhat earlier, at least where no legislative measures are in place to discourage or prevent them from doing so.

The employees least likely to state a willingness and ability to continue working until the age of 65 are those in the younger age groups, those with a lower level of education and qualifications, and women who work in jobs with less favourable working conditions (often temporary and part-time). Most are therefore at the lower end of the employment market.
Working conditions play a major part in terms of the willingness and ability to continue working. Exposure to both physical risks and psychosocial risks is linked with the (perceived) inability to carry on working. The employee's health appears to play a far lesser role. However, this may be due in part to the 'healthy worker' effect, in that those employees in poor health will have already left the employment process and therefore are not included in the survey data. As a result, the influence of health may appear to be smaller than it really is. Nevertheless, it may be expected that an increasing number of employees who are not in optimum health, including those with a chronic illness or disability, will take up employment and will remain in work for longer. Health will then become an increasingly important factor.
This study has also identified factors which have a positive influence on the willingness and ability to continue working until retirement age. They include financial aspects and good working conditions. Those employees who earn a good salary and are able to achieve a good work-life balance are more motivated to work longer, and are also more likely to be able to do so. The same applies to employees who have recently attended a training course.

We may conclude that the likelihood of an employee continuing to work until retirement relies on the totality of those factors which discourage doing so (physically or psychosocially taxing working conditions, shiftwork, poor health, etc.), the positive factors (high salary, autonomy and a satisfactory life-work balance) and legislation which regulates such matters as pension release and entitlement to social security benefits. The factors which encourage continued employment are more often found at the upper end of the employment market, among highly educated and well qualified employees, while those which prompt employees to withdraw from the labour market are to be found at the lower end, among employees with a lower level of education. It has been forecasted that the divide between these two groups will become even wider over the coming fifteen years (Wevers & Van Genabeek, 2005). Well-qualified staff will be able to demand even better terms and conditions of employment, while those at the lower end of the market will find it increasingly difficult to do so. Their career development opportunities will be further restricted, whereupon they will be unable to progress to a position higher up the career ladder where the terms and conditions are better. It seems likely that this will have a further negative impact on the willingness and ability of these employees to remain at work until the statutory retirement age.

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Chapter 4 Occupational health services in the Netherlands: current status and future prospects

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Summary

Dutch employers are required by law to seek expert advice on matters of Occupational Safety and Health (OSH). They can employ one or more qualified experts, make individual arrangements with a number of external experts, or buy a package of services from an external occupational health service. In 2009, some 3% of employers had made individual arrangements, while 80% had entered into a contract with an external expert or consultancy organization.

The main service contracted by employers is sick leave management and guidance, further to the statutory requirement to minimize absenteeism through illness. The second most popular form of service is the Risk Inventory and Evaluation (RI&E), although an ongoing downward trend can now be observed. In 2009, three quarters of all companies made arrangements with regard to the RI&E, compared to 85% in 2005.
Some employers also choose to contract additional OSH-services which are specific to the company itself, the nature of its services or the needs of individual employees. Some such services are also conducted in-house: training in the appropriate method of lifting heavy items is more often organized by the employer organization itself, while psychological support services are more likely to be outsourced. Employers are now attaching greater importance to psychological support in the form of stress management courses and the prevention of 'burnout'. It would seem that they are responding to the problems associated with the pressure of violence and harassment at work. To date, there has been somewhat less interest in relatively new services such as lifestyle advice for staff, fitness testing and exercise programmes for staff.

When selecting an OSH-service provider, employers have a number of considerations. The content of the service package is important: almost 60% of employers base their decision on an assessment of the products and services included in the contract price. However, there is also a relatively large group of employers who devotes little or no attention to content as such. Almost one third opts to renew their contract with the same service provider year after year. In 2010, there were 63 certified external OSH-service providers and 27 certified internal OSH-service providers in the Netherlands. The seven largest external service providers accounted for a market share in excess of 80%.

The decrease in sickness absenteeism has resulted in a decline in the external consultancies' revenue. This is due in part to the reduced financial incentive for employers to invest

in OSH-services, while it is also due to certain legislative amendments. For employers, costs are often a prime consideration. The service providers have responded to the changing market by expanding their range of products and services, but to date this has not increased their revenue levels.

4.1 Introduction

This chapter is about care for occupational safety and health (OSH), including the reduction of sickness absenteeism. Employers contract this assistance in order to ensure safe and healthy working conditions for their workers, and to reduce absenteeism with the associated costs and loss of productivity. In the majority of cases, employers contract the services of an external expert[11] or service providing organization. The products and services purchased will often have a significant effect on the quality of the company's Health and Safety arrangements. Employers regard the contracted services as successful if they meet their own wishes and requirements, and if their employees also derive the intended benefit. In this context, it is important that the products and services are cost-effective and readily available. To obtain a full picture of the quality of OSH-services, it is necessary to examine not only the products and services themselves, but also the way in which the market functions. Both aspects are considered in this chapter.[12]

The key questions are therefore: what is the current status of OSH- services in the Netherlands and what are the most interesting prospects for the future?

We shall answer these questions by first examining how employers organize OSH-management, including the use of external services. We then go on to examine supply and demand. What products and services do OSH-services offer, and which are currently being purchased by the employers? Next, we examine how the market for OSH- services functions. What are the trends in revenues and market share, and how willing are employers to switch from one service provider to another? Based on our conclusions, we shall then outline some likely future developments.

4.2 What is occupational safety & health (OSH) management?

All employers are required by law to ensure good working conditions and to take measures to reduce absenteeism through illness. The government has passed legislation which establishes the rights and responsibilities of both employers and employees. The legislation covering working conditions includes the Arbeidsomstandighedenwet (Working

11 Under Article 2.7 of the Working Conditions Directive, assistance may be provided by a qualified doctor (company medical officer), a safety expert, an occupational hygienist, or a qualified management and organization specialist.

12 We have opted not to consider the added value (net effectiveness) of specific Health & Safety activities since too little data is currently available.

Conditions Act, usually abbreviated to Arbowet), the Arbeidsomstandighedenbesluit (Working Conditions Directive or Arbobesluit), the Arbeidsomstandighedenregeling (Working Conditions Regulation or Arboregeling) and a set of policy statements known as the Beleidsregels arbeidsomstandighedenwetgeving[13] (Arbobeleidsregels). The obligation to reduce absenteeism through illness is established by Book 10 Section 7 of the Netherlands Code of Civil Law and the Wet Verbetering Poortwachter (Gatekeeper Act, concerned with the reintegration of employees following a period of sickness absence).

Legislation in brief

The Arbeidsomstandighedenwet (Working Conditions Act) requires employers to implement a formal Health and Safety policy. It sets out the main framework for such a policy, the details of which are established by the underlying Arbeidsomstandighedenbesluit (Working Conditions Directive) which includes some provisions which are specific to certain sectors or employee categories. All provisions are statutory requirements which must be observed by employers and employees alike to mitigate or obviate occupational health risks. The Arbeidsomstandighedenregeling (Working Conditions Regulation) sets out a series of detailed requirements with regard to matters such as the certification of external Health and Safety service providers, reporting of occupational illness and periodic Health and Safety inspections to identify (potential) risks. Finally, the Beleidsregels arbeidsomstandighedenwetgeving (Health and Safety Policy Rules) establish the manner in which all relevant legislation is to be implemented, regulated and enforced.

The Dutch Code of Civil Law requires the employer to continue paying a sick employee for a period of two years (104 weeks). The amount to be paid is at least 70% of the employee's regular salary or the statutory minimum wage, whichever is higher. However, the vast majority of Collective Labour Agreements (CAOs) require the employer to pay more than the minimum 70% during the first year, usually the full salary. Only in the second year of absence may the payment be reduced to 70%. The Wet Verbetering Poortwachter includes statutory requirements which apply to both employers and employees with regard to (long-term) sick leave and re-integration. For example, the employee and employer (in practice, generally the line manager) are required to assess the situation after six weeks to determine whether long-term absence is likely, and if so to produce a full problem analysis with the assistance of the occupational health physician.

The purpose of all legislation is to ensure good working conditions, with particular regard to occupational Health and Safety, the reduction of absenteeism and the full reintegration of employees following any long period of illness or incapacity. The legislation is preventive in nature, ensuring that employees do not have to withdraw from the employment process due to an occupational illness or accident sustained in the workplace, and that any employee who suffers from illness or injury can return to work as soon as possible in the interest of productivity and herewith reducing the social security burden.

13 Many of the 'policy rules' were repealed on 1 January 2011 and are no longer in effect.

Two ways in which OSH services are organized

Article 14 of the Working Conditions Act requires employers to contract expert assistance when devising and implementing their Health and Safety policy. There are two ways in which they can do so:

- Individualized arrangements (separate contracts with a number of experts)
- By contracting the services of a certified occupational health service or establishing an internal OSH service.

The Dutch government encourages employers to organize OSH services internally, which is easiest when applying the individualized arrangements. If it is not possible to do so, they may purchase a 'standard package' of services from an external provider.
In case the employer opts to make individual arrangements, a qualified occupational health physician must be available to assess employees on sick leave, to conduct regular (occupational) health examinations (known by the acronym PAGO) and to conduct pre-employment examinations where required. An employer wishing to make individualized arrangements must have the written consent of the relevant staff representative bodies such as the Works Council. Moreover, individualized arrangements are only possible if specifically permitted by the Collective Labour Agreement for the sector concerned. In practice, very few employers wish to make such individualized arrangements. According to the results of a survey conducted by the Labour Inspectorate, only 3% of companies had done so in 2009.

Most companies opt for the 'standard' package of services provided by an internal or external occupational health service. The Labour Inspectorate's survey reveals that in 2008 and 2009, some 80% of the companies had contracted such a service provider. In most cases (74%) the contract was with an external consultancy. The National Employers Work Survey (NEWS) 2008 shows similar percentages. If we look back over a number of years, however, the percentage of companies having a contract with an external occupational health service has fallen from 83% in 2006 to 74% in 2009 (Table 4.1).

Of those companies which have not contracted an external service, most (3%) engage only one expert (the occupational health physician) or have set up their own internal occupational health service (1%). As shown in Table 4.1, it is the larger companies which are more likely to make individual arrangements or establish an internal occupational health service.

It is notable that 22% of companies are unable to state what OSH- products and services are available to their employees, even though they are required by law to have taken the necessary measures.[14] The Bedrijfsgezondheidszorgmonitor 2010 (Corporate Healthcare Monitor) reveals that almost half of the companies arranges their OSH-activities through an intermediary, often an insurance company. The organization of OSH management is

14 Further to Article 14, para. 4 and Article 14a para 6 of the Working Conditions Act, the manner in which the statutory responsibilities are fulfilled must be recorded in writing, regardless of the form of the arrangements.

therefore less visible, if at all, to the employer because everything is integrated into a single package which also includes insurance to cover the cost of paying the salaries of staff on long-term sick leave.

Table 4.1: Percentage of companies which have contracted an occupational health service or other service provider

CONTRACT WITH OSH SERVICE PROVIDER?	2004	2005	2006	2007	2008	2009
certified OSH service	90	86	82	79	73	71
internal OSH service	-	-	1	1	1	1
uncertified service provider	-	-	1	1	2	3
unknown or not possible to ascertain	-	-	-	3	2	2
only other H&S expert(s)	-	1	2	2	3	3
other H&S expert(s) plus consultancy	-	-	4	7	7	7
Total with a contract *)	**90**	**87**	**86**	**85**	**79**	**80**

*) The totals do not add up to 100 due to the overlap between occupational health service organizations and individual Health and Safety experts.

SOURCE: Labour Inspectorate Corporate Healthcare Monitor 2004-2009

Four types of contract

Employers are able to enter into various types of contract with occupational health services. The majority of contracts fall into one of four categories:

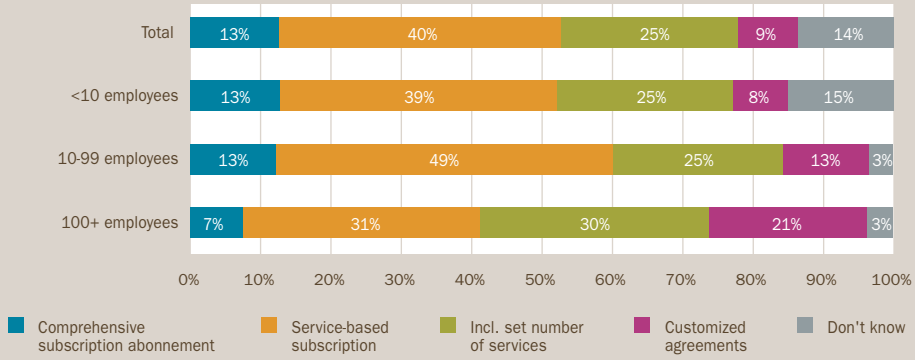
1. Comprehensive subscription: a complete package of products and services provided at a set 'all-in' annual fee.
2. Service-based subscription: a complete package provided at a variable basic charge, depending on the products and services selected.
3. Subscriptions covering a specific (selected) combination of products and services.
4. Customized agreements, with contracts for specific products and services.

In the case of 3) and 4), the employer pays a variable charge for each service provided.

The Corporate Healthcare Monitor 2010 shows that the majority of companies which purchase products and services from an external service provider favour the Service-based subscription (see Figure 4.1). This type of contract is also known as an 'administrative' or 'basic' agreement, whereby companies have access to the full range of product and service at a low basic fee which is calculated on the basis of the total number of employees. The full fee for each service is payable only if and when it is used. In many cases, such contracts require the employer to authorize the service provide to provide whichever products and services it deems necessary to meet the requirements of the Wet Verbetering Poortwachter. This type of subscription is similar to the comprehensive subscription in that the service provider assumes full responsibility for the relevant OSH-management activities. However, the service-based subscription can represent a greater financial risk

to the employer because fewer products and services are included 'as standard'. This financial risk must be weighed against the benefit of a lower basic price.

FIGURE 4.1 **Take-up of various contract forms for occupational health services, by size of company, in 2010**



SOURCE: Occupational Health Monitor 2010

We now turn our attention to the role of the external occupational health services in ensuring good working conditions. The external service providers are regarded as the primary service providers since they have been contracted by almost three quarters of all employer organizations.

4.3 Types of OSH management

There are various ways in which the external occupational health services can assist and support employers. The services they provide can be divided into three main categories:
- Statutory tasks further to Article 14 of the Working Conditions Act
- Specific services for the employer organization as a whole (perhaps further to the nature of its activities)
- Voluntary services targeting individual employees.

Table 4.2 shows the employers' take-up of the various types of products and services.

Table 4.2: Most popular products and services provided by Occupational health servicesoccupational health services, by type of service

TYPE	PRODUCTS AND SERVICES
Statutory tasks under Article 14 of the Working Conditions Act	Assessment of the Risk Inventory and Evaluation (RI&E) Sick leave management and supervision Regular occupational health medical examinations (PAGO) Pre-employment medical examinations
Company-specific services	Training in lifting Courses in stress management and prevention of burnout Mediation/psychological support Welfare services Physiotherapy Social-medical consultation (SMO)
Voluntary individual services	Vitality policy Lifestyle assessment and advice Fitness tests Exercise programme Employability assessments

Support in statutory OSH tasks

The law requires employers to implement a number of OSH measures. Under Article 14 of the Working Conditions Act, the employer must also seek expert advice with regard to the Risk Inventory and Evaluation (RI&E), supervision of employees on sick leave, regular medical examinations (PAGO) where required, and pre-employment medical examinations, again where required.

Risk Inventory and Evaluation (RI&E)

Article 5 of the Working Conditions Act requires employers to conduct a full Risk Inventory and Evaluation (RI&E). They can do so using a (digital) checklist which identifies the various risks to which staff are exposed. Based on the results, the employer must then produce an action plan which sets out the measures to be implemented in order to address and minimize those risks. The company's 'prevention worker' has an important part to play in planning and conducting the RI&E.

Once the RI&E has been completed and the action plan produced, both must be assessed by an accredited occupational health service, which will ascertain whether the RI&E is complete, current and reliable. In some cases, this will involve a physical inspection on site. Smaller companies (with up to 25 employees) require only a 'light' assessment of the RI&E, based on a written report. The assessment of the RI&E is not required where the company has less than 25 employees and the employer has used a checklist stipulated by the Collective Labour Agreement, or where the number of hours worked by all employees combined total less than forty in any one week.

Sick leave management

Employers are also required by law to engage expert assistance in supervising and maintaining contact with employees who are on sick leave, or are unable to work for any

health-related reason. Most companies have a rule whereby employees must report sick to the occupational health service within the first week of absence. Under the Wet Verbetering Poortwachter, the employee and the employer (in practice the line manager) are required to produce a problem analysis if the employee is still absent from work after six weeks, and to involve a occupational health physician. The occupational health service can also provide support to the employer on a number of other statutory obligations, including:

- the six-weekly progress interviews with the employee (which might involve training line managers in conducting these interviews);
- producing a reintegration plan;
- producing and implementing an action plan in the eighth week of sick leave;
- reporting the case to the UWV (the government agency responsible for administering social security benefits) in the thirteenth week of sick leave;
- producing the first-year evaluation;
- submitting the application for disability benefit (to offset the employer's obligation to continue paying the absent employee's salary after two years of sick leave).

Periodic Occupational Health Examinations (PAGO)

Article 18 of the Working Conditions Act requires employers to offer a regular medical examination. This 'check-up' focuses on the occupational risks of the employee's work, with the goal to prevent or minimize any adverse health effects.

Pre-employment medical examinations

If a company requires a candidate for a position to undergo a medical examination, that examination must be performed by a registered occupational health physician (who may or may not be affiliated with the contracted occupational health service).

Company-specific OSH- activities

Over and above their statutory responsibilities, many employers opt to implement various measures intended to prevent adverse health impact and reduce health-related absenteeism. These measures generally address risks which are specific to certain industries or the company concerned. Some are prompted by the responsibilities revealed by RI&E, while others are more voluntary in nature. Occupational health services offer various products and services in this area.

Training in lifting

There is a right way to lift heavy objects and there are many wrong ways which can result in (permanent) back injury. Occupational health services train staff to use the correct method and to pay attention to their posture in all work activities.

Courses in stress management and preventing burnout

Occupational health services as well as other service providers offer an extensive range of services to help employees avoid or manage stress and burnout. They range from straightforward lectures and courses to on-the-job training, coaching and counselling.

Mediation

Mediation is a form of conflict resolution in which the mediator acts as an independent and impartial advisor to help the parties concerned (employer, employee, manager, colleagues, etc.) to find a mutually acceptable solution to their differences. An important precondition is that the parties must want to resolve those differences without recourse to the judicial system. The mediator advises and guides the process; he or she does not arbitrate.

Psychological support

Psychological counselling must take into account both the employee as an individual and the setting in which he or she works. The psychologist helps the employee to develop the skills required to resume work or to improve current performance. This may entail adapting behaviour and attitudes, enhancing personal effectiveness or, in some cases, seeking alternative employment more suited to individual abilities and requirements. The psychologist will also assess whether any adaptations to the work itself are required to allow the employee to perform at his or her best. It may be appropriate to adjust the content of the work, the interpersonal relationships within the hierarchy, the physical conditions or the entire organizational structure. Occupational psychologists are able to rely on a standard handbook, 'Work and pyschological complaints' (NIP, LVE, 2005) which provides a systematic framework for the psychological support services provided by occupational health services.

Welfare services

Where individual employees or groups of staff are suffering from tension or stress which leads to problems at work, counselling may offer a solution. The objective of such welfare services is to optimize both personal performance and teamwork within the department. It is another way in which to reduce health-related absenteeism and to create good working conditions throughout the organization. The staff welfare representative will identify any shortcomings in the organization's policy and advise management accordingly.

Physiotherapy

The occupational physiotherapist advises on working processes and procedures, and the ergonomic design of the workplace. He or she may also provide advice and training to (groups of) staff. In many companies, the physiotherapist is closely involved in performing the RI&E and producing the relevant action plan.

Social-medical consultations

'Social-medical consultations' (SMO) are a structured series of meetings at which the occupational health physician discusses health-related matters with line managers, the personnel manager and experts involved in the reintegration of staff on long-term sick leave. In these meetings, the medical officer acts as an advisor with regard to the OSH-responsibilities addressing both individuals and the workforce as a whole. The SMOs have traditionally been a method of providing management with the required support and advice, particularly with regard to the reintegration process. In recent years, they

have also become a means of allowing management to address the health and welfare of all staff or specific groups of employees (NVAB 2010).

Voluntary individual services

In recent years, many companies have introduced a 'vitality policy' for their employees. A vitality policy can best be described as a strategy to improve the health and motivation of the workforce so that they can continue to work for longer and with greater job satisfaction. A vitality policy is assumed to have a number of concrete results, including:

- improving the general health of employees;
- enhancing the employability of employees;
- increasing productivity of employees.

Vitality policies come in many shapes and sizes. Some companies choose to focus on specific groups of employees, often those in the more senior age groups, while others have a vitality policy which addresses all staff. The policy can embrace a number of aspects, such as lifelong learning, lifestyle (better diet, more exercise), the energy balance (the relationship between those factors of work which tend to drain energy and those which restore energy) and achieving a good work-life balance.
Occupational health services now offer a number of services to assist companies in implementing their vitality policies. By expanding their activities in this way, these service providers are attempting to increase their added value and hence create additional market opportunities.

Lifestyle assessments

Occupational health services and various other service providers offer employers the opportunity to arrange 'lifestyle assessments' and general health checks for their employees. This often involves a short medical examination in combination with a questionnaire which enquires into the employee's health-related behaviour, such as how much he exercises per week, whether he drinks or smokes, his diet, and how often he is able to relax (including how many hours' sleep he gets each night). The medical examination assesses the employee's general physical and mental condition (e.g. blood pressure, weight, waist measurement, body fat percentage and BMI) and any current health problems. Some service providers also check cholesterol and blood sugar levels, and conduct a preventive cardiovascular examination in the form of an ECG, an IMT (Intima Media Thickness) measurement and/or a cardio-echogram. Some even go as far as to offer 'whole body scans'. Based on the results of the various tests, employees are given advice about possible follow-up tests and lifestyle changes.

Fitness tests

Fitness tests are designed to provide an understanding of the health risks faced by employees further to lack of exercise. They generally involve a short assessment of strength, endurance, agility and speed. Many also require the employee to complete a questionnaire about his lifestyle and general health. Based on the results, employees are given

advice about ways of avoiding the health risks associated with low levels of physical activity.

Exercise programmes

Employers are able to contract occupational health services or other service providers to organize sports and fitness activities for their employees. Once again, the aim is to promote vitality and general health. The costs to the employer are often tax-deductible.

Employability assessments

Some service providers offer to assess the 'sustainable employability' of the employer's staff. This assessment may be part of the regular occupational health examination (PAGO) or another preventive medical examination. In addition to health itself, the employability assessment looks at other factors which affect long-term employability, such as engagement and commitment, the willingness to seek solutions, update and improve skills and general performance.

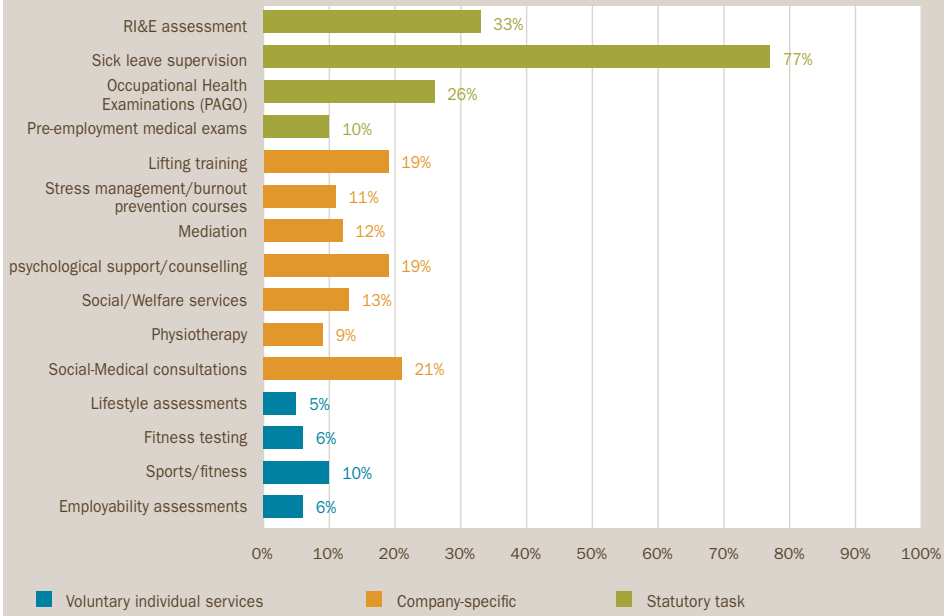
4.4 What occupational health services do employers actually purchase?

In the previous paragraph it is shown that occupational health services and other service providers have a lot of support to offer companies to comply to legislative demands and other company needs on OSH. Figure 4.2 shows the take-up rate for these various products and services offered. These services are grouped according to the three categories of statutory tasks, company-specific services and voluntary individual services. The statistics on which this figure is based are drawn from two sources:

1. Information relating to the statutory tasks is taken from the Labour Inspectorate Corporate Healthcare Monitor 2009, which asks employers whether they had made contractual arrangements with occupational health services to provide the necessary support and assistance.
2. Because the Labour Inspectorate Monitor 2009 does not provide any information relating to the other two categories, this data is taken from the Corporate Healthcare Monitor 2010, which asked employers to list the products and services they had purchased from occupational health services in 2010.

Both studies are based on a representative sample of employer organizations and both were conducted in more or less the same period.

FIGURE 4.2 **Percentage of all companies which purchased the various types of Health and Safety products and services in 2009**



BRON: Labour Inspectorate Occupational Health Monitor 2009 and Occupational Health Monitor 2010

Take-up of support in statutory tasks is greatest

It is shown that a relatively high percentage of companies contract occupational health services to provide assistance in the supervision of employees on sick leave, the assessment of the RI&E and, to a slightly lesser extent, the Occupational Health Examinations (PAGO). This was to be expected because companies are required by law to seek expert assistance in these areas.

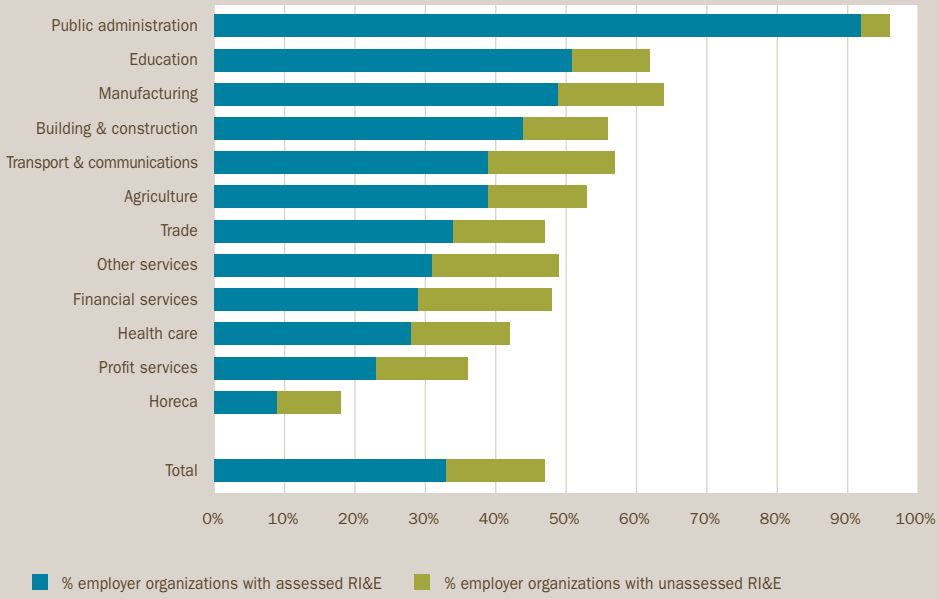
It is notable, however, that a substantial percentage of companies have yet to make contractual arrangements with a service provider with regard to the statutory tasks. It is not entirely clear why they have failed to do so. One possible explanation is that some employer organizations have yet to be confronted with (new) statutory requirements. If the RI&E does not need to be assessed (because it has already been assessed and approved in the past), if there are no employees on sick leave, and if there are no medical examinations to be conducted, the employer will not have felt the need for any assistance in doing so. We now examine the RI&E and sick leave management in further detail.

RI&E assessment

At the reference date of 1 July 2009, 46% of Dutch employer organizations had produced a RI&E (source: Labour Inspectorate Corporate Healthcare Monitor 2009). Larger compa-

nies are more likely to have a RI&E than those in the small and medium-sized enterprise sector. Among the smallest organizations (with fewer than 10 employees), 38% have a RI&E; among those with between 10 and 99 employees the figure is 74%, while in the case of large organizations with 100+ employees, the figure is 95%. Overall, 33% of Dutch employer organizations have had a RI&E which has been assessed by an occupational health service or certified professional, while 14% have a RI&E which has not (yet) been assessed. The percentage of organizations with an assessed and accredited RI&E has fallen slightly in recent years, from 36% in 2005/2006 to 33% in 2009.

FIGURE 4.3 **Employer organizations with an assessed or unassessed RI&E by sector**



SOURCE: Labour Inspectorate Occupational Health Monitor 2009

Figure 4.3 shows that the vast majority of public sector organizations have a RI&E which has been assessed and approved. The percentage of employer organizations in education, industry and construction which have an approved RI&E is also relatively high. The lowest percentages are to be seen in the horeca, the profit services sector and health care.

Sick leave management

In 2009, 77% of Dutch employer organizations had contracted an occupational health service to assist in supervising and maintaining contact with employees on sick leave (see Figure 4.2). This percentage has shown an on-going decrease since 2005, in which year it was 85%. It fell to 83% in 2006, 81% in 2007, 78% in 2006 and 77% in 2009.

Not all organizations which have contracted an occupational health service to supervise employees on sick leave have established an internal sick leave policy. According to the Labour Inspectorate Corporate Healthcare Monitor 2009, only 72% had made clear agreements with regard to sick leave procedures. Small companies with fewer than 10 employees are less likely to have done so (32%), particularly in agriculture and in the horeca. Table 4.3 shows an increase in the number of organizations which have made formal agreements (at least partly in writing) until 2007, whereupon the figure seems to have stabilized in 2008 and 2009. There has been a concomitant decrease in the number of companies which rely solely on verbal agreements. The number of employer organizations with no agreements at all, whether written or verbal, increased throughout 2008 and 2009.

Table 4.3: Sick leave policy in percentages

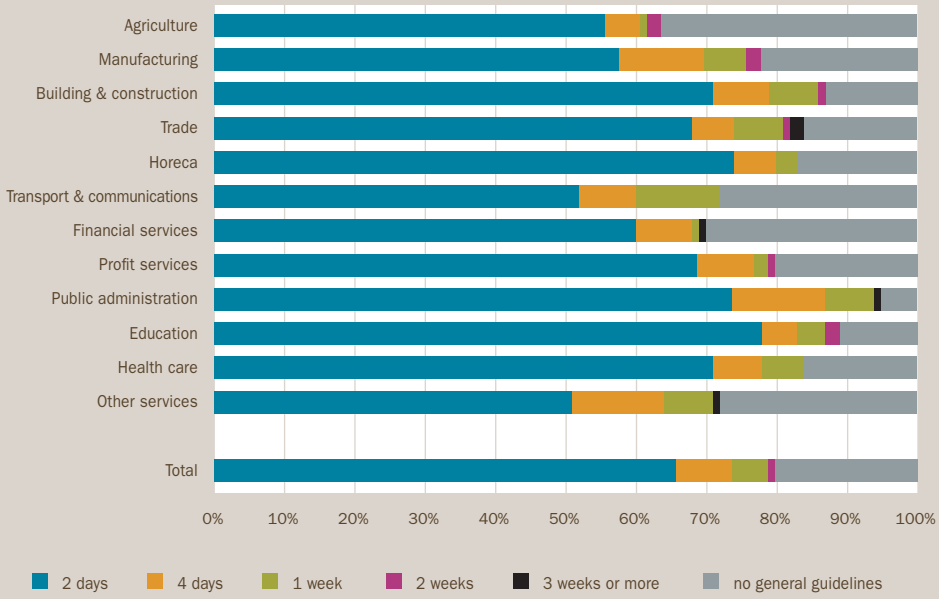
DOES THE ORGANIZATION HAVE A FORMAL SICK LEAVE POLICY?	2004	2005	2006	2007	2008	2009
Policy established in writing (at least in part)	33	35	42	49	42	43
Only verbal agreements	46	41	37	31	31	29
No agreements in place	21	24	21	20	27	28

SOURCE: Labour Inspectorate Corporate Healthcare Monitor 2004-2009

Sick leave management entails that (a representative of) the employer will contact the employee who has reported sick. This can be to check that he or she really is ill and not merely enjoying an unauthorized vacation, but can also be an opportunity to encourage the employee to return to work as soon as possible.

Some two-thirds of the employers contact the employee within two days of his reporting sick, while 78% do so within one week (Figure 4.4). Where there are any general guidelines in place, most state that contact should be made within one week. However, 20% of the employers do not have any general guidelines. Companies in agriculture, transport and communication, financial services and miscellaneous services are least likely to set guidelines, although this does not necessarily mean that they never contact their absent employees.

FIGURE 4.4 **Period within which contact is made with the employee on sick leave by or on behalf of the employer**

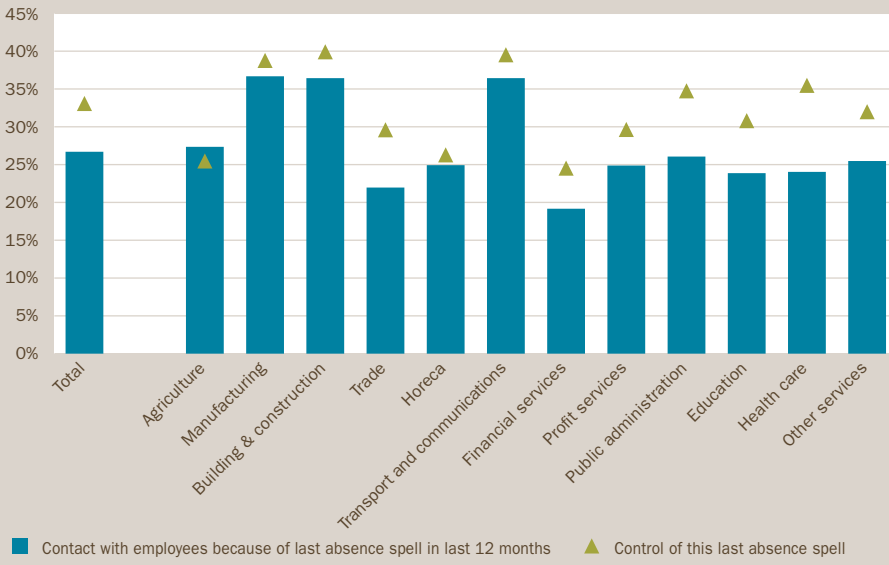


SOURCE: Labour Inspectorate Occupational Health Monitor 2009

From Figure 4.5 we see that an average of 26% of Dutch employees were contacted by their employer in connection with their absenteeism for health reasons during the most recent 12-month period. The percentage of employees contacted is relatively high in industry, construction and the transport and communications sector.

An average of 33% of the employees were subject to supervision and control further to the most recent period of sick leave, whether directly by the employer, the occupational health service or another organization, and whether in the form of a home visit, telephone call, letter or invitation to attend an interview.

FIGURE 4.5 Contact with employees further to supervision and control of sick leave



SOURCE: NEWS 2008

Company-specific OSH services more popular than voluntary individual services

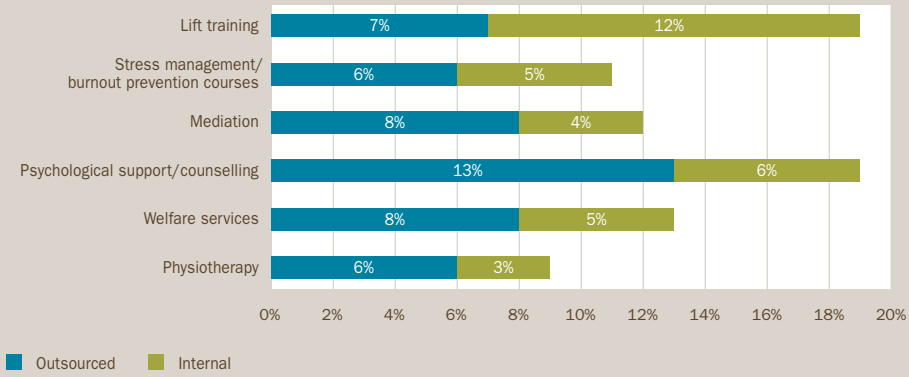
On average, employers purchase company-specific OSH- services more often than those which address individual employees. A relatively large number of employers have long arranged lifting courses and Social-Medical Consultation meetings, and engage the support of OSH- experts or consultancies when doing so. These activities are often further to the requirements identified by the RI&E. In recent years, we have also seen growing demand for psychological support, such as courses in stress management and the prevention of burnout. It would seem that employers are using these services to respond to the problems of work pressure and violence and harassment in the workplace (see also Chapter 2). According to the findings of the National Working Conditions Survey 2009 (NCWS), some 40% of the employees consider (further) measures to limit work-related stress to be necessary. However, the exact nature of the measures they have in mind is not known.

Employers have shown relatively little interest in lifestyle assessments, fitness tests and exercise facilities in the workplace. The Corporate Healthcare Monitor 2010 shows that less than 10% of small companies (with fewer than 50 employees) purchase such products from the occupational health services. The figure is only slightly higher among large companies (> 500 employees).

Company-specific OSH- services are also organized internally

Some employers, especially the larger organizations, opt to implement company-specific OSH-activities internally. The percentage of companies doing so and the number that outsource these activities to an external service provider are shown in Figure 4.6, which is based on the results of the Corporate Healthcare Monitor 2010. We see that lifting training is more likely to be organized internally, while psychological support services are more likely to be purchased from an external service provider.[15]

FIGURE 4.6 **Company-specific OSH- services outsourced or organized internally, by percentage of total**



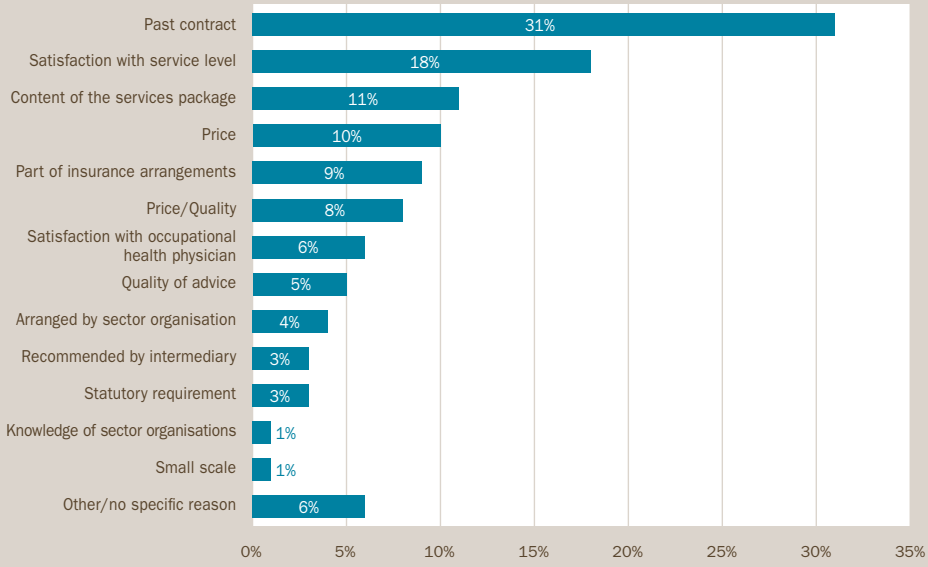
SOURCE: Corporate Healthcare Monitor 2010

Employers base their choice of the OSH-service provider on very diverse factors

When selecting a Health and Safety consultancy, employers take many considerations into account (Figure 4.7). Almost 60% of the employers base their decision on an assessment of the service provider itself, in terms of client satisfaction (18%), content of the services package (11%), price (10%), price-quality ratio (8%), good personal contact with the occupational health physician (6%) and the quality of the advice provided (5%). However, there is also a large group of employers who ignore such factors altogether. Almost a third opts to remain with the service provider with which they have done business with for many years. They do not review their arrangements because they are unable to assess alternative service providers effectively. There is a further group of employers who allow others to make the choice for them, relying on the recommendations of insurance companies (9%), sector organizations (4%) or intermediates (3%).

15 It is not possible to state the extent to which Social Medical Consultations or individual voluntary activities are organized by employers themselves, since the Corporate Healthcare Monitor does not provide the necessary information.

FIGURE 4.7 Reasons for selecting an occupational health service



SOURCE: Corporate Healthcare Monitor 2010

4.5 Market developments on OSH

Occupational health services have developed a broad package of products and services over the course of many years. Further expansion of the products and services might enable the consultancies to offer greater added value to their clients while also expanding the market for OSH- services. However, these positive effects cannot be taken for granted. Employers remain free to select certain products and reject others. Competition from other service providers will also play a part. There are now many companies which offer various types of 'vitality' and 'wellness' products: the established occupational health services must compete with fitness centres, private clinics and the like.

Reduction in absenteeism is associated with falling revenue

Have employers actually spent more on occupational safety and health since more products and services have become available? Figure 4.8 reveals that the revenue of the occupational health services peaked in 2003, after which it fell for a number of years before levelling off at the current level. The decline can be explained in part by the reduction in absenteeism through illness seen since 2002, which has in turn reduced the financial incentive for employers to invest in the products and services offered by the consultancies. Prior to 2003, the opposite trend could be seen: rising absenteeism prompted

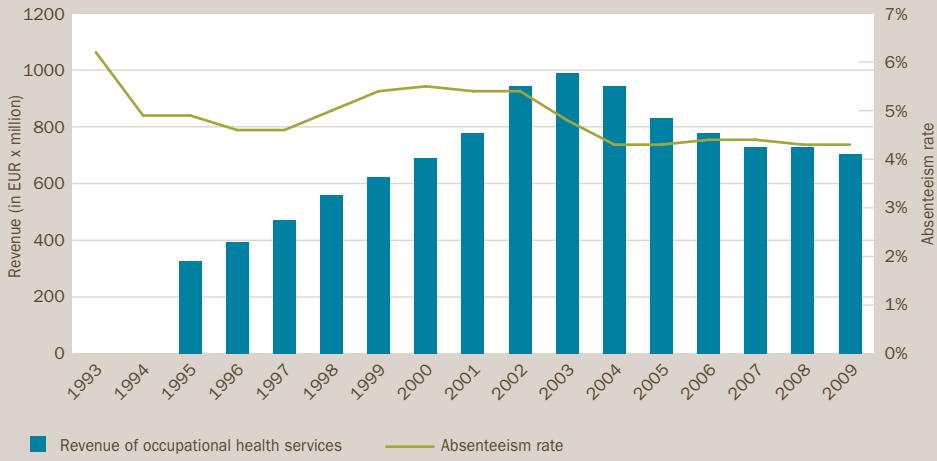
employers to invest more in the products and services offered by the occupational health services.

Market shifts and a 'price war' further to legislative amendments

The steady increase in revenue seen until 2003 can also be explained in terms of the introduction of new legislation in 1994, whereupon employers were required to continue paying the salary of a sick employee during his period of absence. Legislation was also introduced which required employees to engage the services of a certified OSH- expert or consultancy. This requirement was implemented in several phases: from 1994 in the case of the high-risk sectors, and from 1996 for all other sectors, whereas since 2004 the duration of the period for which they had to pay the salary of the sick employee was increased from one to two years of absence. A legislative amendment in 2005 gave employers greater freedom of choice in terms of how they wished to arrange the statutory OSH- activities, and in terms of how and where they would acquire the necessary expertise and support. At the same time, certain prevention activities were made mandatory (under Article 13 of the Working Conditions Act).

Many employers, particularly larger organizations, immediately cancelled their existing contracts or subjected them to close scrutiny. In most cases, they did so in order to reduce costs, although there may also have been an element of dissatisfaction with the services currently provided (and that dissatisfaction may indeed have been justified). The opportunity to make individualized arrangements proved an attractive option for many employer organizations. Although only a small proportion eventually opted to take this route (3% according to the Labour Inspectorate Corporate Healthcare Monitor), many contracts were nevertheless reviewed and amended. Companies seized the opportunity to purchase occupational health services under new, more favourable, terms and conditions. The occupational health services, which had thus far enjoyed relatively high profit margins, were now forced to compete more on the basis of price. Moreover, the market saw a number of new entrants, including small consultancies, independent doctors willing to act as occupational health physicians, case management bureaus and insurance companies offering cover against the costs of absenteeism. These factors put prices under severe pressure, whereupon the existing occupational health services saw their turnover and profits plummet.

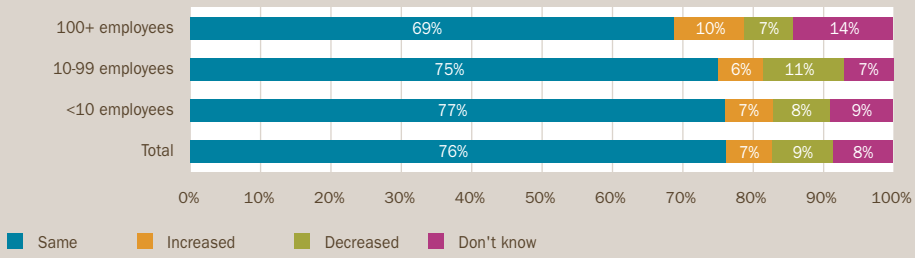
FIGURE 4.8 **Trends in the revenue of occupational health services against the results of their efforts in reducing absenteeism**



SOURCE: CBS Statline and Corporate Healthcare Monitor 2010

In recent years, the amount which companies spend on OSH-activities has remained relatively stable. Figure 4.9 shows that the budget for such activities in 2010 is very similar to that in the preceding year. Only 6.5% of employers report any increase in the budget, while 8.7% actually reduced their expenditure. Only among the largest companies is the budget more likely to have increased rather than been reduced, but here too the vast majority of companies report that the budget has remained the same.

FIGURE 4.9 **Trend in Health and Safety budget, 2010 vs 2009**

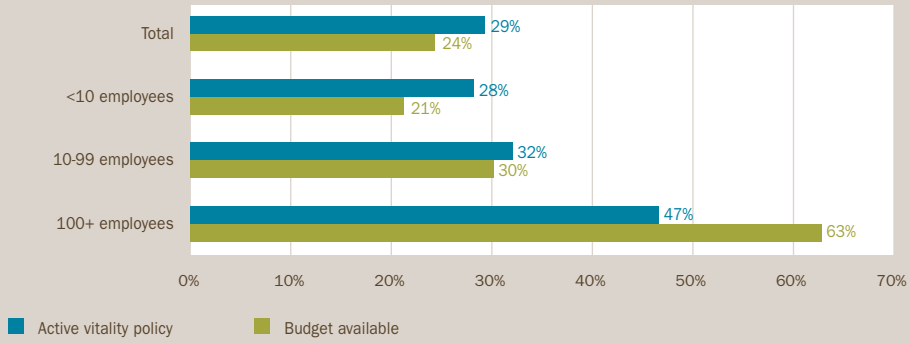


SOURCE: Occupational Health Monitor 2010

Expansion of product range has failed to increase revenue

Have the occupational health services been able to stop the fall in revenue by offering a greater number of products and services? The Corporate Healthcare Monitor 2010 shows that only a relatively small proportion (an average of 10%) of employers' OSH-budget is spent on the new services addressing vitality and lifestyle. This is confirmed by the answers to the question examining the extent to which companies have implemented an active policy to address employee vitality (see Figure 4.10). Of all Dutch organizations, 29% state that they have such a policy. This percentage has remained unchanged since the 2008 survey. Moreover, having a vitality policy does not mean that the employer concerned will actually invest money in it. Only one in four organizations with an active vitality policy have set aside a budget to fund relevant activities, and this percentage has fallen since 2009 when 34% claimed to do so. The conclusion must be that the expansion of the occupational health services' product range to include vitality and lifestyle services intended to enhance the health and long-term employability of the workforce has not resulted in any significant increase in revenue.

FIGURE 4.10 **Percentage of companies with an active vitality policy, and percentage of companies which have made a budget available to support that policy**



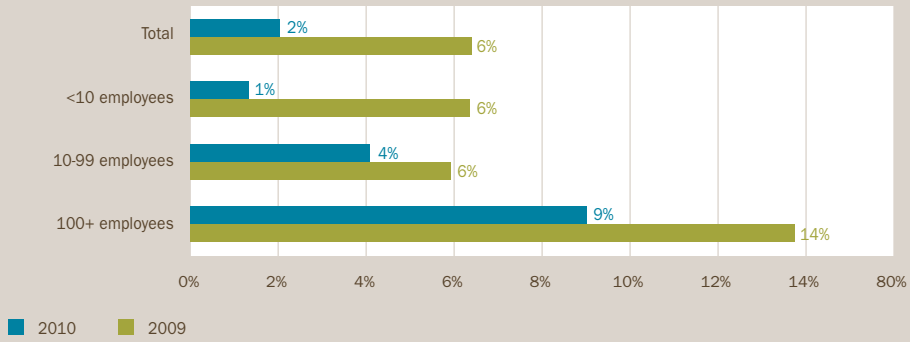
SOURCE: Corporate Healthcare Monitor 2010

Employers see little reason to switch from one occupational health service to another

Product expansion and innovation is one indicator of market dynamics. Another indicator is the willingness of employers to consider taking their business to another occupational health service provider, known in marketing circles as 'switching behaviour'. The possibility of 'switching' provides incentives on both sides: the occupational health service is encouraged to offer a high level of services, while the employer is encouraged to arrange purchasing products and services in the most efficient and effective manner possible. Service providers must therefore make ongoing efforts to stand out from the competition.

Figure 4.11 shows that, in recent years, relatively few employers have considered taking their business elsewhere. Moreover, the desire to do so fell markedly in 2010.

FIGURE 4.11 **Percentage of employers who considered switching Health and Safety service provider in 2009 and 2010**



SOURCE: Corporate Healthcare Monitor 2010

Market concentration despite proliferation of service providers

The limited interest in switching service providers may be linked to the number of service providers active on the market. When there are few service providers, employers have very limited choice. However, this is not the case. The SBCA, the organization responsible for registering the accreditation of occupational health services, reports that there were 63 certified external occupational health services in 2010, and 27 certified internal occupational health services. There is also an unknown number of uncertified experts active on the market and entitled to offer certain OSH-related services. Despite this proliferation of service providers, a small number of large providers now enjoy a significant market share further to a number of acquisitions and mergers. As Table 4.4 shows, the seven largest occupational health services account for a combined market share of 80%.

Table 4.4: Market shares of occupational health services in 2008 and 2009, and percentage share of total gross revenue in the sector

OSH-SERVICES	REVENUE 2008 (€ MLN)	REVENUE 2009 (€ MLN)	REVENUE 2009 (€ MLN)	MARKET SHARE 2009 (%)
Arbo Unie	174,5	23,5	159,4	22,7
ArboNed (incl. Arbo DUO)	142,2	19,1	142,3	20,2
Achmea Vitale	147,7	19,9	134,1	19,1
Tinguely Netwerk BV	75,3	10,1	100,2	14,2
KLM Health Services	36,6	4,9	33,3	4,7
HumanCapitalCare	17,7	2,4	19,2	2,7
Beter	11,9	1,6	11,7	1,7
Subtotal	605,9	81,6	600,2	85,3
Internal H&S depts (23)	73	9,8	53	7,5
Other H&S service providers (54)	64	8,6	50,5	7,2
TOTAL	**742,9**	**100,0**	**703,7**	**100,0**

SOURCE: Corporate Healthcare Monitor 2010

To summarize, we can state that the occupational health services market now faces stagnating revenue and market supply-side concentration. On the demand side – the employers – there is little interest in switching from one provider to another. In order to preclude an all-out price war, the established occupational health services are attempting to enhance their attractiveness by expanding their range of products and services. However, when developing new products to address the individual aspects of vitality, wellness and employability, they face further competition from other types of service providers such as fitness centres and private clinics. Furthermore, the take-up of the new services by employers has remained very low to date.

4.6 The prospects for occupational health services

In the past, the occupational health services have focused on supervising employees on sick leave. In doing so, they have tried to meet the requirements of employers who face the additional costs caused by absenteeism. Those employers remain responsible for paying the absent employee's salary, and may also have to engage another worker to compensate for lost productivity. It is possible for employers to take out insurance against this type of unexpected outgoing, but the premiums represent an additional cost centre. Eventually, the insurance company will recoup any payment made through the premiums. It is therefore very much in the employer's interests to prevent or reduce absenteeism, and to ensure that sick employees will return to work as soon as possible.

As noted above, there seems to be a direct correlation between the absenteeism rate and employers' willingness to invest in OSH-services (see Figure 4.8). Employers spent more

when absenteeism was rising, and reduced their budgets when the absenteeism rate fell. Since 2005, the national absenteeism rate has remained reasonably constant at approximately 4%, which may well be one explanation for the stagnating revenues of the occupational health services in recent years. The relatively low absenteeism rate now achieved is due in part to the efforts of the occupational health services, although it is not possible to quantify their precise contribution (in terms of added value). It would nevertheless seem that the occupational health services have been the victim of their own success.

In the years ahead, employers face the challenge of maintaining the absenteeism rate at the current low level of 4%. This will not be easy, since there are indications that the overall health of the Dutch working population will deteriorate. The trend whereby people continue in employment for longer, until or perhaps even beyond statutory retirement age, means that there will be a greater number of employees with age-related health problems. In addition, the number of people with chronic health problems is expected to rise. Many such health problems are due to lifestyle factors: musculoskeletal problems, cardiovascular disease and diabetes caused by overweight and obesity, or hearing problems, for example (RIVM, 2007).[16] Society can no longer afford to exempt or exclude people with health problems or limitations from the employment process as it has in the past. It is projected that, from 2014 onwards, there will be an ongoing shortage of labour due to demographic shifts such as population ageing (Van Ewijk and Teulings, 2009). As a result, there will be even greater pressure on society to make full use of the available labour potential, whereby people must also remain in employment for longer. Everyone who is able to make a productive contribution must do so: "all hands on deck!". It will fall to the occupational health services to promote the sustainable, productive employability of the entire working population.

At the same time, the growing trend towards self-employment (as an individual professional practitioner without employees) will have consequences in terms of the way in which OSH-services are or will have to be organized. Employees with a formal contract of employment, whether permanent or flexible, will in principle have full access to the OSH- services organized or provided for by their employers. The self-employed, on the other hand, will not.[17] The number of self-employed has shown significant growth in recent years, from less than 400,000 in 1996 to over 600,000 at the end of 2009 (CBS, 2010). Expressed as a proportion of the total working population, this increase is from 6% to 9%. Although the rate of growth slowed in 2009 and 2010, a further increase in the number of self-employed is expected in the years ahead. We must then ask ourselves how OSH-services can best be organized for this group.

16 Developments since 2006 are reported on the RIVM website: www.nationaalkompas.nl

17 Large sections of the Working Conditions Act do not apply to the self-employed. They include certain administrative requirements such as the production of a risk inventory, and the provisions relating to work of a physically or pyschosocially strenuous nature. However, Article 9.5 of the Working Conditions Directive does list a number of risks which the self-employed must take measures to mitigate or preclude. For example, a self-employed person has exactly the same obligations as an employer with regard to working at heights and preventing falls, avoiding exposure to hazardous substances, using only appropriate tools and resources, and wearing appropriate personal protection.

To address both the expected growth in the number of workers with health problems and work limitations, and the growth in the number of self-employed, occupational health services may well opt to introduce further new products onto the market. There has already been a marked expansion of the product range, and it seems likely that it will become even more difficult for employers to keep track of precisely what is available. Smaller companies in particular may require assistance in identifying their precise needs: which services are required in order to ensure safe and health working conditions for employees? The question is then how best to organize this form of assistance.

The (commercial) outlook for the occupational health services will depend in no small measure on the success with which they can respond to the challenges:
- How can we ensure sustainable employability whereby people will remain in work for longer?
- How should OSH-services be organized for the growing group of self-employed?
- How can companies be helped to identify their precise support in OSH-management?

We now present and discuss some innovative concepts which may provide the answers to these questions.

Sustainable employability: productive contribution of older employees

In recent years, several occupational health services have developed 'sustainable employability' services intended to prolong the active working life of employees. Many fall into the category of 'voluntary individual services', such as the implementation of a vitality policy to include lifestyle assessments, fitness tests and exercise programmes. The basic principle is that employees who are healthy, fit and vital will take less time off work, be more productive and will continue to work longer. Accordingly, the term 'health management' is also used to refer to a policy intended to promote health and prevent absenteeism through illness or injury.

Health and Safety services combined with a Human Resources Management approach

A person's long-term employability relies not only on his or her health and fitness. Equally important is that employees are both competent and motivated to work. To promote competence and motivation, a different, more integral approach is required. Current OSH- services will therefore be combined with human resource management which offers employees opportunities for personal development, training, greater autonomy and influence, and social support. The larger companies are particularly interested in introducing this approach. In some cases, services are tailored according to the age, or more accurately the 'life phase', of the employees concerned, as reflected by the term 'age-aware personnel policy'.

There are already many resources available in terms of staff training and personal development. Employees in all sectors and functions will find an almost bewildering array of courses, training sessions, development processes, coaching, mentoring, and so forth. However, the same degree of choice is not yet available in terms of instruments designed

to enhance motivation and engagement. Indeed, it is often difficult to influence employees' motivation and engagement since they are determined by personal factors on the one hand and by environmental factors, in the workplace and elsewhere, on the other. To date, employers have restricted their efforts to the workplace itself, ensuring a pleasant and attractive working environment, and to social activities such as informal staff meetings, parties and outings, all intended to help the employee feel 'at home' in the working environment. Structured social interventions to enhance the motivation of employees and promote the sense of engagement in the company or organization as a whole are still few. There are indeed many psychological interventions available (such as personal profiling, assertiveness training, courses in effective communication, etc.) but all tend to focus on the individual and his immediate setting. One social intervention which can be used to promote motivation and engagement among a larger group of employees is the Heuristic Method, as described in Box 1 below.

Occupational health services should develop to become specialists in the field of sustainable employability, doing so by including innovative interventions intended to enhance motivation and engagement in their product range. It seems highly appropriate for them to seek cooperation with other service providers. For example, occupational health services can join forces with HRM consultancies to produce a fully integrated chain of services intended to promote sustainable employability. The advantage for the employer is that there will be a single point of contact for all activities which are undertaken with a view to increasing productivity and long-term employability.

Box 1:
The Heuristic Method – a social intervention to enhance motivation and engagement

The Heuristic Method is a social intervention which addresses both the individual characteristics and the environmental factors which influence an employee's attitude to work. The Heuristic Method can be used to motivate groups of employees and to enhance their feeling of involvement and engagement with the employer organization. The underlying principle is that motivated workers are not only more productive and more flexible, but can also make a substantial contribution to the problem-solving ability of the organization.

The Heuristic Method can also be described as 'bottom-up innovation'. It involves a combination of conducting research, devising solutions and then implementing those solutions immediately. Employees and their managers work together to identify problem areas within the organization and situations which can be improved. Senior management is closely involved in the process and will undertake to make use of all practical findings. If the findings are not deemed practical, management must be able to explain and justify the decision to discount them. The intended result is that all existing practical knowledge on the workfloor is made visible, classified, analysed and assessed in terms of its usefulness and practical applicability. A secondary benefit is that the participants learn to cooperate in a structured manner. Ideally, the Heuristic Method will encourage participants to take a greater interest in their own skills and potential, as well as those of everyone else in their team, the department and the organization as a whole. It will make them more inquisitive with regard to the organizational objectives and the arena within which the organization operates. The Heuristic Method has already been applied by a number of government departments in which the average age of staff continues to rise.

Making OSH- services more accessible to the self-employed

At present, there are very few OSH- services which specifically target the self-employed. The market seems to place a self-employed person on a par with the average employer. In principle, they are free to purchase any of the standard products and services, but must pay the full market price when doing so. Not only are those standard products sometimes inappropriate to the needs of the self-employed, they are also often too expensive. There is certainly a demand for affordable, tailor-made OSH-services for this group. Many self-employed work in sectors such as construction, in which measures to ensure safe and healthy working practices are of great importance. Moreover, many can derive the benefit of expert curative support, since they are directly responsible for their own long-term employment.

Community insurance: a possible solution?

How can affordable OSH- services be made available to the self-employed? In 2010, BS Health Consultancy published a proposal for a 'community insurance' package, which would include coverage against disability, healthcare costs and a range of OSH-services to be selected by the policyholder using a system of accumulated points. Policyholders would also automatically become members of an online community, allowing them to share their experiences with regard to all topics such as taxation, how to handle disagreements with clients, and measures to prevent work-related illness or injury. The online community could also act as a project database. BS Health Consultancy believes that an alliance between the existing occupational health service providers and insurance companies could tap into a large and growing potential market by offering this package. The product would allow insurance companies to establish a distinctive position in health and disability insurance for the self-employed with significant added value. Policyholders will be able to use their accumulated points to invest in their own long-term employability, while membership of the community provides access to the knowledge and experience of other people in the same or similar position. As far as can be ascertained, the idea of a community insurance package which includes OSH-services has never been tested, let alone launched on the market. However, it remains unclear whether this arrangement would be affordable for the average self-employed person.

First-line curative care: another possible approach

One concept which has indeed been tried in practice is the provision of occupational curative care through first-line healthcare services. General practitioners (GPs) and other first-line professionals are able to refer patients (including the self-employed) to an occupational health specialist, the costs being covered by the patient's regular health insurance. The underlying principle is that self-employed persons generally only consult their GP when they have actual health complaints, while in many cases it is difficult for the GP to make a link between the symptoms and the patient's work. An occupational health specialist can do so more easily, and can help to resolve the work-related causal factors. Moreover, an occupational health specialist possesses the expertise required to support patients throughout their recovery.

Recent years have seen various initiatives to involve first-line health practitioners in curative occupational healthcare. In 2002, for example, the Netherlands Society for Occupational Medicine (NVAB) and the National Association of General Practitioners published guidelines for the social-medical supervision of employees on sick leave. There have also been several experiments in which first-line practitioners were partnered with occupational health specialists, who could then provide immediate advice and assistance.[18]

It has not yet been established whether the experiments in which occupational health care was brought into the GP's work domain were effective, although the evaluation of the 'GAZ' experiment (Geïntegreerde Arbeidsgerelateerde Zorg; Integrated Work-related care) conducted by health centres in Amsterdam Zuidoost and the health insurance company Agis suggests that the input of the occupational health specialist does enable patients to return to work sooner, and to learn to cope with the specific physical requirements of their job more effectively (Andriessen et al., 2009). Similarly, the evaluation of the Sterk naar Werk (Strong to Work) project reveals that referring a patient to an occupational health specialist does have a positive influence on his or her resilience and self-management ability (Van de Gulden et al., 2010).

Occupational health services can take responsibility for chain management in occupational first-line curative care

Even it is possible to establish that curative care involving the input of occupational health specialists is effective, there are many obstacles to be overcome before the concept can be fully integrated into first-line care services. First, general practitioners must learn more about the links between health complaints and work. If the GP is to refer the patient to an occupational health specialist, he must of course realize that there is some connection, or a potential connection, between the patient's symptoms and the nature of his or her work. Moreover, it is necessary to ensure that the costs of the occupational health expert's input are covered. The health insurers which funded the experiments to date derive little direct benefit from first-line occupational health services as such. The main benefit is to be seen in terms of the employee's earlier return to work rather than in any reduction of the insurer's outgoings.

There may well be a role for the occupational health services to play in streamlining first-line occupational healthcare, which they can do by assuming responsibility for chain management whereby they ensure effective coordination between the general practitioner and the occupational health specialist. They might take responsibility for managing the budgets to ensure that the costs and returns of such a system are fairly distributed among the various parties involved: the healthcare professionals, health insurers and employees and other (e.g. self-employed) workers.

18 Examples include a pilot project in work-related first-line care (GAZO, AGIS en TNO, 2005-2006), the 'Bedrijfsarts in de 1e lijn; project (NVAB, 2006-2007), 'Sterk naar Werk' (Welder and NVAB, 2008-2010) and 'Perspectief op Participatie' (DWI Amsterdam, GAZO, Agis and TNO, 2009-2011).

Assisting companies in making the right choices: the Collective Health and Safety Contract

As noted above, employers in the small and medium-sized enterprises will usually opt to purchase a limited number of OSH-services, often restricting themselves to those which are required by law. Many employers are deterred by the costs of a comprehensive subscription and often lack the infrastructure required to make a well-considered choice of appropriate OSH-activities. As a result, employers in the small and medium-sized enterprises are less able to benefit from the broad range of products made available by the occupational health services than their larger counterparts.

Chain cooperation via sectoral 'desks'

How can smaller companies be helped to benefit from the full range of services on offer? In recent years, a number of sectors have introduced a system of chain cooperation in the areas of prevention, sick leave supervision and reintegration. Based on the assumption that working conditions and the (demographic) make-up of the workforce will be broadly similar in all companies within the sector, employers can then pass responsibility for the implementation of their OSH-policy to a sector organization. Many sectors have established special front offices or 'desks' to coordinate activities and to act as a central point of contact for employers. In practice, we see various types of sector desk (Table 4.5).

Table 4.5: Types of sector desk

TYPE	EXAMPLE	TASKS
Administrative	PIEN, PLATO	Handles employees' reports of illness and resumption of work
Central purchasing	Introduced by many sectors, some as long ago as 1994	Collective purchasing of insurance and Health and Safety services with group discounts
Case management	Remedium	Full case management in reintegration processes; determines if and when the services of an occupational health service or intervention specialist should be engaged
Supervision	Sazas	Oversees and directs activities further to sick leave policy; contracts service providers
Knowledge	Arbouw	Develops benchmarks and conducts research
Collective Agreements	Several sectors	Formulates and implements arrangements with regard to health policy, reintegration, insurance and employee benefits

SOURCE: MarktConcern Van Spaendonck

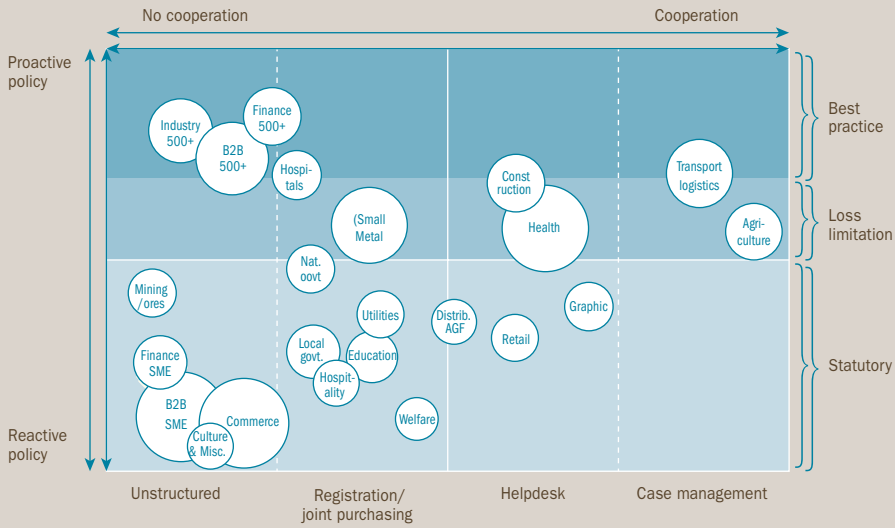
Proactive and reactive cooperation

As Table 4.5 demonstrates, chain cooperation at sector level can take many forms. In some sectors, the cooperation is proactive in nature: the desks manage all or most aspects of sick leave policy and organize OSH-activities on behalf of the affiliated employer organizations. Other sectors adopt a more reactive approach, providing information and advice on demand. The nature of chain cooperation also depends on the number of employers who participate. Sectors which include many larger companies are generally more

restricted in their opportunities to create a cohesive system of chain cooperation because these large companies will generally wish to retain full control of the OSH-policy and activities.

Figure 4.12 shows how chain cooperation is organized at sector level. The horizontal axis indicates the degree of cooperation with the sector, while the vertical axis indicates the extent to which OSH-policy can be regarded as proactive or reactive. Larger companies generally formulate their own policy and therefore demand a customized approach. The smaller companies have different priorities and often lack the scale required to organize matters individually. Two clear trends have emerged in recent years. First, large companies (with 500+ employees) increasingly avoid cooperation and pursue their own proactive policy. Second, those sector organizations which include many small and medium-sized companies seek further cooperation, but also wish to pursue a proactive OSH-policy. Many sector organizations have already made great advances in this regard. They include Colland in the agricultural sector (see Box 2) and Gezond Transport (formerly known as BGZ Wegvervoer) in the transport sector.

FIGURE 4.12 Proactive or reactive Health and Safety policy at sector level in relation to level of cooperation



SOURCE: MarktConcern Van Spaendonck.

Box 2:
Colland: a role model of chain cooperation at sector level

Chain cooperation in the agricultural sector, operating under the name Colland, is regularly held up as an example for other sector organizations to follow (see for example Hoogtanders et al., 2006). Colland is a cooperative alliance of all agricultural and related social funds. Its objective is to optimize the labour market within the sector. Colland offers pension plans, savings schemes and insurance for employers, employees and the self-employed within this sector, and actively implements the sector's labour market policy. The Collective Labour Agreement (CAO) for the agricultural and related sectors 2006-2010 includes a number of agreements regarding companies' participation in Colland and how the alliance is to be financed. The CAO also describes in detail the form of the social partners' cooperation and sets out the arrangements with regard to the continued payment of sick or disabled employees. Colland has contracted three service providers to implement the social arrangements: Interpolis Pensioenen, Interpolis Mens & Werk Verzekeren and Stigas (Stichting Gezondheidszorg Agrarische Sectoren).

Sazas is the central office which coordinates the chain activities in prevention, sick leave supervision, reintegration and insurance. Stigas provides a number of services in the area of prevention, including courses, workshops, information provision and on-site inspections. Companies with no employees (e.g. family firms) are able to make use of the Stigas services on a voluntary basis.

Achmea Vitale is the occupational health service for the agricultural sector. It implements sick leave supervision, employing medical officers who work exclusively within this sector. Member organizations can select from three packages described below:

– Comprehensive sick leave management, whereby Achmea Vitale undertakes all relevant activities. As an additional service, Achmea Vitale will also provide inspections at the workplace and provide advice to employees (or self-employed) with physical complaints. All interventions in the first and second year of sick leave are covered under the insurance component.
– Basic sick leave management, whereby employers themselves are responsible for supervising and maintaining contact with the absent employee for the first few weeks. The employer remains obliged to report the employee's absence to the SAZAS office within the statutory period, but there will be no phone contact or home visit. After two weeks, the employer will decide whether further support is required.
– Individualized sick leave management, which allows large companies to implement their own sick leave supervision measures. Services and interventions are purchased individually, at rates previously agreed with each employer organization. This package is designed for large companies which have their own professional occupational health service and the (computer) resources required to monitor sick leave arrangements. It is therefore most suiTable 4.for companies with over 100 employees.

Colland's involvement in the OSH-services has been highly successful. As a result of the high participation rate and effective chain cooperation, the absenteeism rate in the sector has remained below 3% for several years. All members benefit from this success, whether independent small farmers, medium-sized companies or the very largest companies. Because it makes the various services available to self-employed farmers, Colland can be seen as a 'good practice' example of affordable occupational health services provision for this sector, and one which may be disseminated to other sectors. Colland provides insights and inspiration for the application of innovative concepts such as the 'OSH community insurance' proposed by BS Health Consultancy (2010).

4.7 Summary and conclusions

In this chapter we have examined the contribution made by occupational health services and other service providers to (occupational) health, and have considered a number of promising new developments.

4.7.1 Current situation

Over the years, occupational health services have developed a broad range of services. In addition to assisting employers in meeting the statutory Occupational Safety and Health (OSH) requirements in terms of prevention, sick leave supervision and reintegration, they offer many supplementary products and services. In this chapter we have distinguished between products and services for the company (or indeed sector) as a whole, and voluntary individual services. The company-specific services are related to the statutory requirements in that they are designed to assist in preventing occupational illness and injury, and hence (long-term) absenteeism. The voluntary individual services are designed to promote the vitality, health, wellbeing and sustainable employability of individual employees. These products and services are relatively recent additions to the occupational health services' package, having been introduced within the last few years.

This expansion of the product range has not, however, led to any marked increase in the number of services being contracted by employers. Most employers, particularly smaller organizations, restrict themselves to the services in prevention and sick leave supervision. The take-up of the new 'vitality' services has thus far been very low. Moreover, the occupational health services face growing competition from other types of service providers such as fitness centres and private clinics.

Despite efforts to expand the range of services available, the OSH-services market has not been particularly dynamic in recent years. Employers have little interest in switching from one provider to another. Almost a third of all employers regularly renew their contract with the current service provider without giving any consideration to alternatives. A relatively large number of employers actually leave the choice to others, such as a sector organization, insurance company or an intermediary. Our analysis therefore reveals a picture of a market which faces stagnating revenues and a market supply-side concentration.

4.7.2 Outlook

Occupational health services face a number of challenges in ensuring that they can continue to provide sufficient added value.

First, they must be able to make a clear contribution to the sustainable employability of the workforce. This will demand more than the current range of services geared towards prevention, sick leave supervision and the promotion of general health and vitality. The consultancies must examine ways in which they can also improve competencies, motivation and engagement of employees. This calls for a different, more integrated approach. The existing services must be combined with effective human resources management

with ample opportunities for personal and profession development in the form of training, education, greater autonomy and influence, and better social support. The occupational health services should therefore consider joining forces with training institutes and HRM specialists.

The second challenge is that of ensuring the availability of OSH-services to the growing group of self-employed workers. This may entail introducing new service concepts such as the 'community insurance' package. In addition, there are interesting opportunities to incorporate occupational healthcare into the existing first-line health services, to which the vast majority of self-employed workers already have access. One way of doing so would be to employ an occupation health specialist within the first-line health centre, or arrangements whereby the specialist visits general practitioners' surgeries on a regular basis. Health and Safety service providers can make agreements with the first-line health providers and the insurance companies to ensure that this new type of occupation healthcare for the self-employed is both available and affordable.

Another means through which the occupational health services can safeguard their future is by promoting chain cooperation at the sectoral level so that (smaller) employers and self-employed persons also enjoy the necessary support in organizing their Health and Safety activities. This demands a more proactive approach on the part of the service providers. They themselves can take the first step towards effective chain cooperation by bringing the various parties within the sector together, making proposals for provisions at sector level, and by organizing service provision accordingly. This type of activity calls for the service providers to assume a different role. No longer will they be just the suppliers of OSH-activities: they will be the managers and coordinators of chain cooperation throughout the sector.

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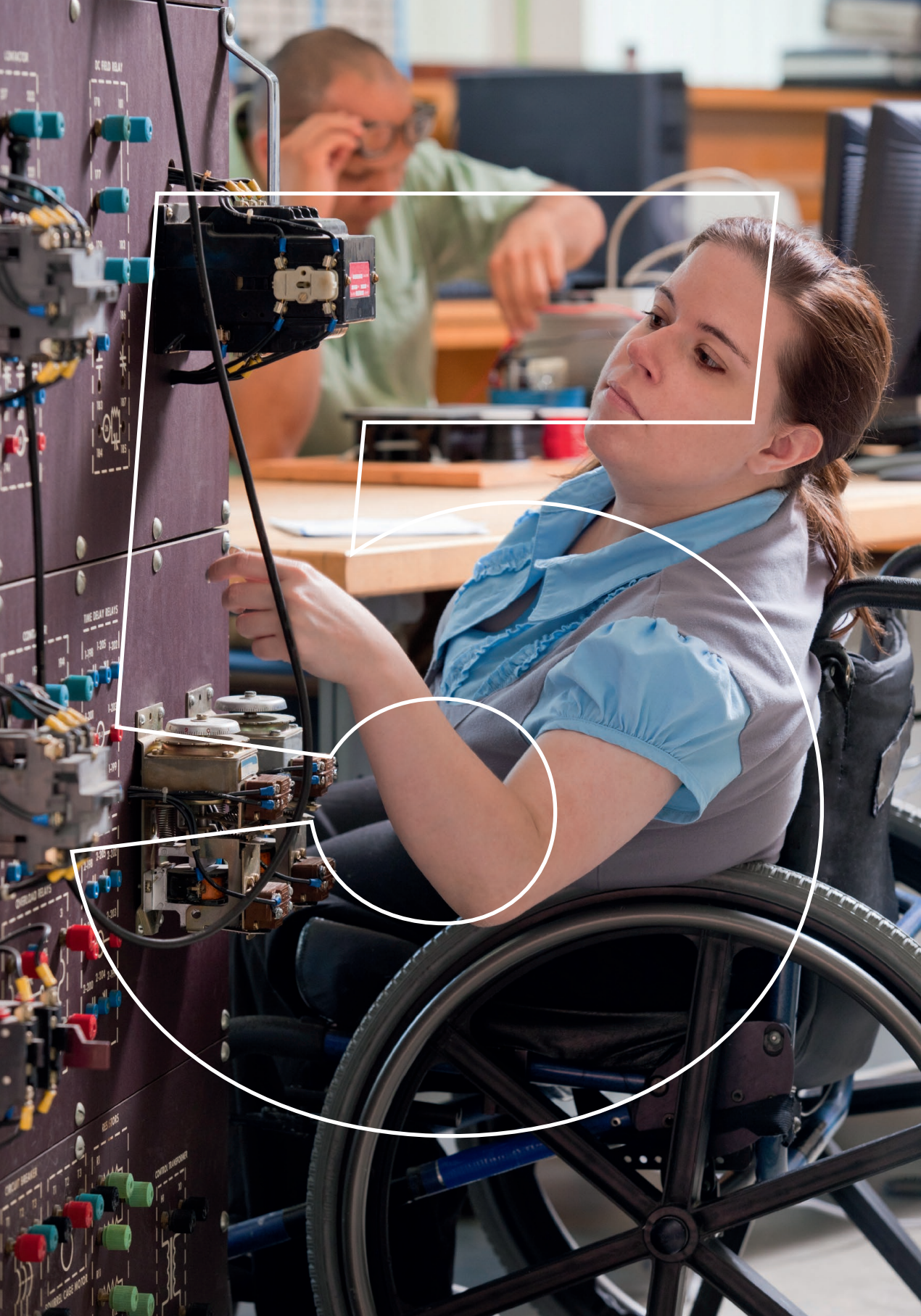


Chapter 5: Work and employment conditions for flex-workers

Peter Smulders and Anneke Goudswaard

Summary

In this chapter the question is posed as to which trends can be seen in various types of employment contracts, which sectors 'use' this type of contract most, and what the relation of these types of contract is with the 'quality of work'.
We have presented statistics which demonstrate that the percentage of employees with a 'flexible' employment relationship has risen during the period 2005-2009, and most notably during and immediately following the economic crisis. Employers seem to favour flexible contracts as a means of limiting financial risks. Employing staff under a permanent contract, on the other hand, is seen as a way of retaining those workers who have shown to add something to the business. Temporary agency workers and 'on call' workers in particular are far more likely to be required to undertake physically demanding work which offers less variety, autonomy, job security and development opportunity. These two categories of employee should therefore form the focus of the employability policy which unions now wish to implement.

5.1 Introduction

Trade unions in the Netherlands have announced that investment in training and the employability of more vulnerable groups of employees, such as 'flex-workers', is to be a spearhead of their policy. Data analyses show that the percentage of employees who work under a flexible contract has increased yet further during the recent economic crisis, and that training and development opportunities for these employees do indeed call for attention.

It is often claimed that globalization will increasingly determine where employment opportunity is to be found, whereupon employees will be required to change jobs, and possibly professions, more often. A parallel development will be a decline in the number of permanent or indefinite contracts of employment, with flexible contracts becoming more common. Employees must therefore prepare for the inevitable transitions.
According to the media reports, the unions are now to adopt the theme of mobility and employability as a spearhead of their policy. As a response to the mooted restriction of employment protection and social security provisions (such as reduced redundancy payments and a reduction in the period for which unemployment insurance benefits are being payed), the unions wish to see a revision of the social structure. While a discussion

of these interventions is desirable, an equally important consideration is the enhancement of future employability by means of greater training opportunity. Employees will then be more 'resilient' and better placed to move between employers and even sectors more quickly. It falls to employers to make available both the financial resources and time needed for ongoing training. The government is expected to promote the policy by means of fiscal incentives.

In the light of the current discussions, this chapter examines three questions:
1. What trends can be seen in the various types of employment contracts in the Netherlands?
2. Which sectors make greatest use of flexible contracts?
3. What can be said about the nature of the work and the working conditions of flex-workers compared to those with permanent contracts of employment?

According to the European Company Survey 2009, the Netherlands has the greatest number of flex-workers of any European country (Riedman, et al., 2010). This makes a consideration of the topic even more relevant.

5.2 Methodology

This chapter is based on data derived by the Netherlands Organisation for Applied Scientific Research (TNO) and Statistics Netherlands (CBS) through the annual National Working Conditions Survey (NWCS), which has a representative respondent sample of approximately 22,000 employees each year. The sample is selected by the CBS from the database of employees paying national insurance contributions. Unlike the CBS' Working Population Survey (EBB), the sample selection for the NWCS does not take the number of contracted hours into account, whereupon the respondent group will also include those with a 'small' job in which they work fewer than twelve hours per week on average a year. A detailed account of the size, representativeness and reliability of the NWCS is given by Koppes et al., 2010.

5.3 Results

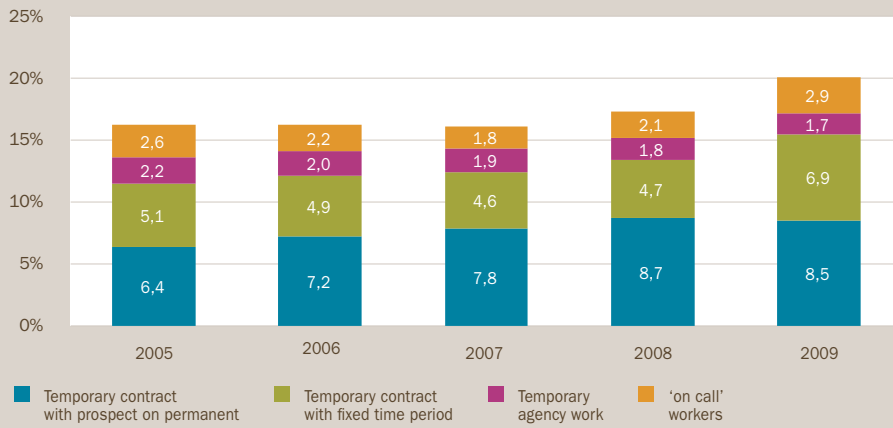
5.3.1 Trends in employment contractual arrangements

Our first question relates to the trends in employment contract forms. We distinguish five types of employee contracts: 1) those with a permanent (or indefinite) contract; 2) those with a temporary contract which offers the prospect of a (permanent) contract; 3) those with a temporary contract of fixed duration; (4) temporary agency workers, and (5) 'on-call' workers.

Figure 5.1 is concerned with categories 2 to 5. Employees with a permanent contract are not shown. This group has decreased in size from 84% of all employees in 2005 to 80 % in 2009. The group of employees with some form of flexible contract has therefore grown

from 16% to 20% over the same period. This is largely due to an increase in the number of temporary contracts, with or without the possibility of conversion to a more permanent arrangement.
Examining the situation in closer detail, we find that the percentage of 'on call' workers since 2005 first fell slightly and then rose once more to reach 2.9% of all employees in 2009. The percentage of temporary agency workers showed a slight but consistent fall, from 2.2 % to 1.7 %. This trend is confirmed by reports from the temporary employment agency sector itself. According to recent media reports, employment agencies saw an increase in activity in 2010. The overall number of temporary contracts, with or without the prospect of conversion to a more permanent contract, rose from 11.5% to 15.4% during the period under consideration.

FIGURE 5.1 **Trend in % of flexible contracts 2005-2009**



SOURCE: NWCS 2005-2009

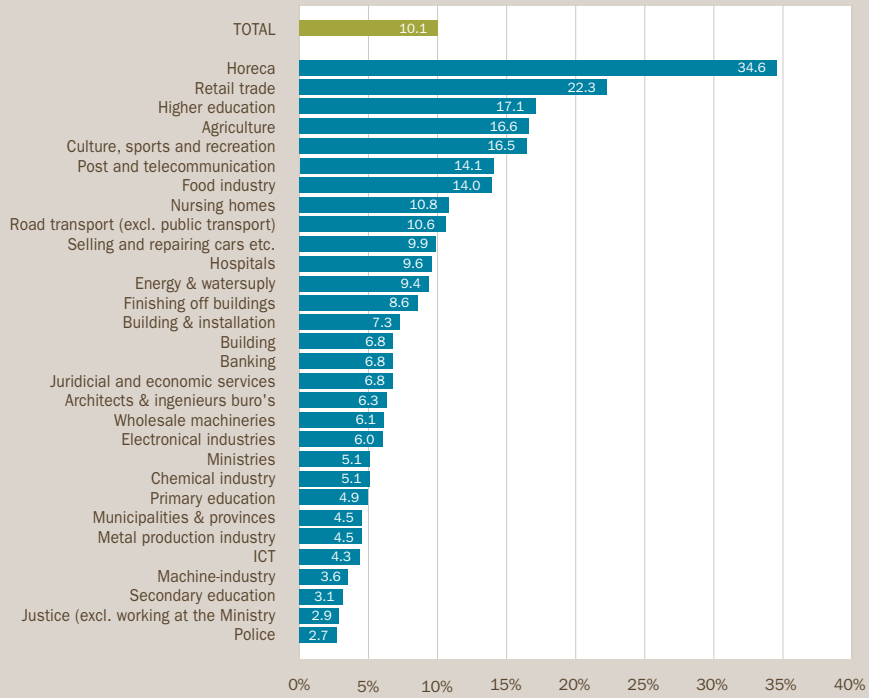
In times of economic crisis, employers may be expected to be more cautious in entering into permanent contracts of employment and to rely more heavily on temporary contracts. The NWCS figures, in Figure 5.1, do indeed show an increase in the percentage of flexible contracts during the crisis period since 2008, with a concomitant decrease in the number of permanent contracts.

5.3.2 Which sectors in particular 'use' flex contracts

Next, we examine which sectors make greatest use of flexible contracts and which are least inclined to do so. This analysis is based on the aggregated findings of the NWCS in two successive years, 2008 and 2009, with a combined respondent sample of some 44,000 employees. Here, the focus is on the 'true' flexible contracts (the fixed term, temporary agency and on call worker). Temporary contracts which may be converted to a permanent contract are excluded in Figure 5.2. At the top of the figure are those sectors which tra-

ditionally make significant use of flexible contracts, such as the horeca (in which almost 35% of employees have a flexible contract) and the larger firms in the retail trade (department stores and supermarkets) with 28%. The higher education sector has a surprisingly high percentage (17%) of employees working under temporary contracts, while the 10% to 11% seen in the health and welfare sector represents an average level.
At the other end of the scale, and hence towards the bottom of the list, are the public sectors which are far more cautious in hiring external personnel: police and justice, local and regional authorities, primary and secondary education. Sectors such as Manufacturing (e.g. the chemical sector, machine and electro-metals industries) are also at the lower end of the table, having traditionally employed fewer flex-workers than, say, the food-processing industry. Figure 5. 2 therefore presents a varied picture of the use of flexible contracts which reflects both the sectors' uncertainties regarding the future and their traditional contractual arrangements.

FIGURE 5.2 **Percentage of flexible contracts by sector**



SOURCE: NWCS 2008 & 2009

5.3.3 Quality of work in flex workers as compared to employees with a permanent contract

Our third question relates to the working conditions of employees with a temporary contract compared with those of employees working under a permanent contract. This analysis is based on the combined NWCS data for 2007 and 2009 (with approximately 44,000 respondents), and an examination of ten relevant features of the working situation. Data for 2008 have not been used because the NWCS in that year omitted to measure a number of relevant characteristics of work.
The ten characteristics used in our analysis are:

- Number of contracted hours per week
- Irregular working times (shiftwork, weekends, evenings or nights)
- Physically strenuous work
- Degree of autonomy
- Degree of variety
- Work pressure (speed and/or volume)
- Emotionally taxing work
- Job security
- Whether the employee has been given recent training opportunities
- Satisfaction with salary

For further information about how these aspects were measured, see Koppes et al. (2010).

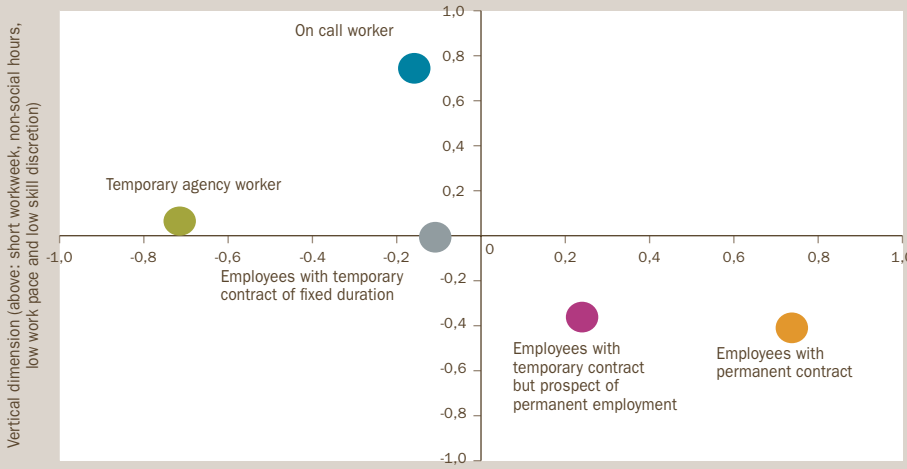
Both employees with a permanent contract and those with a temporary contract which may be extended indefinitely appear to work 32.4 hours per week on average. Employees with a temporary contract of fixed duration work 26.3 hours on average, temporary agency workers work 27.5 hours a week on average, and 'on-call' workers work 8.1 hours a week on average.

Regarding the quality of work, flex-workers are more likely to be required to work irregular or unsocial hours (shiftwork, weekends, evenings of nighttimes) and are more likely to undertake physically strenuous work.
Autonomy and variety of work are greatest for employees with a permanent contract of employment, but this group also has the highest rate of emotionally taxing work. Employees working under a flexible contract report a significantly lower work pressure and less emotional strain than those with a permanent contract.
With regard to perceived job security, the permanent employees lead the field by a considerable margin. Almost 80 % of employees with a permanent or indefinite contract of employment report no uncertainty about the future of their work. Among employees with a temporary contract which offers the prospect of permanent employment the percentage is 63 %. Among those with a temporary contract of fixed duration it is just over 50 %, while somewhat fewer agency staff (44 %) report no concerns about the continuation of their employment. Remarkably, perceived job security among 'on call' workers is extremely high at approximately 73 %. As noted above, however, this group of employees works an average of just eight hours a week. It is therefore possible that their frame of ref-

erence and ambition level play a part: they are satisfied with a relatively 'small' job which clearly suits their current requirements.
Satisfaction with salary is greatest among employees with a permanent contract and those with the prospect of permanent employment. Those with a temporary contract of fixed duration and temporary agency workers are by far the least satisfied with their remuneration.
The final consideration is training opportunity, a matter to which the unions have rightly been devoting attention to. Among the permanent employees, 40% has taken some form of training course, whether internal or external, during the past year and with the costs paid by the employer. In the other categories, employers' investment in training and development is markedly lower. Approximately 37% of employees with a temporary contract but a prospect of permanent employment have attended a training course in the past year. Among those working under a temporary contract of fixed duration the proportion is 22%, among temporary agency workers this is 13 % and among the 'on call' workers it is just 9%. We therefore see significant disparities in the level of training investment between the different categories of personnel, which will inevitably affect their long-term employability.

The ten characteristics of 'quality of work' are shown in Figure 5.3 using Multi-Dimensional Scaling (MDS), an analytical technique whereby the five types of contract are plotted on a two-dimensional matrix. Multi Dimensional Scaling is a form of cluster analysis and is included in SPSS.
In Figure 5. 3 we see that employees with a permanent contract (bottom right) have a high score on the horizontal dimension. They frequently have varied work, a high degree of autonomy, enjoy good training and development opportunities, a high level of job security, are satisfied with the salary level and are rarely required to undertake physically strenuous work. On the other hand, these employees are more likely to experience high work pressure and emotional stress. The temporary agency workers are located at the opposite extreme of this dimension. To use the terms favoured by Karasek & Theorell (1990), the 'active jobs' can therefore be found among the permanent employees, while the 'passive jobs' fall to the temporary agency workers.
The vertical dimension relates predominantly to the number of hours worked each week and to irregular or unsocial working times, but also includes aspects of work pressure and the limited training opportunities. 'On call' workers score very high on this dimension. They have a short working week, work irregular hours, experience little pressure and have very few training opportunities, if any.

FIGURE 5.3 **Two-dimensional plotting of the five categories of according to ten characteristics of**



SOURCE: NWCS 2007 & 2009

5.4 Discussion and conclusions

In this chapter we have presented statistics which demonstrate that the percentage of employees with a 'flexible' employment relationship has risen during the period 2005-2009, and most notably during and immediately following the credit crisis. The trends in flexible work we have identified correspond to some degree with those observed in the EBB Working Population Survey. Using data from this latter survey, Leufkens (2010) concludes that the percentage of flex-workers increased between 2004 and 2007, but then showed a decline until the end of 2009. However, it must be remembered that the EBB respondent sample does not include employees with 'small' jobs (of less than 12 hours per week). The data derived from various NWCS studies show that this group includes a relatively high number of employees who can be categorized as 'flex-workers'. If we define a flex-worker as someone who works at least one hour per week, the overall percentage of employees with a flexible contract has clearly been underestimated by the EBB.

Employers seem to favour flexible contracts as a means of limiting financial risks. Employing staff under a permanent contract, on the other hand, is seen as a way of retaining those workers who have shown to add something to the business. It remains far from certain how flexible employment will develop in the years and decades ahead. The call for the flexibilization of the labour market heard from both the government and

employers – as well as from certain researchers (e.g. Hebbink, 2004; Wilthagen, et al, 2006) – seems at odds with past experience whereby flexibilization has been more of an 'effect variable' (of economic development) rather than a 'management variable' which has led to any growth in employment opportunity. Dekker & Kleinknecht (2008) state that flexible employment hinders productivity growth. Although they base this conclusion on OSA panel data, it must nevertheless be asked whether productivity should not be a prime motive when making the choice between permanent and flexible personnel rather than being nothing more than an effect.

The employers' perspective aside, flexible jobs are also seen as a means for employees to gain 'a foot in the door' of the labour market. Our findings reveal that employees with a flexible contract are generally worse off in terms of various aspects of work and the (contractual) working conditions than those with a permanent contract of employment. This is particularly true with regard to the aspects of variety and challenge, physically demanding work, job security, satisfaction with salary and opportunities for training and personal development.

Temporary agency workers and 'on call' workers in particular are far more likely to be required to undertake physically demanding work which offers less variety, autonomy, job security and development opportunity. These two categories of employee should therefore form the focus of the employability policy which unions now wish to implement.

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Chapter 6: Twenty-five years of government spending cuts: consequences for the quality of work and productivity

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Summary

This chapter is about the public sector, and particularly about the consequences of twenty five years of government spending cuts on the quality of work and productivity of this sector. The problems of an increasing shortage of the government, lead politicians and (top) management in the public sector to experiment with ways to make the government civil servants work harder and more effectively. A large variety of measures has been implemented, but research into the productivity of different parts of the public sector shows that this has been lagging behind as compared to that of the private sector. However, the quality of work remained quite high and the educational level of civil servants increased. This paralleled a shift from administrative towards more social functions of the public sector.

The public sector cannot be readily compared to the private sector. For one, the political context is not comparable with a business context. In addition, public sector management always has to take into account the possibility that 'the counter is reset at zero' and a change in policy or in political preference can make investments done redundant. Also, public sector management has to deal with different values as compared to private sector management. Public sector management has to be accountable, predictable and transparent, and has to stick to societally relevant, but business economically not always responsible rules.

6.1 Introduction

In the perception of the general public, the work of a government civil servant is rather attractive (Stekelenburg, 1999). Research confirms that the quality of work is reasonably good, the occupational risks are limited, and there are good opportunities for personal development and career advancement. The only downside is that the job demands are relatively high (Houtman et al., 2001). Over the past 25 years, civil service managers have placed ever more emphasis on higher productivity and better performance. In the 1980s, the growing budget deficit forced politicians to implement cuts in public expenditure and costs. Ever since, we have seen politicians, senior officials and managers experimenting with all kind of methods intended to ensure that government staff work harder and more effectively (Kickert, 1998). It is interesting to examine trends in the quality of work and productivity in national government departments over the past twenty-five years in the

face of this additional pressure. Throughout this period, the government has attempted to establish itself as a 'normal' employer[19]. But is public sector management really comparable with that in the private sector? Certainly, the 'New Public Management' considered many of the principles applied within industry to be equally applicable to the civil service (see for example Osborne & Gaebler, 1992). Bourgon (2007), on the other hand, points to the special nature of public sector administration, while Baumol (1967) contends that public sector productivity must necessarily remain below the level seen in the private sector, since the costs of government follow those of industry. Moreover, service provision is a key feature of public administration, whereupon there is inevitably a lower level of productivity growth (Nordhaus, 2008).
In this chapter, we examine the hypothesis that, if the government were to act in precisely the same way as a 'normal' employer in the private sector, the effects among public sector personnel would be the same as those seen among staff in the private sector. 'Cost cutting' in industry leads to intensification of work, polarization of the qualification structure, degradation of the content of work, and to new forms of work and working practices (Huijgen, 1989; Schumann et al., 1994).

6.2 The reference point: cost strategies in the private sector

In the 1980s, the government was not solely interested in cutting costs but also, and perhaps more especially, in increasing output. In search of inspiration, it looked at how large private sector companies controlled their costs. Senior managers were lured away from the private sector to take charge of various government organizations (Karsten & Van Veen, 1998). What effect did this have on the factor of work itself? A study of the private sector clearly reveals the effects of the various cost strategies. It is important to stress that 'cost cutting' is just one strategy which private sector managers may follow. Others include product innovation, enhanced marketing and value creation. Each strategy has very different consequences for the labour factor (Kern & Schumann, 1984; Gaither, 1996).
Cost management may also involve a number of staffing measures, each of which has known effects. First, there are downsizing measures which focus on reducing the overall number of staff while maintaining the same output, i.e. increasing productivity. Such measures result in the 'intensification of work'. Examples include the introduction of the conveyor belt and the 'Lean Production' concept. A second series of measures focuses on reducing certain types of staffing costs, notably by reducing dependence on expensive skilled specialists. Tayloristic interventions, such as standardization and automation, were designed to do just this. The conveyor belt is a textbook example of 'deskilling' and breaking the 'functional autonomy of craftsmen' (Van Waarden, 1983). This approach is linked to the quest for 'labour markets with cheap labour'. Deskilling leads to a polarization of the qualification structure (Huijgen, 1989) and to 'deprofessionalization'. A third series of measures addresses the contract of employment. If working hours, the period of

19 With 'normal', we mean as if the government is a private sector employer.

employment and even the location of employment are made more flexible, labour costs can be reduced. The result is a more heterogeneous labour force, whereby the strength of certain groups is restricted.
Sometimes, these measures are combined to create new organizational forms. The discipline of organizational development has seen various schools of thought with regard to the optimal organizational structure, from Lean Production to Sociotechnical Systems (STS). Our research question is whether similar motives and effects can be detected in the productivity measures applied by the Dutch government.

6.3 The motives of government productivity measures

Personnel costs are part of the annual budget and public sector managers seemed keen to spend that budget in full. Most innovations in the management of government organizations have been intended to dispel this approach to financial management, giving managers the opportunity to develop a long-term perspective and to achieve specific aims by means of cost reductions. Over the past 25 years, eight measures intended to allow (or force) managers to bring their personnel costs under control have been implemented. Some, if not all, have had other underlying motives which we shall consider where known.

1. Cost reduction. The most clear-cut measure is forced cost-cutting, as imposed by the government on the various ministries and departments. In the 1980s, for example, the Lubbers government introduced the '2% - 3% rule', whereby all ministries were expected to reduce their outgoings by this amount each year. For the first time in the history of the modern government organizations, staffing levels and the attendant costs were actually reduced. Similarly, the 'Zalm-norm' of the 1990s sought further cost reductions. All expenditure must be carefully planned and accounted for. Any unexpected income could not merely be spent on 'extras', while unforeseen expenditure had to be balanced between the sectors: overall costs must not rise. More recently, the Balkenende government imposed further restrictions, whereby all ministries were required to reduce staffing levels and costs, with job grading and salary structures reflecting the nature of the ministry and its responsibilities (policy, regulation, support or implementation). The previous governments have chosen for drastic cutting in staff levels (up to 20%) in order to reduce the large governments deficits, a consequence of the financial crisis of 2008-2009.

2. Normalization. Normalization is a process which seeks to bring the terms and conditions of employment (salary, pension rights, social security, etc.) of staff in the public sector in line with practice in the private sector. As applied by the Dutch government, it would create a more flexible system of employment conditions and benefits, taking the private sector as its reference point. The levelling out of the differences has indeed greatly increased mobility of personnel between the public and private sectors. In this sense, the government has increased its labour market appeal and outreach. Moreover, greater mobility helps to keep costs within bounds. In 2004, SEO Economic Research investi-

gated the differences in salary levels between the public and private sectors (Berkhout et al., 2004). It found that the government was paying higher salaries to staff in the lower grades, but lower salaries to the more senior officials.
Normalization was linked to the introduction of the sectoral model of ministries. Rather than one large government apparatus, since 1993 there have been 14 public sector employer organizations, and 14 staff representative bodies. Eventually, however, the original intention of complete normalization, bringing public sector employees fully into line with those in the private sector, was abandoned. It remains unclear whether normalization and the sectoral model have actually served to reduce personnel costs. This would indeed be the case if there were a reasonable inflow of staff from the private sector joining the public sector, accompanied by a flow of the 'more expensive' senior staff in the opposite direction. However, a 2005 study concludes that personnel moving from the private sector into the public sector outnumber those moving in the opposite direction by two to one. This might indicate that the government now has fewer problems in attracting staff from the private sector; greater choice may well help to reduce costs. On the other hand, the low outflow may be further to the specific nature of the public official's profession with its status and benefits. This could serve to increase costs (Trendnota 2002; POMO, 2006).

3. Performance-related pay. This measure is intended to increase efficiency and productivity by linking part of an employee's salary to performance in the form of a bonus which is paid only when certain targets have been met. This government policy has been rather 'stop and go' – and recently more 'stop'. As long ago as 1989 it was suggested that the existing automatic yearly bonus should be replaced by a performance-related bonus. No changes were brought to the system. In 2006, the topic was broached once again. In its role as employer, the government has discussed performance-related remuneration but has yet to take affirmative action. In 2009, a Centre of Expertise was set up to examine the proposals but there has been little visible cooperation from employees themselves (Trendnota 2009). At this moment, the issue has been abandoned completely.

4. More 'market', outsourcing and partial privatization. In the late 1980s, attention focused on applying market forces to the public sector and the (partial) privatization of some parts of the public sector apparatus. Operating within the free market economy would allow price incentives to reduce the costs of service provision. More recently, some support departments have been merged to form 'shared service centres', the intention being to outsource their activities entirely at some later date. Plans for full privatization were quickly abandoned because, by the late 1980s, the government was rapidly losing its influence and control over the private sector (Kickert, 1998). The introduction of free market forces in certain sectors has been a lengthy process. In healthcare, for example, the government hopes that by 2012, approximately 80-85% of interventions (in the so-called B-segment) will be offered under market conditions. Success was considerably more rapid in the housing sector, in which the housing corporations were part-privatized in 1992.

Privatization and the introduction of free market forces are very much at the heart of the political divide between left and right. Nevertheless, many government organizations have been part-privatized with comparative ease. Almost all executive organizations made the transition to become 'agencies' which operate largely independently and with a very high degree of autonomy. Criticism of the functioning of these agencies and the 'autonomous administrative authorities' (ZBOs) prompted a change of name, whereby they are now known as *baten-lastendiensten,* or 'costs-return departments' to reflect the fact that they must at least cover their own costs (General Court of Audit, 1995; IBO, 2004). These revised organizational structures have certainly led to a more cost-efficient manner of working than was seen in the former ministerial departments. Nevertheless, many observers still consider their concern for output versus costs to be lacking (see Dekkers et al., 2007; Van Thiel et al., 2009).

5. Management by results and performance monitoring. If you want to achieve more, you must monitor more. Managers have been given greater responsibility on condition that they also accept greater accountability. In 1990, a performance monitoring pilot project was launched (OECD, 1996). It involved various measures addressing the various levels of management responsibility. The first measure was to decouple the budget from the specific areas of policy and link it to the realization of output targets. Next, the project examined how output can be monitored and measured (e.g. the establishment of the General Court of Audit in 1991; a survey of government productivity by SCP/IOP in 1992; the VBTB campaign in 1998). The final phase was the introduction of a form of contract management and flexible remuneration for managers in 1999.
In 2007, all operational processes were subject to review under the *Vernieuwing Rijksdienst* (Central Government Reform) programme. The hope is that central government will become less compartmentalized, more results-focused in response to specific issues, and thus regain the trust and confidence of the general public. The adoption of business principles common in the private sector has certainly led to increased pressure on government organizations (both the ministries and the autonomous bodies) to achieve visible results. However, the various successive attempts to restructure the operational processes have made it very difficult for managers to conduct any consistent policy or strategy.

6. Informatization. In recent decades, the government has made substantial investments in information technology. A study by the General Court of Audit (2007) concludes that these investments amount to at least two billion euros a year. The nature of computer automation has changed drastically over the past 25 years. In the late 1980s and early 1990s, most investments were concerned with the automation of the large administrative processes (such as those of the Tax and Customs Administration). Later, the emphasis shifted to office automation. Today, the focus is on automating information and service provision to achieve two-way communication with the public (e.g., the e-Government programme). There have been very few initiatives designed to promote creativity and innovation (Sonnenschein, & Van Hal, 2009). Due to the complexity of 'informatization' – whether technical, organizational or political – public sector managers do not always

make strategic use of the resources available in managing personnel aspects and reducing costs.

7. Human Resources Management. As part of the normalization process (see above), it is appropriate to develop a strategy with regard to human resources. It was not until 2002 that the Ministry of Foreign Affairs and Kingdom Relations (BZK) adopted the term 'Human Resources Management' to replace 'personnel management' (Government Annual Social Report 2002). Nevertheless, much had already been done in terms of HRM. Throughout the 1990s, efforts were made to increase the proportion of female staff in the interests of gender equality, followed by attempts to ensure equal promotion opportunity and female representation in (senior) management positions. In 1995, the first steps towards a formal Management Development strategy were taken with the establishment of the *Algemene Bestuursdienst* (General Administrative Department) which would recruit and train 'top talent' (Trendnota 1999). Formal research into personnel development and mobility began in 1999. From 2002, HRM efforts were further stepped up, prompted by the findings of the Van Rijn Commission. This period also saw greater attention for working conditions agreements to address complaints about working pressure and other occupational risks. Attention for HRM resulted in a diversity policy intended to ensure that the public sector would reflect the demographics of society itself in terms of age, gender and ethnicity. Efforts were made to eradicate unfair differences in salaries and benefits, to reduce staff turnover and to ensure that vacancies could be filled more quickly. However, because day-to-day HRM remained the responsibility of the individual organizations, it remained unclear whether all proposed measures were being implemented in a consistent manner. While the outline of HRM was the same everywhere, the details were not. Currently, the public sector foresees an enormous outflow of civil servants in the period to 2020. The current reduction of 20% of staffing levels is somewhat contradictory to this trend. New HR-measures are developed to ensure that outsourcing not only affects younger civil servants. Such a result would exacerbate the calculated outflow of civil servants (VSO SCO BZK 2010).

Table 6.1 compares the possible, intended and/or latent labour effects of the cost management measures.

Table 6. 1. Possible labour effects of specific costs management measures

LABOUR EFFECTS	MEASURES						
	(1) COST REDUCTIONS	(2) NORMALIZATION	(3) PERFORMANCE-RELATED PAY	(4) ORGANIZATIONAL MEASURES	(5) OUTPUT/ PERFORMANCE	(6) INFORMATIZATION	(7) HRM
Lower staffing levels	✓			✓			✓
Opening up cheaper labour markets		✓		✓			✓
Erosion of job autonomy			✓		✓	✓	
Deskilling / deprofessionalization						✓	✓
Polarization of qualification structure				✓		✓	
Intensification of work	✓		✓	✓	✓	✓	✓

The most significant (potential) effect of the various measures is the intensification of work. This is further to the government's objective of at least maintaining output at the same level even in the face of reducing spending on staff costs. Performance-related pay, the costs-returns accounting structure, management by output, informatization and HRM all serve to increase the required performance level and hence the pressure of work. Other effects are a downsizing of the workforce, the opening up of new, cheaper labour markets, and a reduction of the discretion enjoyed by the departments in organizing matters as they wish.

In terms of downsizing, HRM is actually an indirect measure. It can be used to optimize the staffing level, thus decreasing the overall staffing requirement. Privatization, as an organizational measure, is intended to result in the immediate transfer of government staff to the private sector. Examples of the erosion of autonomy include performance-related pay and management by output, both of which restrict the freedom of managers and staff alike. Deskilling, deprofessionalization and polarization are less visible as intended effects.

6.4 Productivity in the public sector

Table 6. 2 shows the macro-effects in terms of the productivity of central government personnel, and is based on data published by the Netherlands Institute for Social Research/ SCP (Kuhry, 2005; 2006). The findings are confirmed by Van Ark (2004) and Van der Wiel (2007). Unfortunately, data for the period 2004 to 2009 is not available.

Table 6.2: Breakdown of actual costs and returns in public sector

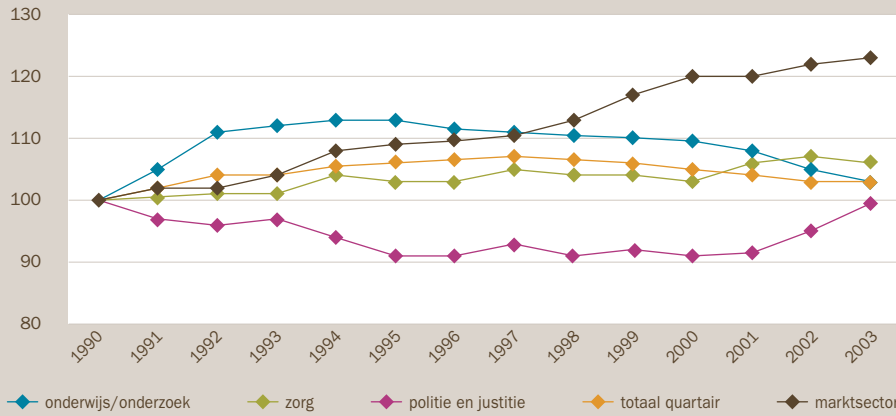
	ALL PUBLIC SERVICES	MARKET SECTOR
RISE IN ACTUAL COSTS	**3.4**	**2.5**
Production growth (volume)	1.8	3.0
+ Growth in actual costs per product (price)	1.6	-0.4
RISE IN ACTUAL COSTS PER PRODUCT (PRICE)	**1.6**	**-0.4**
Proportion staff costs (%)	63	83
x [rise in actual contractual staffing costs	0.5	0.3
+ incidental salary increases	1.2	1.4
- rise in productivity]	0.0	2.3
+ proportion material costs (%)	37	17
x growth in material costs per product	1.3	0.1

SOURCE: SCP (2004)

The actual costs of the public services showed an annual growth of 3.4% during the period 1995-2004. The main reasons for this increase are a rise in the production volume and in the actual costs per product. The market sector shows a particularly marked increase in volume, while prices actually fell. The rise in the costs of public sector is due to increasing labour costs which, although still lower than in the private sector, were not compensated by higher productivity. Costs were also pushed up by rising material costs, especially those of ICT.

The picture does however differ considerably from one government segment to another and fluctuates over time. Figure 6. 1 shows the trends in productivity within three quaternary public sectors and the private sector over a 15-year period, 1990 to 2004.

FIGURE 6.1 **Productivity in three quaternary public sectors and the private sector, 1990-2004 (indexed, 1990=100).**



SOURCE: SCP (2004)

Productivity in the private sector shows an ongoing upwards trend. Growth in the quaternary public sectors can be seen to be slow. Notably, the productivity in the police/justice sector actually fell prior to 2000. There is some productivity growth in the healthcare sector, albeit slow, with very little further development during the period 2002 to 2006 (Van Hilten et al., 2008). Productivity in education shows a marked decline, particularly in the later years, due to various measures including smaller class sizes and more special and individual education. The Netherlands Institute for Social Research (SCP) concludes that the overall trend in the quaternary sectors, lagging behind the private sector as it does, is an example of Baumol's Law at work (Kuhry et al., 2002; Langenberg & Van Bergen, 2009).

6.5 Labour effects

6.5.1 Size of the public sector and the nature of work

Twenty-five years ago, some 1.45 million people (1.2 million FTE) worked in the public sector (government, administration, defence, education and health care). By 2007, the figure had risen to 2.1 million (1.6 million FTE). There had been an increase in employment opportunity in almost all subsectors, the sole exception being defence. Health care accounted for the largest growth.

During the period 1993 to 2009, the size of the central government labour force fluctuated between 400,000 and 450,000 employees. A marked shrinkage could be seen in the years prior to 2000, with some recovery and growth thereafter. By 2002, the labour force was

at the level of the early 1990s. This picture of a reasonably stable government apparatus seems to conflict with the government's efforts to cut costs and increase performance (Den Hertog, 1996). In 2007, the government stated the intention of downsizing the central apparatus by 11,000 civil servants, but even this would not have a major impact on the overall size of the labour force (Central Government Reform Programme, 2007).

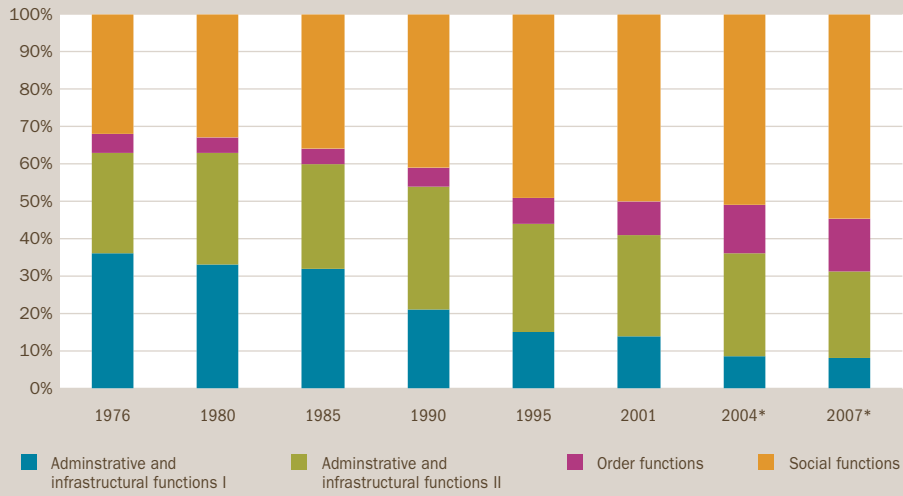
Although the total size of the central apparatus has not changed markedly, the government's approach in 2009 was very different to that applied in 1984. Ballendowitsch (2004) offers an interesting classification of government personnel based on the type of function of civil servants.

1. 'Administrative and Infrastructural Function I', which entails a central controlling role within the national economy.
2. 'Administrative and Infrastructural Function II', with similar responsibilities but at local level.
3. 'Order functions': those within police, justice and jurisprudence.
4. 'Social functions'.

Figure 6. 2 is based on an adaptation of Ballendowitsch's data, supplemented by data for 2004 and 2005. Central government personnel (taken from the relevant Annual Social Reports) have been classified according to the above categories:

- The staff of the following ministries are assigned to Function 1: General Affairs (AZ), Foreign Affairs (BuZa), Economic Affairs (EZ), Finance (including the Tax and Customs Administration), Agriculture (LNV), Public Works and Water Management (RWS), Transport and Housing, Spatial Planning and the Environment (VROM).
- The staff of the following ministries and government bodies are assigned to Function 3: Ministry of the Interior and Kingdom Relations (BZK), Justice, the Public Prosecution Service (OM) and the High Councils of State. (In fact, some of the Ministry of Foreign Affairs staff could fall into category 1, but which staff and how many cannot be deduced from the Annual Social Reports.)
- The staff of the following ministries are assigned to Function 4: Social Affairs and Employment (SZW), Education, Culture and Science (OCW) and Health, Welfare and Sport (VWS). All health care personnel can be assigned to this category, but this is not the case here.

FIGURE 6.2 Trends in types of function within central government, 1976-2007



SOURCE: Ballendowitsch (2004), adapted and supplemented.

We can see a marked increase in the number of staff in the Social functions and a decrease in the Administrative and Infrastructural Functions type I. The most recent figures indicate that the devolvement of administrative and infrastructural responsibilities to the regional and local levels is now at an end. In fact, staffing levels within these bodies have fallen. We also see a significant growth in the number of staff in the Order functions: a twofold increase during the period under review. This growth is expected to continue in the years ahead (see Annual Social Report 2009).

Although the overall size of its labour force has remained stable, the nature of the Dutch government has changed considerably over time. In the 1970s and 1980s, there was a great emphasis on spatial development. The focus has since shifted to the Social and Order functions.

The nature of government has changed to such a degree that today's public officials bear little resemblance to their forebears of 2000, and even less to those of 1984 (see also Van der Meer, 2008).

6.5.2 New labour markets

The main trends in public sector employment are seen in terms of a greater proportion of women in the workforce, a higher average age and higher educational qualifications. Recruitment policy is in line with the government's desire to reflect the diversity of Dutch society.

One of the first labour market measures to be introduced was that of achieving equal representation of men and women (Trendnota 2001). Efforts in this regard were extremely successful; in 1982 women made up just 29% of the central government workforce. By

2009, they were actually in a slight majority (52%) for the first time ever. However, the large number of women working part-time means that the volume in FTE is still just 30%. Since the late 1990s, the government has also taken steps to improve career opportunities for women. It is uncertain whether this policy was intended to keep pace with the large growth in the number of women entering the employment market as a whole, or whether the government wished to take advantage of the lower rates of pay for women which were more common at the time. The first explanation falters because it was not until the end of the decade that the government devoted specific attention to career mobility among women, although recruitment continued to favour female applicants even after 2000. Previous government publications make no mention of any deliberate policy to take advantage of the growth in the number of women entering the employment market. That the government did so would appear to be a 'happy coincidence'. The ongoing feminization of the workforce has been helped by a strong supply of highly qualified female applicants (Batenburg et al., 2003) and the attractiveness of a civil service career, especially for women (Berkhout et al., 2006). Accordingly, the second explanation does not hold either: that women could possibly be paid less for the same work is not a good reason to recruit them (and this strategy was consciously avoided) but may have been an unintended 'benefit'. Government policy is actually intended to remove any differences in remuneration and achieve full gender equality. Nevertheless, the differences between public sector salaries and those in the private sector remain, especially in the case of men, and are increasing (Berkhout et al., 2006). It seems likely that the large number of women entrants served to check a rise in salary levels that would have been seen had the government continued to employ predominantly men.

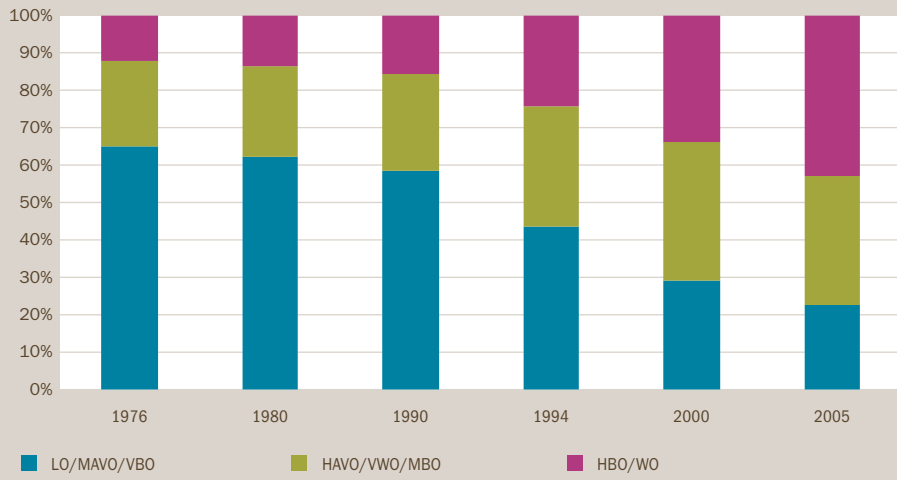
A second labour market measure was a policy of attracting more staff from the ethnic minorities. The intention was that the demographic make-up of the government workforce should reflect that of society as a whole. In this sense, just as in the trend of feminization, there was no question of a deliberate attempt to attract cheaper labour. Although the data are inconclusive, we can state that the government has been less successful in applying a full diversity policy than the private sector. The various departments applied an entire arsenal of instruments to improve the inflow and throughflow of ethnic minority staff, and to reduce the relatively high outflow. The policy has resulted in a slow but steady increase in the number of ethnic minority staff in recent years, although predominantly in the group with higher education and qualifications. In this sense, the government has a special attraction for the ethnic minority employee.

A notable labour market effect is the increase in the average age of the central government workforce over the past twenty years. This is due in part to the various cost reduction measures implemented since the late 1980s. In 1987, the average age of the workforce was 37 (Stekelenburg, 1999), rising to 41 in 1999 and to 43 in 2006, when the average age of male employees was 45 and that of the female employees 41. The average age of the male staff is rising more quickly due to the limited intake of young male applicants and will probably rise even more as a consequence of large reductions in staffing.

6.5.3 Degradation of the qualification level

When considering any 'deskilling', two aspects are significant: the trends in overall recruitment and the qualifications required to perform the work itself. Figure 6. 3 combines data from two separate studies (see Ballendowitsch 2004; Trendnota 2003; POMO 2006).

FIGURE 6.3 Trends in educational level of government employees (excluding defence), 1976-2005



SOURCE: Ballendowitsch (2004); 2000-2005: Ministry of BZK (2005)

HBO/WO: Higher Vocational Diploma/University degree (equivalent)
HAVO/VWO/MBO: Higher General Secondary Education/Intermediate Vocational Diploma (broadly equivalent to British 'A' levels)
LO/MAVO/VBO: Basic or Intermediate Secondary Education (broadly similar to British GCSE or CSE)

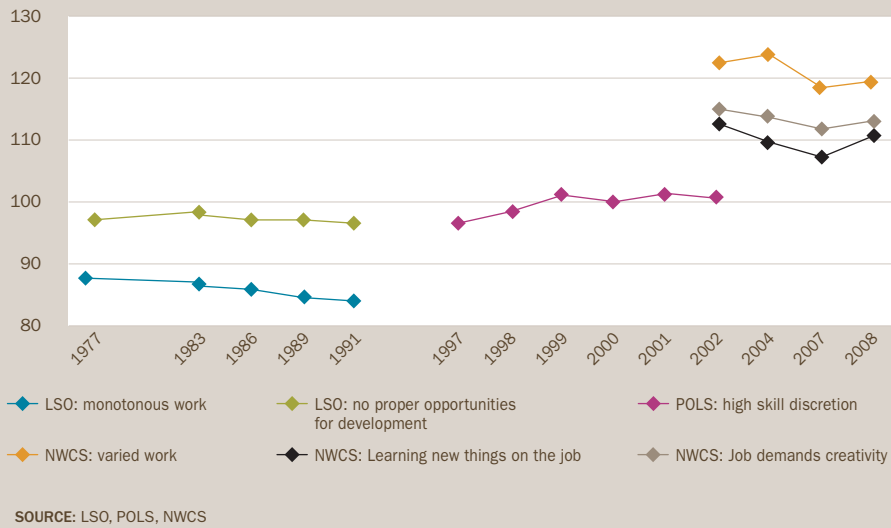
The overall educational level continues to rise, with a greater number of graduates seen in all sectors. Within the foreseeable future, the majority of government personnel will be educated to college level or above. At present, 17% of government employees hold a university degree or equivalent.

These trends can be observed throughout society as a whole and reflect an ongoing rise in the level of qualifications demanded by employers. This process has been supported by a higher average level of general education. Within the government there does not, however, seem to be any question of those with lower qualifications being 'pushed out' by the graduates. While Batenburg et al. (2003) observe that the average professional level of new recruits did indeed rise during the period 1994 to 2000, they find no evidence of any polarization of the qualification structure.

People with a lower level of qualifications will find it increasingly difficult to enter government employment. The more routine work they perform is now being outsourced to less expensive service providers. As Ballendowitsch (p.27) notes, the 'normalization of the legal position' affects employees at the lower education levels more than others.

Alongside the educational and professional level of the staff themselves, the precise nature of the work to be undertaken is also of importance. Figure 6. 4 presents an overview of qualifications compared to the demands of the work, as reported by employees themselves in various surveys.

FIGURE 6.4 **Trends in qualifications required by government employees**



SOURCE: LSO, POLS, NWCS

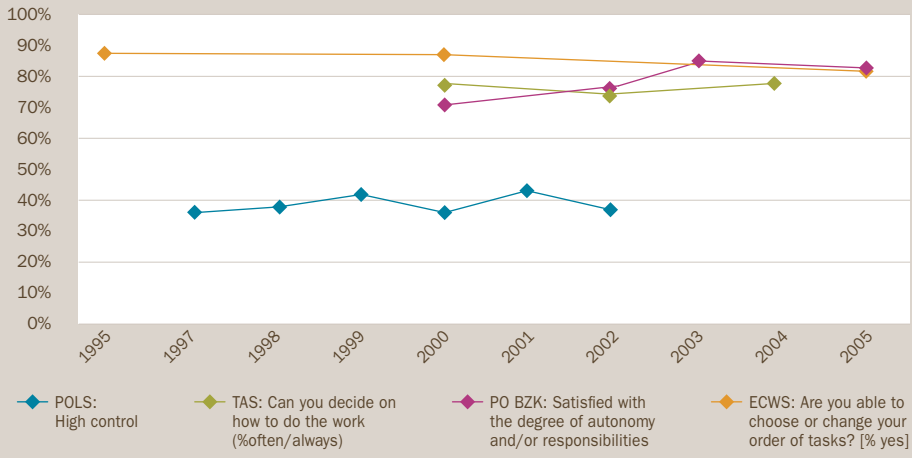
The LSO surveys conducted in the 1970s and 1980s reveal a downwards trend in the number of government employees stating that their work was 'monotonous' and a stable one concerning 'inadequate development opportunity offered'. In the later POLS surveys, the percentage of employees stating that their work presented opportunities to apply their skills increased, particularly in the mid-1990s. The results of the National Working Conditions Surveys (NWCS) show a marked decline in the perceived opportunity to apply and learn skills, and in the required level of creativity, although there is some recovery in 2008 and beyond. The findings are in line with those of Batenburg et al. (2003), in that the required qualification level is indeed rising. This effect is due in part to the departure of staff with lower qualifications (the item 'monotonous/routine work'). Batenburg et al. observe the same effect: there are fewer functions which demand a low professional level and more which call for a high professional level. As Figure 6. 4 illustrates, the trends seem to have levelled out in recent years. Some items (e.g. 'variety') indicate an increase

in dull, routine work. Van der Meer (2008) suggests that the ongoing 'academization' of the government workforce is evidence of further bureaucratization, as an increasing number of staff are engaged in planning and policy development. This trend, combined with the growing gap between educational level and professional level, is beginning to be seen as irksome. The most recent POMO survey conducted by the Ministry of the Interior reveals that 58% of employees have noticed an increase in the administrative burden of their work over the past four years (Trendnota 2009).

6.5.4 Erosion of autonomy?

The POLS surveys indicate a slight increase in perceived autonomy during the period 1997 to 2002 (Figure 6. 5). There was a marked dip in 2000, and in 2002 the percentage fell yet again. The comparable item in the TNO Work Situation Survey (TAS) showed a slight dip in 2002 as well, but the overall scores were much higher than those recorded by POLS. The results of the European Working Conditions Survey (EWCS) are in line with those of POLS, indicating a high level of perceived autonomy. The internal surveys of the Ministry of the Interior show a rise in staff satisfaction which peaked in 2003, followed by a slight decline in 2005.

FIGURE 6.5 Trends in autonomy



SOURCE: POLS, TAS, POMO & EWCS

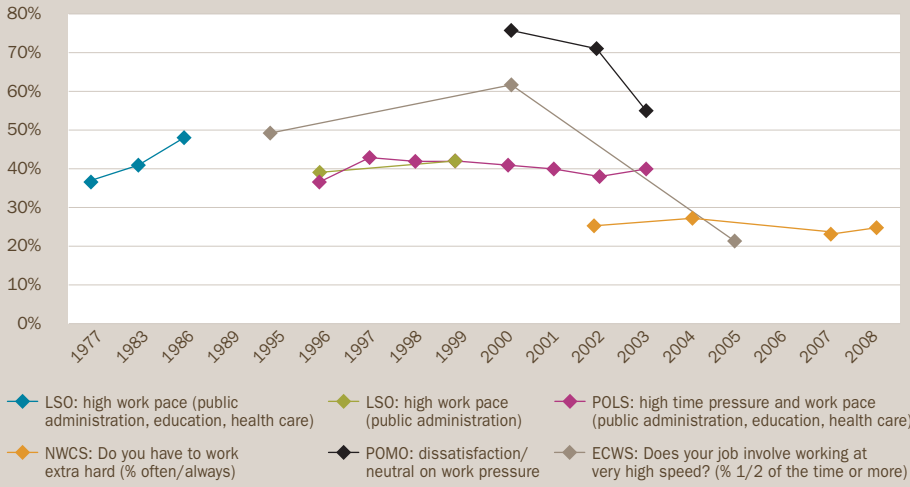
According to this data, there has been no erosion of autonomy. Employees maintain a high degree of influence in terms of how they perform their work and the tempo of working, despite the bureaucratization noted above.

6.5.5 Intensification of work

Does this indicate that the government employers have focused on an intensification of the work? Figure 6. 6 shows the results of various surveys. It is important to note that

the research populations are not directly comparable in each case, which may distort the overall picture.

FIGURE 6.6 Trends in work tempo



SOURCE: LSO, POLS, NWCS, POMO, EWCS

Despite the difficulty in making direct comparisons between the respondent groups, we can see that the various items show similar trends. The reported work tempo rose markedly in the early 1990s. The percentage of employees stating that the work tempo was particularly high peaked in or about 2000, with a clear decrease seen thereafter. The European data and the results of Ministry of the Interior's staff satisfaction survey confirm this picture. The percentage of employers who were dissatisfied with the pressure of work decreased in line with the reported decrease in job demands (POMO, 2006).

An intensification of work was observed in the 1990s, a period in which various performance and productivity measures were implemented, and had a cumulative effect, while there was also a decrease in staff numbers further to downsizing. By the end of the 1990s and in the early years of this century, the staffing restrictions were relaxed (see for example the report of the Van Rijn Commission; Ministry of the Interior, 2001). Moreover, the 'working conditions agreements' devoted much attention to resolving the problems associated with high work pressure. As Figure 6. 6 shows, efforts in this regard were successful. A further downsizing process is now ongoing. Data relating to pressure of work was not available at the time of writing, whereupon it is not yet possible to state whether the latest round of staffing cuts has resulted in any intensification of work.

6.6 Conclusions and discussion

In the 1980s, the Dutch government found itself facing a large and growing budget deficit. It responded with significant cost reduction measures which included a downsizing of the central government staff. Politicians and managers drew their inspiration from the cost management strategies applied in the private sector. In this chapter, we have examined the effects of the measures intended to make the government more 'productive', and particularly the effects, both intended and accidental, on the factor labour. Our reference point are the known effects of costs strategies in the private sector, i.e. intensification of work, erosion of autonomy, deskilling and deprofessionalization, degradation of the required qualifications and polarization of the qualification structure.
The analysis has revealed a broad range of measures which were intended to reduce costs while maintaining or increasing the output (performance) of government employees. The results of the productivity study show that productivity in various segments of the public sector lagged far behind that of the private sector during the period examined.
Not all the labour effects which could be predicted based on experiences in the private sector can be observed in practice. There has been no erosion of autonomy, nor any degradation or polarization of the qualification structure. In fact, government employees continue to enjoy a high degree of autonomy and are largely able to resolve the work problems they encounter as they see fit. The required professional level has risen, as have the average education level of the workforce and the educational qualifications demanded of new entrants. However, intensification of work has been seen, most especially in the 1990s. Relaxation of the staffing restrictions and investments in measures to reduce job demands served to halt this trend. Some erosion of the quality of work, in terms of content rather than output, has also been seen in recent years.

Why have the predicted effects not been seen in practice? First, we can conclude that the government still is not a 'regular' employer comparable to those in the private sector. The political context is very different to the commercial context in which everything revolves around profit and 'the bottom line'. Government managers must always allow for the possibility of radical changes in policy and objectives, whereupon past investments are rendered irrelevant at the whim of the electorate. The strategy of a government department is determined to a large degree by the incumbent politicians. A manager in the private sector does not experience the same degree of influence from the market. There is a logic to public sector management which defies that of a more commercial management approach, whereupon it is often far from easy to achieve cost reductions (Henrekson & Lybeck, 1988).
Moreover, public sector managers must observe values which are very different to those of their counterparts in industry. They must be accountable, predictable and transparent at all times. They must meet the demands of social and societal relevance, which entails observing rules which would not always be considered necessary or even prudent in the private sector.
A diversity policy improves the labour market prospects of the minority groups but for government organizations this will entail additional costs for recruitment, selection,

monitoring and so forth. In the private sector, transparency is not always a motor of greater profitability. To fully understand the government's response to the rapidly rising cost levels, we must apply a different frame of reference. Baumol's Law (Baumol 1967) goes some way towards explaining why productivity in the public sector has lagged behind that of the private sector, but does not explain why the focus on performance and output failed. The required frame of reference does not yet exist: it must be developed.

What do these results mean in terms of the future of public sector management at central government level? First, it is useful to consider the significance of the public sector's lower productivity. The Netherlands Institute for Social Research (SCP) cites Baumol's Law in this context (Kuhry et al., 2006; Langenberg & Van Bergen, 2009). If the law holds true, there is no limit to the size of the government apparatus. And yet the public sector (excluding health care) has not grown in size over the past 25 years. In practice, there are indeed limits, which are at least partly determined by developments in the private sector. Provided the economy continues to grow, and tax revenue with it, there is room for the government to develop further (Van der Ploeg, 2007). In times of economic crisis, however, the limits come clearly into view. If tax revenue is falling, the size and costs of government must be brought under control (Henrekson & Lybeck, 1988). The question then becomes: what is the government expected to do, and how large must the government apparatus be in order to fulfil its responsibilities?

This chapter has focused on the effects in terms of the labour factor. Our analysis shows that measures devised centrally are implemented locally, and that the longer term does not always permit consistency of intentions. As a result, the effects on labour cannot always be traced back to a specific government strategy. Moreover, some of the effects we have identified were unintentional. The feminization of the government workforce was indeed intended, but the ongoing trend whereby women outnumber men was not. Feminization has coincided with population ageing; in the foreseeable future, large numbers of older male employees will leave the public sector. In addition, the labour market as a whole has an oversupply of highly qualified (graduate) personnel, both male and female. While this may appear to be an advantage, it is important to consider the practical implications in the light of future developments. The attractiveness of the public sector, particularly among women, is due in no small measure to the facilities it offers in terms of flexibility and the opportunities to combine work with family obligations. If it proves necessary to downsize the government workforce, it will be prudent to make the same facilities available to all, otherwise women who are forced to leave the public sector will be unable to find suitable employment in the private sector.

The government makes a particularly large claim on the labour market supply of qualified personnel, 'creaming off' some 41 % of new graduates each year (Trendnota 2006). This is far more than one would expect, given the size of the government as an employment organization. In view of the preferential treatment given to female candidates, its seems likely that almost all female graduates will find their first job with the government before long. This is also a product of the shift in the focus of government activity. Its 'social functions' are perhaps particularly suitable for women.

It is of course important that the nature and content of the work itself reflects the rise in the professional level of staff. This now seems to be a problem area. The divide between educational level and professional level is already causing some dissatisfaction with regard to the nature of the work, and it is possible that this dissatisfaction will increase. It is essential to restore challenge to the work, perhaps by automating or outsourcing the more routine activities.

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Surveys (for further information see Dhondt et al., 2009):
- LSO: Living Conditions Survey
- POLS: Permanent Living Conditions Survey (CBS; Houtman, De Vroome, 2001)
- TAS: TNO Work Situation Survey (TNO; www.tno.nl/tas)

- NWCS: National Working Conditions Survey (TNO; www.tno.nl/nea)
- EWCS: European Working Conditions Survey (European Foundation for the Improvement of Living and Working Conditions)
- POMO: Staff Satisfaction and Mobility Survey (Ministry of the Interior and Kingdom Relations).

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Chapter 7 Knowledge work: a demanding but comfortable job

Frank Pot and Peter Smulders

Summary

A lot has been written about knowledge work and knowledge workers. However, proper definitions and empirical foundations are lacking quite often. In this chapter knowledge work is distinguished from other work in which retrieval, application and transfer of knowledge and information is important An analysis is made of the job content and the employment relationship of knowledge workers and how these work characteristics influence the incidence of burn-out, intention to quit and the work-life balance. Data of the Netherlands Working Conditions Survey (NWCS) 2007 and 2009 are used. Conclusions are that definitions matter and that knowledge work is a demanding but comfortable job.

7.1 Introduction

The academic debate on knowledge workers and knowledge work suffers from inappropriate definitions and lack of empirical foundations. Different definitions lead to different populations of knowledge workers of which, as a consequence, characteristics of job content and employment relationship cannot be compared, even if empirical data are available. So there is a theoretical need for a proper definition that distinguishes knowledge work from other work in which retrieval, application and transfer of knowledge and/or information is important. Such a definition should derive its plausibility from the empirical result of its application as well. Only then it makes sense to compare knowledge workers and non-knowledge workers, knowledge work and non-knowledge work.

The results of these analyses are also important for the policy debate as it has emerged in the countries of the European Union. 'Smart growth means strengthening knowledge and innovation as driver of our future growth' (European Commission, 2010a: 9). 'In a global knowledge-based economy where the ability to succeed is based on a propensity to create, exchange, appropriate and exploit knowledge, it is essential to establish a sound knowledge base via policies that aim to educate, train, attract and retain a sufficient cadre of highly skilled knowledge workers'(European Commission, 2010b:33). These are a few main points from the European Strategy 2020. The statements underline the political importance of knowledge work on European level. In the Netherlands, the Foreign Nationals Employment Act was revised in 2009, making it easier to encourage knowledge workers from abroad to come and work in the Netherlands. In 2010, the new government of the UK restricted immigration possibilities, making an exception for some categories of knowledge workers, such as medical specialists and nuclear physicists. The previous

government already had acknowledged that there is a problem with the supply of a skilled STEM workforce: science, engineering, technology and mathematics skills and capacity (Barrett and Wynarczyk, 2009). In December 2011 the German government decided that non-EU knowledge workers of the STEM-categories can apply for a so-called 'Blue Card' which makes it possible to avoid all kinds of immigration restrictions. Considering this political context, we may expect the managerial as well as social science debates on knowledge work and knowledge workers to continue.

That debate is about 1) who can be considered to be knowledge workers (Thompson et al., 2001; Fleming et al., 2004; Warhurst and Thompson, 2006; Marks and Scholarios, 2007) and how many knowledge workers are there (Dankbaar and Vissers, 2009; Fauth and McVerry, 2008), 2) what are the characteristics of knowledge workers' work (job content and employment relationship) (Warhurst and Thompson, 2006; Benson and Brown, 2007), 3) what risks do knowledge workers run regarding health and well-being (Fauth and McVerry, 2008; Albertsen et al. 2010), 4) what is their class position; are these experts becoming a 'new working class' coming into conflict with professional managers (Darr and Warhurst, 2008; Marks and Baldry, 2009; Mallet, 1969), 5) how to manage knowledge workers and how to improve their performance (Davenport, 2005; Wang et al., 2008) and 6) how to ensure that there are enough knowledge workers available (UK and Dutch policies as mentioned above). A lot has been written about these topics, but little empirical research has been carried out into these questions. This paper contributes mainly to the debate on the first three questions.

7.2 Definition of knowledge work

Of course, first of all a proper definition of knowledge work is required. It is not necessary to discuss all the definitions that have been used once again in this paper. This has been done elsewhere (Thompson et al., 2001; Fleming et al., 2004; Davenport, 2005; Pyöriä et al., 2005; Warhurst and Thompson, 2006; Benson and Brown 2007; Darr and Warhurst, 2008). Rather, some choices are made for the research model to be used in this paper, based on the following three conclusions from the definition debate.

- In order to define knowledge work, it is preferable to look at work characteristics rather than at professions. Not every worker within an assumed knowledge occupation is in fact a real knowledge worker. (Thompson et al., 2001; Warhurst and Thompson, 2006; Fincham, 2006; Benson and Brown, 2007). IT workers in Scottish organisations differ in professional identity, which is related to differences in job content (method control and cognitive demands) and entry qualifications (Marks and Scholarios, 2007).
- A high level of knowledge must be part of the definition. Having to do with information does not necessarily entail knowledge work. Thompson et al. (2001) make a distinction between knowledge work and knowledgeability in work. Knowledge work requires "high degrees of expertise, education or experience" (Davenport, 2005: 10) or "a theoretical body of knowledge" (Warhurst and Thompson, 2006: 787). Education or qualifications as such is not a very good proxy for knowledge work because job

levels and education often do not match very well in contemporary labour markets (Warhurst and Thompson, 2006; Adams and Demaiter, 2008). However, definitions without the factors of qualification or theoretical body of knowledge will always result in too broad a definition. An example of this is the research by Dankbaar and Vissers (2009), in which only job autonomy and external contacts are taken as criteria for the definition of knowledge work.

– In order to ascertain in which professions knowledge work occurs, it is meaningful to carry out research at the level of separate professions. Using large categories like 'professionals' gives an insufficient or even mistaken view of the development of knowledge work. Fleming et al. (2004) demonstrate this for the official statistics of professions like in Australia, but the same objection also applies to the survey by the Work Foundation based on data of the European Working Conditions Survey 2005 (EWCS). In that survey, knowledge workers are defined as workers in the top three ISCO-88 categories, including legislators, senior officials and managers, professionals and technicians and associate professionals (Fauth and McVerry, 2008: 31).

To distinguish 'real' knowledge workers, Warhurst and Thompson's definition is taken as starting point in this paper:

'The central characteristics of knowledge work are that it draws on a body of theoretical (specialized and abstract) knowledge that is utilized, under conditions of comparative autonomy, to innovate products and processes.' (Warhurst and Thompson, 2006: 787).

We use these characteristics as criteria to determine who the knowledge workers are among the workers. Then we ascertain in which professions these knowledge workers can be found.

7.3 Work characteristics

In the literature referred to, many other characteristics of knowledge work are mentioned, in particular concerning job content. Characteristics given in the papers referred to above are: high cognitive demands, job variety, creative work, many external contacts, working with computers and work requiring high involvement.

In research on occupational safety and health, the focus is also on work pressure as a characteristic of job content (Fauth and McVerry, 2008; Albertsen et al., 2010). Knowledge workers are also expected to experience high work pressure due to high quantitative and qualitative job demands combined with stronger managerial control as a result of global competition and the increased obligation to give account.

A specific category of work characteristics concerns the employment relationship. Benson and Brown (2007), for example, carried out a survey in a large Australian semi-governmental, scientific research organisation. The knowledge workers were more often contented with HR-practices, experienced more frequent support from co-workers and supervisors, gave a higher rating to their job security and were more frequently members of a union than the non-knowledge workers in the same organisation. Benson and Brown differentiate three dimensions in knowledge work: 'variation and dynamic nature of the work', 'degree of reciprocal interdependence of work with other tasks being per-

formed in the team' and 'degree of autonomy employees have in carrying out their work' (Benson and Brown, 2007: 125). By doing so, they avoid the objections to the professions approach. What is a problem, however, is that they omit the level of education or qualifications or another measure for 'theoretical body of knowledge'. Their case study, however, does not suffer from this fact, because the organisation investigated was a large Australian semi-governmental, scientific research organisation with 6957 employees of whom 3335 responded to the questionnaire. Thanks to this choice, they already had enough 'real' knowledge workers in the research population beforehand.

7.4 Effect characteristics

In the discussion about knowledge work, work pressure is mentioned as the greatest risk, which might even lead to burn-out (Fauth and McVerry, 2008; Albertsen et al., 2010). Albertsen et al. (2010: 83) define knowledge work broadly as 'working with signs, communication, or exchange of knowledge, thereby making it possible to perform some part of the work via information technology equipment'. The choice of definition makes it not significant to compare the results with the results of our survey.
Counter to this risk of burn-out, however, is the expectation based on the 'job-demand-control theory' (Karasek and Theorell, 1990) that high job demands combined with high job control result in 'active jobs' with few work related health complaints.
Another risk mentioned in the literature is a disrupted work-life-balance, which may have an adverse effect on someone's work and/or private life. Golden (2009) researched in a high tech organisation with a highly educated workforce, how working life and family life influence each other. The author offers recommendations on how to bend the negative effects on work and family towards mutual consolidation. That is why this paper examines whether knowledge workers experience problems in their work-life balance.

Another possibly different effect concerns the intention to quit. In general, it is assumed that because of the nature of their work (Benson and Brown, 2007) and because of their intrinsic character (Wang et al., 2008) knowledge workers show a high intention to quit or a high turnover. However, this hypothesis was not confirmed in Benson and Brown's survey. On the contrary, knowledge workers showed a lower intention to quit than the other employees. Or course, knowledge worker turnover is important because it 'affects organisational learning processes and content, which consequently impacts innovation (Guidice et al., 2009: 157)'.
To sum up, the research questions in this paper are:

1. What percentage of the professional population in the Netherlands consists of knowledge workers and in which professions, sectors of industry and organisations (size) do they work?
2. What are the work characteristics (job content, employment relationship) of knowledge workers compared to those of non-knowledge workers?
3. Do the effects of knowledge work (burn-out, work-life balance, intention to quit) differ from those of non-knowledge workers?

7.5 Methods and measures

Use is made of the data from the Netherlands Working Conditions Survey, a annual monitor carried out by the Netherlands Organization for Applied Scientific Research (TNO) and Statistics Netherlands (CBS). Individual employees are sent a questionnaire. The average response is 32 per cent and is representative for the Dutch employees (Van den Bossche et al., 2008; Van Hooff et al., 2008; Koppes et al., 2010). The data of 2007 (N = 22.659) and 2009 (N = 22.247) – being different samples – have been combined in this paper.

The selected definition, by Warhurst and Thompson is operationalised with the following three NWCS-questions: education (college or university degree required), contributing to the improvement of products and services (regularly or always) and contributing to the innovation of products and services (frequently or always) and with the scale job autonomy (usually). Thus, knowledge workers are regarded as having at least a college or university degree, often or always contributing to the improvement and renewal of products and services, and usually experiencing autonomy in their work. Improvement and innovation combined could be termed as 'innovative work-behaviour'.
Concerning work characteristics and effects, the NWCS already includes the relevant concepts from the discussion dealt with. Only involvement is lacking. Extra characteristics are: emotional demands, contracts and hours worked (see Appendix 1.).
The analysis of the job content includes visual display unit work, work pressure, emotional demands, cognitive demands, job variety and creative work, external contacts.
The analysis of the employment relationship covers type of contract, working hours, overtime hours, hours working at home, supervisor support, colleague support, satisfaction, job insecurity and union membership.
Finally the following effects will be scrutinized: burn-out, intention to quit, neglect of family because of work and neglect of work because of family.

7.6 Results

7.6.1 Percentage of knowledge workers

According to the definition based on the four characteristics of education, autonomy and improvement and renewal of products, 9,3% of the occupational population of the Netherlands are knowledge workers. Table 7. 1 shows that merely considering work characteristics and leaving education out of the definition would result in a far higher percentage, more or less comparable to Dankbaar and Vissers (2009). Only considering college or university graduates without including the work characteristics would give a far higher percentage of knowledge workers, more or less comparable with Fauth and McVerry (2008).

Table 7.1 Percentages of Knowledge workers in total work force according to definition (2007 & 2009)

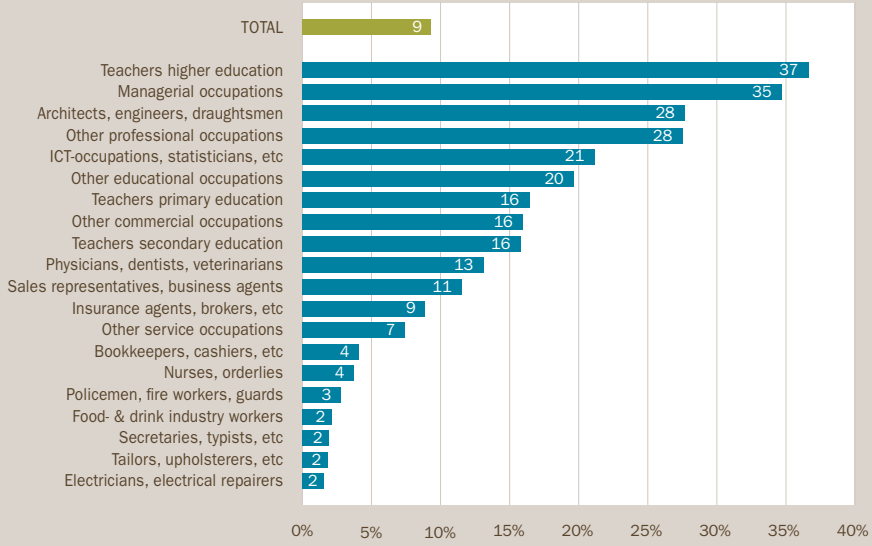
	MEASUREMENT YEAR		
	2007	2009	2007-2009
1 Knowledge workers (only higher education)	30,1%	30,1%	30,1%
2 Knowledge workers (innovative work and a high level of autonomy)	17,9%	18,0%	18,0%
3 Knowledge workers (higher education and innovative work)	10,9%	11,3%	11,1%
4 Knowledge workers (higher education, innovative work and a high level of autonomy)	9,2%	9,4%	9,3%
Number of employees in the sample	22.659	22.247	44.906

SOURCE: TNO-CBS Netherlands Working Conditions Survey, 2007 & 2009

7.6.2 Occupational groups

The percentage of knowledge workers per occupation group differs considerably and remains below 40% (Figure 7. 1). Teachers in higher education, managers, architects, draughtsmen, ICT-occupations and statisticians show a relatively high percentage of knowledge workers.

FIGURE 7.1 Top-20 occupational groups with respect to % of knowledge workers.



SOURCE: TNO-CBS Netherlands Working Conditions Survey, 2007 & 2009

7.6.3 Sectors and size

The sectors with the highest number of knowledge workers are (in consecutive order from 30% to 17%): higher education, architects and engineers, computer service and information, legal and economic services, primary education, local government and provinces, oil and chemical industry, secondary education (not shown in table 7.1. or figure 7.1).
In addition, it was found that organisations with fewer than 100 employees employ 7,3 % knowledge workers; organisations with 100-499 employees employ 10,3%, those with 500-999 employees 12,2% and those with more than 1000 employees 15,6%.

7.6.4 Work characteristics

Job content

Knowledge workers spend far more hours per day working at a computer screen than non-knowledge workers do, their work is more often varied-creative and they are far more often confronted with high cognitive demands. For knowledge workers, work pressure is higher than for non-knowledge workers. The emotional demands they meet are also significantly, though not much, higher. Knowledge workers have significantly more external contacts than non-knowledge workers, although the difference is small (Table 7.2).

Employment relationship

Information on employment relationships is also shown in Table 7.2. All the differences in scores as regards employment relationship are significant but small. Knowledge workers less often have a temporary contract (4%) than non-knowledge workers (11%), they have more contract hours, work more hours overtime and more hours at home.They experience slightly more support from colleagues and get more supervisor-support. Knowledge workers are slightly more satisfied with their terms of employment and HR-practices. They are less often insecure about their jobs (22%) than non-knowledge workers are (27%) and they are less often members of a union (22% versus 25% of non-knowledge workers).

Table 7.2 Means of Knowledge & Non-Knowledge workers on Work Characteristics and Effects (2007 & 2009)

	MEANS					
	NON-KNOWLEDGE WORKERS	KNOWLEDGE WORKERS	TOTAL SAMPLE	TOTAL SAMPLE N	F-VALUE (ANOVA)	SIGNIFICANCE
JOB CONTENT						
Visual display unit work (hours per day, recoded,1-4)	1,79	2,57	1,86	42467	1258,1	,000
Work pressure (never-always, 1-4)	2,38	2,68	2,41	44660	751,1	,000
Emotional demands (never-always, 1-3)	1,64	1,87	1,67	44669	491,5	,000
Cognitive demands (never-always, 1-3)	2,02	2,44	2,06	44684	1474,5	,000
Job variety and creative work (never-always, 1-4)	2,62	3,24	2,68	44726	2450,9	,000
External contacts (never-daily, 1-4)	2,55	2,70	2,56	44240	90,0	,000
EMPLOYMENT RELATIONSHIP						
Type of contract (permanent vs. non-permanent, 0-1)	0,11	0,04	0,10	44172	169,3	,000
Number of working hours according to contract per week	30,9	35,5	31,3	44319	682,8	,000
Number of overtime hours per week, paid & unpaid	5,45	8,77	5,76	42693	340,8	,000
Number of hours working at home per week	1,39	3,40	1,61	39192	684,1	,000
Supervisor support (not agree-agree, 1-4)	2,94	3,18	2,96	42356	429,9	,000
Colleague support (not agree-agree, 1-4)	3,33	3,45	3,34	43237	171,3	,000
Satisfaction with pay, promotion, learning possibilities (not satisfied-satisfied, 1-3)	2,29	2,59	2,32	39393	589,3	,000
Job insecurity (no-yes, 0-1)	0,27	0,22	0,27	44342	39,3	,000
Labour union membership (no-yes, 0-1)	0,25	0,22	0,25	44504	24,5	,000

SOURCE: TNO-CBS Netherlands Working Conditions Survey, 2007 & 2009

7.6.5 Effects

Knowledge workers experience slightly less - though significantly – burn-out symptoms (10%) than non-knowledge workers (12%; Table 7.2). Neglect of family because of work occurs more frequently (70% versus 50%), as well as work neglected because of family (42% versus 28%).

7.7 Conclusions and discussion

In this paper it was shown that the number of knowledge workers depends for a great deal on the definition chosen. Recent research also indicates this. Dankbaar and Vissers (2009) use job autonomy and external contacts as criteria and then investigate how many

knowledge workers there are according to the EWCS 2005 data. They arrive at 25,6 % knowledge workers in the EU-member states in 2005. With their general definition of professional groups, Fauth and McVerry (2008) arrive at 33% knowledge workers in the UK, based on UK-data in the EWCS 2005. The results of the analysis of the NWCS-data confirm that our definition, combining schooling with work characteristics, gives a more realistic picture of the number of knowledge workers (9,3% in the Netherlands), in concordance with the differentiation between knowledge work and knowledgeability of work. For those reasons we strongly recommend to researchers and statisticians to use this definition.

Defining knowledge work in the light of specific work characteristics especially results in a differentiation of the concept of a knowledge profession. The NWCS-data confirm that it is not meaningful to speak of knowledge professions in the sense that whoever works in one of those professions is a knowledge worker. It is not surprising in which knowledge sectors knowledge workers occur, once it is known in which professions they work. Although the percentage of knowledge workers in SMEs is lower than in large companies, SMEs still contribute substantially to the knowledge based economy because there are far more SMEs than large companies. For governments it is important to promote the development of skills and competences in general. However, to boost innovation special attention should be paid in educational policy and labour market policy to knowledge workers as is also highlighted in chapter 3 of the Flagship Initiative Innovation Union (European Commission, 2010b:33-46). The more precise definition we propose would increase the efficacy of those policies.

As expected, knowledge work is cognitively demanding and the work concerned is varied and creative. According to the above-mentioned theory by Karasek and Theorell (1990), the fact that knowledge workers suffer less from burn-out although they do more frequently experience work pressure can be explained by their having high job autonomy.
As regards employment relationships, knowledge workers clearly constitute a different category than non-knowledge workers. There is no large difference per item of the employment relationship, but it is extraordinary that knowledge workers score more positively on all items than non-knowledge workers do. This concurs with the results of the survey by Benson and Brown (2007), except for membership of a union. In the NWCS this is lower than that of non-knowledge workers and corresponds more closely with the research by Marks and Baldry (2009), who found a low rate of union membership among Scottish software workers. There is no indication that knowledge workers are becoming a 'new working class'. Trade unions could do more to be attractive for this strategically important category of employees.

These positive scores make it understandable that the intention to quit is low. The only tricky point seems to be that work life and family life sometimes interfere with each other. Knowledge workers have interesting work. They are reasonably contented and have relatively few work related health complaints. To maintain high levels of performance and

well-being, the most important recommendation to managers as well as worker's representatives is to guarantee job autonomy.

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Appendix 1. Job content, employment relationship and effects.

Job content

Six job content characteristics will be included in the analysis.

- Visual display unit work (1 item, hours per day,recoded,1-4)
- Work pressure (mean of 4 items, never-always, 1-4; α: 0.86)
- Emotional demands (mean of 3 items, never-always, 1-3; α: 0.83)
- Cognitive demands (mean of 3 items, never-always, 1-3; α: 0.81)
- Job variety and creative work (mean of 3 items, never-always, 1-4; α: 0.77)
- External contacts (mean of 3 items, never-daily, 1-4; α: 0.44)

Employment relationship

Also nine aspects of the employment relationship will be analysed.

- Type of contract (permanent vs. non-permanent, 0-1)
- Number of working hours according to contract (hours per week)
- Number of overtime hours paid & unpaid (hours per week)
- Number of hours working at home (hours per week)
- Supervisor support (mean of 4 items, not agree-agree, 1-4; α: 0.88)
- Colleague support (mean of 4 items, not agree-agree, 1-4; α: 0.84)
- Satisfaction with pay, promotion, learning possibilities (mean of 3 items, not satisfied-satisfied, 1-3; α: 0.75)
- Job insecurity (mean of 2 items: no-yes, 0-1; α: 0.72)
- Labour union membership (no-yes, 0-1)

Effects

Finally four work effects will be scrutinised.

- Burn-out (mean of 5 items, low vs. high, 0-1, Utrecht Burn-out Scale; α: 0.86)
- Intention to quit (mean of 3 items, no-yes, 0-1; α: 0.66)
- Neglect of family because of work (1 item, never vs. sometimes or more often, 0-1)
- Neglect of work because of family (1 item, never vs. sometimes or more often, 0-1)

Chapter 8. Workplace innovation in the Netherlands

Frank Pot, Steven Dhondt, Elsbeth de Korte, Peter Oeij, Fietje Vaas

Summary

Social innovation of work and employment is a prerequisite to achieve the EU2020 objectives of smart, sustainable and inclusive growth. It covers labor market innovation on societal level and workplace innovation on organizational level. This chapter focuses on the latter. Workplace innovations are social both in their ends (quality of working life, well-being and development of talents together with organizational performance) and in their means (employee participation and empowerment). Complementary to technological innovations they regard innovations in social aspects of organizations such as work organization, HRM and work relations. A specific variety of workplace innovation is the New Ways of Working (NWW) which focuses in particular on working unrestrained by geographic, time and organizational boundaries.

By introducing workplace innovation, improvement of quality of working life and organizational performance can be achieved simultaneously. A number of theories support this claim. The interventions in the framework of workplace innovation – such as creating job autonomy - are to a large extent the same as those to reduce psychosocial occupational risks.

From the beginning of this century workplace innovation has been on the agenda of the social partners, the government, a few research organizations and consultants in the Netherlands. Dilemmas of these stakeholders are discussed. A Dutch National Centre for Social Innovation was established in 2006 as a temporary agency to boost workplace innovation.

Research in the Netherlands shows that social innovative organizations perform better than not social innovative organizations. However, it can be regretted that quality of working life variables are only occasionally included in the research.

Workplace innovation is seen as a matter of urgency by those who understand the benefits and dare to change, even more so in times of economic recession. But it's not an easy thing to do. Some support from government might help.

8.1 Introduction

Continuous innovation and productivity growth cannot be achieved just by new technologies and by seeking competitive advantage by means of cutting costs. What is needed is the optimal utilisation of the competences and creativity of the workforce and an organisational structure and management culture that gives room for these talents. DSM Anti-Infectives is a very good example of what we nowadays call Workplace Innovation (See Box 1).

Why has workplace innovation become important, already before the financial and economic crises? There are four main reasons for the emerging attention for workplace development. The first one is the need to enhance labour productivity to maintain our level of welfare and social security in the near future with fewer people in the workforce due to the ageing population. The second reason is the need to develop and utilize the skills and competences of the potential workforce to increase added value as part of a competitive and knowledge-based economy. The third reason is that private and public work organizations can only fully benefit from technological innovation if it is embedded in workplace innovation (making technology work by means of proper organization). The fourth reason is that workplace innovation itself appears to be more important for innovation success than technological innovation does. Research by the Erasmus University/ Rotterdam School of Management in industrial sectors shows that technological innovation accounts for 25% of success in radical innovation, whereas non-technological innovation, or social innovation – as it is called in the Netherlands – accounts for 75%. The success of incremental innovation can be based for 50% on each technological and non-technological innovation (Volberda et al., 2006 and 2010). The latest development in the Netherlands concerning workplace development and productivity is a two-tier 'movement' under the banners of 'New Ways of Working' and 'Social Innovation at Work'.

Of course the Netherlands has, like other countries, a tradition of workplace development of almost 100 years, starting with 'scientific management' via 'industrial democracy', 'socio-technical design', 'quality of working life', 'improvement of work and organisation' to 'social innovation'. Some of the present issues are the same, some are new but the circumstances are different, increasing the urgency for social innovation.

In this chapter definitions are presented that are used in the Netherlands as well notions and findings on how these definitions relate to the concept of 'social innovation' in the EU-policy. The next part is on the activities of the Dutch National Centre for Social innovation which is followed by theoretical support, dilemmas of stakeholders and research on dissemination and effects.

Box 1. Example of combining technological and social innovation

DSM Anti-Infectives in the Netherlands holds global leadership positions in active pharmaceutical ingredients such as penicillin. Key drivers of profitability are price and access to global markets. The key success factors are new technologies and operational excellence. Innovative ingredients are produced using enzymes in biotechnological processes. Operational excellence was achieved by the introduction of autonomous teams and the creation of a special job, that of the operation expert, who gears activities of different departments for one another. After the introduction of these changes, the plant produced 50% more with 50% fewer staff members in each shift. Its competitive position is among the first three of the world. For the employees learning opportunities and control capacity have increased considerably.

8.2 Workplace innovation

Whilst there is currently no uniform definition of workplace innovation in this report we will define workplace innovation as 'workplace innovations are strategy induced and participatory adopted changes in an organisation's practice of managing, organising and deploying human and non-human resources that lead to simultaneously improved organisational performance and improved quality of working life.'(Eeckelaart et al., 2012)

Workplace innovation includes aspects of management and leadership, flexible organisation, working smarter, continuous development of skills and competencies, networking between organisations and the modernisation of labour relations and human resource management. Workplace innovation is not directed at and cannot be expected to have direct effects on diseases, injuries, absenteeism and accidents, although it might help indirectly. However, there is evidence that it may help to improve the quality of working life and productivity, especially as an effect of change projects that involve employee participation. Workplace innovation is regarded as complementary and conditional to technological innovation. Research indicates that through workplace innovation a simultaneous improvement in quality of working life and productivity is possible, in particular in projects with strong employee participation (Ramstad, 2009; Pot, 2011).

Workplace innovation does not cover the whole range of OSH topics and OSH performance, but it does include low stress risks, high job autonomy, lower physical workload, continuous development of competences, better labour relations (Pot and Koningsveld, 2009; Ramstad, 2009; Westgaard and Winkel, 2011). The latter can be described as a high 'quality of working life' (QWL). There is a need for more research to develop this association. The systematic review of Westgaard and Winkel (2011) is the first to give a broader overview of the possible relationship between workplace innovation and at least two major OSH topics (ergonomic and psychosocial risks inducing physical and mental health and other outcomes. In the Community Strategy for OSH 2007 – 2012 (European Commission, 2007) 'improving quality and productivity at work' is mentioned as an important goal. However, productivity in this document relates primarily to the

costs of absenteeism. Workplace innovation goes beyond cost savings. It is related to the enhancement of labour productivity and organisational learning or innovativeness.

8.3 New ways of working (NWW)

A specific example of social innovation at work or workplace innovation is the so-called New Ways of Working (NWW), originally called by Microsoft 'the new world of work'. Developments in Information and Communication Technology and more flexible ways of organising work processes have caused the work environment of knowledge workers to change substantially. This New Ways of Working means flexible work arrangements (e.g. mobile teleworking, from fixed to shared workspaces, flexible working hours), unrestrained by geographic, time and organisational boundaries and employees managed based on trust and results, causing a result oriented culture instead of the face-time culture where hours on the job are most important (Croon et al., 2005; Blok et al., 2010). NWW not only seems to meet business objectives, such as productivity growth caused by the expected increase of employee involvement, collaboration and reduction of square meter office space; it also provides greater opportunities for workers to effectively integrate the demands of work and personal life, reduction of unnecessary time travel and increased attractiveness of work for the organization (Hill et al., 2003; Blok et al., 2010).

The initiative was launched by real estate managers to cut the expenses for office buildings. HR joined in because of the changing work relations and management style (management by results). Of course support by the right ICT-tools and sound information management systems is important. Office buildings are redesigned into innovative office concepts that support communication and collaboration, adjusted to the needs of the flexible workers: from conventional office to telework office, from cellular lay-out to open plan offices, from fixed to shared workspaces. Later avoidance of traffic jams and care for the environment became additional motives. Nowadays some advocates of the NWW emphasize that the NWW is necessary because of the needs and wishes of the new generation of '2.0 employees'. Apart from cost savings it is expected that NWW can contribute to higher labour productivity, a better work-life-balance, higher work satisfaction, higher client satisfaction, a better company image on the labour market and even innovative behaviour and a sustainable economy.

8.4 Social innovation in the EU2020 Strategy

A growing number of countries is conducting or developing some kind of programme aimed at labour productivity, development of competences, quality of work, learning, and innovation (www.workinnet.org). Examples of programme titles are: work place development (Finland), innovative Arbeitsgestaltung; Innovationsfähigkeit (Germany), value creation (Norway), social innovation (Netherlands and Belgium), management and work organisation renewal (Sweden) and workplace innovation (Ireland and the UK). These

policies on the level of organisations and sectors are connected to policies on national and European levels concerning 'flexicurity' (employment, education and social security) and innovation. Key concepts are 'dynamic management' (absorption of external knowledge), 'working smarter' and 'utilisation of skills and competences'.
According to the Innovation Union Flagship Initiative, social innovation concerns the creation of new solutions to social problems and new social capital; its modus operandi focuses on building new social relationships and models of collaboration with an emphasis on empowerment and engagement.

What happens in the workplace, in other words the ways in which work is organised and people are managed, has enormous social as well as economic implications. Work organisation strongly influences performance, productivity and innovation in products and services, preconditions for a stable and equitable economic base. Economic performance is the main factor in the growth of welfare, creating the new jobs and wealth that facilitate the solution of social problems. However work organisation also shapes social outcomes which lie at the heart of the Europe 2020 Strategy such as the health, skills, employability and inclusion of employees and the consequences of demographic change (Dhondt et al., 2011; Pot et al., 2012).

'Social innovation at work' or 'workplace innovation' is the process through which "win-win" approaches to work organisation are formulated – approaches which are good for the sustainable competitiveness of the enterprise and good for the well-being of employees. Workplace innovation also represents the 'high road' to economic performance: it is the inherently European way characterised by high wages and high productivity.
Most importantly, workplace innovation is an inherently social process. It is not about the application of codified knowledge by experts to the organisation of work. Rather it is about building skills and competence through creative collaboration. Workplace innovation is about open dialogue, knowledge sharing, experimentation and learning in which diverse stakeholders including employees, trade unions, managers and customers are given a voice in the creation of new models of collaboration and new social relationships. Workplace Innovation is also a European challenge. Only a European approach can guarantee that achievements can be shared and secured.

8.5 The Dutch National Centre for Social Innovation (NCSI)

The Dutch National Centre for Social Innovation (NCSI) was established in 2006 by a small number of employers' associations (AWVN; FME-CWM), trade unions (CNV Vakmensen; FNV Bondgenoten), universities (Erasmus University RSM; University of Amsterdam) and TNO (Netherlands Organisation for Applied Scientific Research), Work and Employment. These parties were brought together by the former Innovation Platform, to gather their thus far separately executed plans on social innovation in order to reach synergy. The mission of the Centre was to put social innovation on the national agenda, to disseminate knowledge on the topic and stimulate action in companies and networks of companies,

trade unions and knowledge institutes (see Box 2). The NCSI was the Dutch representative in the former ERA NET 'Work-In-Net' of national programmes workplace development. However, in the Netherlands social innovation is much more like a 'national movement' rather than a 'national programme' as they exist in for example Finland and Germany. There are similarities in activities and partners. The NCSI was meant as a temporary booster for workplace innovation. After little more than five years the founding fathers and the sponsors considered the mission to be fulfilled and the project will end/ is ended on the First of April in 2012. Some of the activities are accommodated by other agencies.

Box 2. Activities of the Centre

A growing number of organisations are developing their own activities in collaboration with the centre (training courses, workshops, applied research). Initiatives from the centre include for example: workshops on conditions for trust-based management; search conferences on regional labour markets; search conferences on flexible working hours; development capacity planning model for health care; experiment of network of innovative organisations; description of best practices bottom up innovation; design of the education institute of the future; experiment cross functional teams for innovation; experiments working with less legislation and less formal procedures; community of self-employed; innovation experiments with 'employees 2.0' or 'millennials'; workshops on different aspects of social innovation; contest for the most innovative office; trainee programme; monitoring; website with good practices, development of 'serious games' on employee 2.0 and to support brainstorming in teams about process innovations etc.

In the years of its existence companies and public organisations have supported the Centre financially (50 k euro per year). These sponsors had a seat on the Programme Council; they decided on the activities. The activities of the Centre were politically and to some extent financially supported by project subsidies (1 Million euros per year) of three ministries (Economic Affairs; Social Affairs and Employment; Education, Culture and Science).

Unlike other countries the government is not the co-ordinator nor represented in the Centre. The political philosophy accepted by all parties is that the social partners can and should be leading. Another difference is that in the Netherlands there is no prolonged programme as the 13 year programme of TYKES in Finland because Dutch subsidies and other financial means have to be acquired every year or every 2 years. Of course this loose connection with the government and the limited and temporary financial resources made the centre quite vulnerable. As we know from Frieder Naschold's 'best practice model' for national workplace development the strategic justification should primarily arise from macro-level industrial policy issues rather than the industrial relations system or the research and development system (Naschold, 1994).

8.6 Theoretical coherence of QWL, innovation and performance

Individual and group performance is not directly the result of employee satisfaction or motivation, but of involvement and commitment through workers' representation, HRM practices and work organisation. For instance organisational commitment can be brought about by an organisational design that provides job autonomy, possibilities of consulting others, learning opportunities etc. These are exactly the same measures that are recommended to reduce psychological stress risks as a way of 'prevention at the source' (Pot et al. 1994). People do not suffer from severe strain because of problems and disturbances in their work but because they are not able to solve them. This is about discrepancies for example between quantitative job demands and available time or staff, between qualitative job demands and education or training, between problems and disturbances on the one hand and support from supervisor and colleagues on the other hand, between complexity of the job and control capacity.

The 'job demands - control model' also argues that - to understand performance - a proper work organisation is more important than satisfaction (Karasek and Theorell, 1990). 'High demands and high control' provides opportunities for learning. On the contrary 'high demands and low control' is a stress risk and stress inhibits learning. However, in most research, control is only measured by job autonomy (freedom of action within a specific job). This could be called 'internal control capacity', which is related to 'single loop learning' (Argyris and Schön, 1978). But discussing work organisation and targets is even more important for innovation. It enhances 'double loop learning' and also contributes to well-being and the prevention of 'presenteeism' (being present but not very productive). This requires control on another level and could be called 'external control capacity' (participation in decision making) as is elaborated in Modern Sociotechnology (Sitter et al., 1997; Kira and Eijnatten, 2008), the 'action regulation theory' (Hacker, 2003) and in theories of the innovative firm (Sabel, 2006).

The same holds for ergonomic design of workplaces. This serves not only as the objective of reduction of physical workload, prevention of MSD (allowing better postures and movements; reducing lifting) and health improvement (physical exercise) but also that of productivity (easier and faster handling and processing; better lay-out), in particular if the design and implementation processes are participatory (Koningsveld et al., 2005; Vink et al., 2006).

8.7 Dilemmas of employees and management

However, although there are enough reasons to develop workplaces from the perspectives of prevention and performance, it is not an easy job to do.

There are a number of dilemmas for employees and their representatives to be involved and to develop commitment to social innovation. Examples of these are long-term and

short-term effects (employment), “getting 1 kilo of responsibility connected to 100 grams of co-determination only”, andflexibility and security.

The employers’/managers’ side faces dilemmas as well. Benefits of social innovation are apparent later than the results of short-term budget cuts; the amount of return-on-investment of social innovation is rather difficult to estimate; bonuses and shareholders’ interests stimulate short-term thinking; social innovation is more complex than technological innovation; sharing knowledge and power is not easy.
A favourable condition to cope with these dilemmas good starting point is that unions and employers’ organisations are working together in the good Dutch tradition of mutual consulting (the so called ‘polder model’). Much attention is drawn to ‘trust’ and how to translate trust in work organisation and work relations. The newest concept in collective bargaining is: reciprocal risk management.

8.8 Effects of workplace innovation

Unfortunately most research covers industrial and/or private sectors whereas many projects were and still are being carried out in sectors such as health care, schools and municipalities.

Research by the Economic Institute for SMEs in 2008 among 650 Dutch SMEs indicated that companies with workplace development projects achieve higher productivity and financial results compared to companies that do not implement this kind of projects. However, the outcomes regarding quality of working life have not been measured except for employment that in most cases had increased (Table 8.1, Hauw et al., 2009).

Table 8.1 Working Smarter and Performance

PERFORMANCE CRITERION	% CHANGE IN PERFORMANCE LAST 2 YEARS	
	SMEs WITHOUT WORKING SMARTER	SMEs WITH WORKING SMARTER
Company results	2	18
Company turnover	7	15
Productivity	5	14
Employment	6	11

Economic Institute for SMEs. **SOURCE:** Hauw et al., 2009

The *Erasmus Competition and Innovation Monitor* of the Erasmus University Rotterdam – edition 2010 -included 932 Dutch companies of different sizes in different private business sectors. The broad concept of social innovation of the ECIM covers dynamic management, flexible organisation, working smarter and external cooperation. Compared to non-social innovative companies the social innovative companies perform better regarding increase

in turnover, profit and market share, and regarding innovation, productivity, new clients and reputation. In our introduction, we already pointed out that technological innovation by means of R&D and ICT investments determines 25% of innovation success, whereas social innovation (management, organisation and work aspects) determines 75%. This result has been consistently been found in the different waves of the survey. Between 2008 and 2009 the number of social innovative forms had increased with 5,2%. Between 2009 and 2010 the increase was 12,8% (Table 8.2, Volberda et al., 2010).

Table 8.2 Social innovation and performance

PERFORMANCE	PERFORMANCE SOCIAL INNOVATIVE VERSUS NOT SOCIAL INNOVATIVE ORGANISATIONS
Increase in turnover	16% higher
Increase in profits	13% higher
Innovation	31% higher
Productivity	21% higher
New clients	17% higher
Reputation	12% higher
Contented employees	12% higher

Erasmus Competition and Innovation Monitor 2010. **SOURCE:** Volberda et al., 2010

In the Netherlands Employers Work Survey (NWCS, 2008) the Netherlands Organization for Applied Scientific Research (TNO) includes four aspects in social innovation: strategic orientation, product-market improvement, working flexibly and organizing more smartly. In different sectors, 3.468 employers with 10 or more employees filled out the questionnaire. Company performance was measured as a combination of an increase during the last two years in turnover, profit and labour productivity. This combined performance was significantly better in organisations with more social innovation. This is also the case for the four different aspects of social innovation. The employer respondents in innovative companies were more contented with the terms of employment and HR practices in their companies. Concerning the quality of working life: contrary to expectation, the first findings point to the fact that no correlation exists between social innovation and job autonomy, except for the determination of working times and breaks (for edition 2008: see Oeij et al., 2010; Oeij et al., 2011b). New data for 2010 (Oeij et al., 2011a) show a somewhat other picture. Some preliminary results indicate that social innovation correlates to a substantial degree with statements from employers about their satisfaction with their employees (Pearson correlation of .29). This satisfaction was computed by the average score on statements about the employees' availability, commitment, flexibility in working times, preparedness to learn new things, quality of their output and labour productivity. Of course these evaluations by employers can only be seen as indirect indicators of the quality of work of employees. Social innovation also correlates with teamwork (.14), which can be regarded as an indicator for the types of workplace innovations that go

hand in hand with a better quality of jobs. A final indicator worthwhile to mention, is that social innovation correlates in a strong way with using talents of employees (.49). In general one can say that the quality of jobs seems to benefit from social innovation.

Maastricht University conducted research in the sector Technological Industry in 2008. Of all companies 82% implemented some kind of social innovation concerning 'organisation and management' or was planning to do this in 2009. This regards internal flexibility (50%), working in projects (50%), autonomous teams (23%) and other teamwork (40%). There is not a clear picture of changes in the hierarchy. One third of the companies was working on fewer management layers, 20% was decentralizing responsibilities and 20 % was centralizing responsibilities (Kriechel et al., 2009).

Starting in 2008 organisations could apply for ESF-funds for workplace innovation. An evaluation of this first year shows that 9 out of every ten projects were actually implemented. However not without troubles concerning developing commitment, overcoming resistance to change and keeping the projects within the planned time schedule. An important condition appeared to be the involvement of employees and their supervisors from the very beginning. Generally the interviewed people reported more task variety, better image of company for the employees and better utilisation of skills and competences. An improved quality of work is expressed by more engagement, more direct participation and higher job autonomy (Bureau Bartels, 2011). But also without additional funding many organizations initiated workplace innovation. See for some examples Box 3.

Box 3. Some examples of workplace innovation

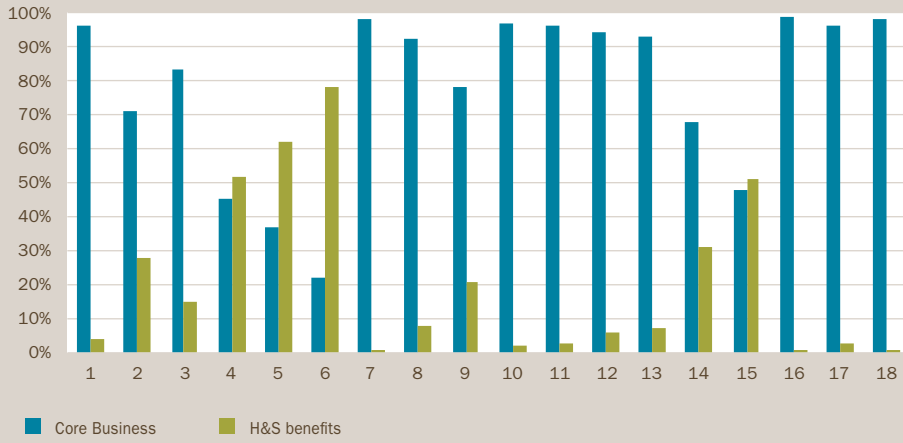
Bronkhorst High Tech is a Dutch firm which holds a worldwide position on mass flow and pressure measurement and control for the process industry, life sciences, food, energy etc. Together with the employees and supported by TNO, the management implemented Demand Flow, Lean Manufacturing and training on the job. The results were higher productivity (20%), shorter throughput time (minus 30%), a more flexible work organisation and enthusiastic staff.

At Philips the management and the unions decided in January 2010 for a new collective agreement in which a process of social innovation was announced, apart from the NWW as described above. A new 'HR director diversity and social innovation' had been selected. A steering group of management, unions and works council initiated four focus groups: flexibility, employability, health & safety and trust. These groups prepared covenants that were approved of by the steering group and – at the time of writing – are part of the negotiations for a new collective agreement.

There has only been limited systematic research on the way workplace innovation helps profitability and quality of work. To overcome the anecdotal character of most research, Koningsveld (2008) reviewed eighteen cases to find out which factors could be convincing to invest in social innovation. The cases are diverse, ranging from ergonomically designed hand tools, via assembly work, and an integral health program, to job enrichment. In all these cases TNO performed as consultant. Seven of the eighteen cases show a payback time of less than 1 year, while two other have a payback time of a little more than one

year. Managers usually decide immediately to implement interventions with such a short payback time. All the other cases are profitable within 3 years; many companies consider three years as the maximum time period to take investments into serious consideration.

FIGURE 8.1 **Percentage of all benefits**



SOURCE: Koningsveld, 2008

To assess the overall impact on core business values and on health and safety benefits, Koningsveld et al. tried to estimate the possible benefits on both dimensions. His systematic analysis helped to weigh both benefits in the same way and to show how the 18 projects faired in practice (Figure 8.1).

Despite the fact that almost all 18 projects start from the OSH perspective, in all but one case, both core business and OSH benefits occur as a result of the change project. A surprising result was that in hindsight the benefits for the core business values of fourteen of the eighteen cases exceeded those of the OSH benefits. In ten of these, the core business benefits represent more than 90% of the total benefits. Only in two cases do the OSH benefits exceed the core business benefits evidently.

This first review indicates that the prevention of unsafe working conditions and health impairment can go hand in hand with enhanced company performance. Of course we have to bear in mind that these cases are not a random sample of interventions.

Besides effects on organizational level we can also investigate the experiences of the working population. Looking at the European Working Conditions Survey (EWCS) the Netherlands has above EU-average scores on job autonomy as well as work pressure.

See also chapter 1 in this book. The European Company Survey 2009 shows that the Netherlands is third, behind Denmark and Sweden, regarding the percentage of establishments with autonomous team work (Eurofound, 2010:23). In the fifth EWCS of 2010 (www. eurofound.europa.eu) new questions have been included about influence on decisions (NL: 51%), consultation on targets (NL: 67%) and involved in improving work organization and work processes (NL: 65%), all of them being elements of external control capacity. It turned out that the scores of the Netherlands are among the highest in Europe. Furthermore employee representation on establishment level is rather well organized and compliant to general legislation. Whether and if yes, how the implementation of workplace innovation correlates with these variables cannot be concluded from the available research.

8.9 Dissemination and effects of NWW

The implementation of 'telework' as a specific example of workplace innovation is no longer a hype in the Netherlands. See Box 4 for some examples. It is a serious trend, certainly in some sectors of the Dutch economy. The consequences of the dissemination of NWW are still little researched or rather anecdotal in nature.

The Netherlands Working Conditions Survey (NWCS) shows that in 2010 only 16% of the working population was teleworker, compared to 12% in 2007. The typical teleworker appears to be a highly educated, often managerial man, living a long distance from his work. He has to do overwork regularly, feels time pressure quite often, but he has a good quality of work, especially high job autonomy. There is no indication for extra emotional exhaustion (burnout). Teleworkers can be found in particular in the ICT-sector (47%), higher education (30%), and commercial and financial services as well as the public sector. Of course industry, health care, agriculture and transport are less likely to implement 'telework' (Smulders et al., 2011). In the Netherlands Employers Work Survey (NEWS) 2010 57% of the respondents of government agencies indicate that their unit has implemented 'teleworking', being the highest percentage of all sectors (Oeij et al., 2011).

So far there is not much research on the effects of the NWW. Despite the growing interest, there is a lack of scientific proof for the effects of this new work concept, especially in relation to business goals. This is partly explained by the difficulty to measure the effects. First of all, there is a large variety of definitions on NWW. Secondly, organisations use NWW to reach a broad variety of business goals (i.e. reducing square meter costs, attracting talented employees, increase productivity) and they also differ in the way they monitor business objectives. Finally, it is difficult to assess the effects as the key indicators will be changing. For instance, old indicators such as hours on the job, do not indicate performance of the new work environment anymore (Croon et al., 2005; Blok et al., 2011). The little results available show small positive signs of NWW. Peters et al. (2011) analyzed the data of 1.017 employees and their supervisors in 90 job categories

in 30 organizations in the Netherlands. Teleworkers experienced more 'flow' than other employees. This was even better for employees who felt themselves empowered (trusted, job autonomy). An interesting result was that how the supervisor thinks about empowerment of their employees, is of no effect on what teleworkers experience.

Box 4. Some examples of New Ways of Working

A broad concept of mobile working was also introduced at Microsoft Nederland. One of the effects is that 49% of the employees reported higher productivity, 1% lower and 50% the same (presentation October 2010). The results have not yet been published in a scientific journal.

At Philips, workplace innovation was initiated in the real estate department to develop smarter offices and to economize on the number of office buildings. The current office space at that time was underutilised for 40% of the time. However, it very soon became clear that this 'mobile working' required changes in the work organisation, better ICT-support and changes in the way employees were managed: managing by output and not by presence. So the HR department joined in. The implementation of NWW is worldwide.

A problem in comparing research results and cases is that the change projects are most of the time more or less different although they share the 'telework'-component. Some organizations implement 'telework' in a narrow sense (flexible working times, independence of work location, ICT-tools), others include employee empowerment, job enrichment, development of competences etc. The latter category applies what we have called above social innovation at work or workplace innovation.

The Netherlands Working Conditions Survey (NWCS) shows that in 2010 only 16% of the working population was teleworker, compared to 12% in 2007. The typical teleworker appears to be a highly educated, often managerial man, living a long distance from his work. He has to do overwork regularly, feels time pressure quite often, but he has a good quality of work, especially high job autonomy. There is no indication for extra emotional exhaustion (burnout). Teleworkers can be found in particular in the ICT-sector (47%), higher education (30%), and commercial and financial services as well as the public sector. Of course industry, health care, agriculture and transport are less likely to implement 'telework' (Smulders et al., 2011). A separate dimension of NWW is the use of social media. One other interesting result is that an analysis of the data of the NEA (a special cohort of 3.327 employees in 2008 and 2009) shows that social media usage positively predicted innovative work behavior without effecting emotional exhaustion (Kraan et al., 2011). In the Netherlands Employers Work Survey (NEWS) 2010 57% of the respondents of government agencies indicate that their unit has implemented 'teleworking', being the highest percentage of all sectors (Oeij et al., 2011)."

8.10 Mainstreaming NWW and workplace innovation

The work of NCSI will be continued/has been taken over by regional centres around universities of applied sciences, by a national consultancy agency for SME's (Syntens) and by many private consultants and last but not least by the founding fathers of the NCSI separately or working together cooperatively in projects. An example of the last mentioned is the 'Manifesto for new labour relations' of January 2011 that is signed both by an employers association and trade unions and in which workplace innovation is an important ingredient. They emphasize that workplace innovation is even more important in times of economic crisis.
But also the other associations and unions support this development as members of the Social and Economic Council of the Netherlands, the most important advisory body to the government, that published several advices on the NWW and workplace innovation from 2006 on.

Every year more 'social partners' decide on collective agreements with elements of the NWW and/or workplace innovation (Pot at al., 2008). However these concepts are competing with the concept of 'sustainable employability' since national policy is to work beyond the age of 65.

Branches of services and industry have developed their sector programmes workplace innovation, in particular health care, education and manufacturing. Financial and commercial services, ICT services and government agencies implemented the 'new ways of working'.

A programme 'SME Powerplant', initiated by the national Innovation Platform, reached more than 2000 SME's in 2010 and 2011, supporting them to work smarter.

The ministry of Social Affairs and Employment has allocated ESF-funding (42 million € for 2007 – 2013) to support workplace innovation in private and public organisations.

Universities and universities of applied science have developed curriculums on social innovation at work and appointed new lecturers for these programmes. TNO and three universities established the network INSCOPE Research for Innovation that organises seminars and congresses.

The NWW is advocated by a national taskforce (Platform working smarter travelling smarter) with social partners but also activist groups for the environment (reduction of CO2 emissions through less traffic).

In September 2011 some political parties proposed legislation for the right to work with flexible working times.

The Advisory Council for Science and Technology Policy, in an advice to the government in August 2011, pays substantial attention to the complementarity of technological and social innovation and the importance of workplace innovation. The government itself published in September 2011 its policy on the future of the Dutch economy and innovation. Workplace innovation for higher productivity and innovativeness was mentioned as well as the role of TNO to support organizations and branches of industry in this respect.

8.11 Conclusions

The new movement in the Netherlands is gaining importance slowly but with conviction.The NWW and workplace innovation are on the agenda. Taskforces, NCSI and ESF-funding have been playing a boosting role. Initial results of workplace innovation on company performance and quality of work are visible. But the boosting activities will be discontinued in the near future. The government had to cut the national budget and its general philosophy is that everybody is responsible for his own budget and should not be dependent on subsidies. Let's hope that these budget cuts and this philosophy do not appear to have been implemented too early. There are many visionary people in companies, the trades unions, employers' associations and science, but some continuation of support from government may help.

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This book is an update of the first edition of ‘Worklife in the Netherlands’, published in 2006, and reflects research by TNO Work & Employment.

This book deals with relevant aspects of Worklife in the Netherlands:

- Quality of work in the Netherlands as compared to the EU
- The health of Dutch employees
- Sustainable employability
- Occupational health services: current status and future prospects
- Working conditions of flex workers
- Twenty-five years of government spending cuts: consequences for quality of work and productivity
- Knowledge work, and
- Workplace innovation in the Netherlands

TNO innovation for life