

## Tilburg University

### Dilemmas Of Downsizing During the Great Recession

van Dalen, H.P.; Henkens, K.

*Publication date:*  
2013

[Link to publication in Tilburg University Research Portal](#)

*Citation for published version (APA):*

van Dalen, H. P., & Henkens, K. (2013). *Dilemmas Of Downsizing During the Great Recession: Crisis Strategies of European Employers*. (CentER Discussion Paper; Vol. 2013-026). Department of Economics.

#### General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

#### Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

No. 2013-026

**DILEMMAS OF DOWNSIZING DURING  
THE GREAT RECESSION:  
CRISIS STRATEGIES OF EUROPEAN EMPLOYERS**

By

Hendrik P. van Dalen, Kène Henkens

May 1, 2013

ISSN 0924-7815  
ISSN 2213-9532

# **Dilemmas of Downsizing during the Great Recession: Crisis Strategies of European Employers**

Hendrik P. van Dalen<sup>1,2</sup> and Kène Henkens<sup>2,3</sup>

Version: April 29, 2013

(1) Tilburg University  
Tilburg School of Economics and Management (TISEM) and CentER  
P.O. Box 90153  
NL-5000 LE Tilburg  
The Netherlands

(2) Netherlands Interdisciplinary Demographic Institute (NIDI)  
P.O. Box 11650  
NL-2502 AR The Hague  
The Netherlands  
Email: [dalen@nidi.nl](mailto:dalen@nidi.nl)

(3) University of Amsterdam  
Department of Sociology & Anthropology  
Oudezijds Achterburgwal 185  
NL-1012 DK Amsterdam  
The Netherlands

## **Summary**

The present paper analyzes the choices faced by European employers when threatened with the prospect of the mass lay-off of their employees as a result of the Great Recession. By means of a representative survey among employers in Italy, Germany, Denmark, Poland, the Netherlands and Sweden in 2009, we show that employers mainly prefer to tackle such threats by offering short-time work, and by early retirement packages to older workers, in conjunction with buy-outs. The latter preference is particularly visible in countries where employers perceive the level of employment protection to be high. The only notable exception is Denmark, where employers prefer to reduce working hours. In general, a sense of generational fairness influences downsizing preferences, with those employers who favor younger workers particularly likely to use early retirement and buy-outs when downsizing, followed by working time reductions. Wage reductions and administrative dismissal are less favored by European employers. In particular, CEOs and owners are more inclined than lower-level managers to cut wages.

Key words: downsizing, early retirement, fairness, older workers, recession

JEL codes: D2, J63, J23, J26

## 1. INTRODUCTION

Drastic measures, such as downsizing, outsourcing, firing workers and cutting back on pension benefits are among the array of decisions contemplated and taken when managers formulate strategies to survive economic crises. However, one key question is how firms balance their various interests with those of their workers. For example, in extreme cases do they prefer to downsize or do they use all available means to avoid this course of action? Information on how choices are made in times of crisis is scarce, because studies tend to focus on ‘normal’ economic conditions, when any economic volatility lies within certain bounds. Under such stable conditions, any shocks can be faced by taking relatively minor or piecemeal action. However, during both the recent global financial crisis (the so-called Great Recession) and during the Great Depression of the 1930s, the shocks were severe and the adaptive policies of firms had to be radical if profitability was to be restored. In such times of uncertainty, the ‘animal spirits’ to which Keynes alluded may well dominate decisions to invest, downsize and/or lay off workers (see Akerlof and Shiller (2009)).

In the present paper, we examine how employers respond to the need to take far-reaching cost-cutting measures and how they address the difficult question of whether to keep workers in anticipation of better times to come, or to lay them off. The traditional assumption in economics is that concepts of fairness are irrelevant in such a dilemma; we nevertheless believe that considerations of equity and efficiency must be paid attention to in understanding such decisions. The reason for expecting these considerations to be important is because the findings of experimental and survey research (Bewley (1999, 2005), Camerer and Malmendier (2007), Kahneman et al. (1986), Fehr and Schmidt (1999)) show fairness to be a dominant force in most economic matters. While this notion may seem unorthodox to some economists, it is widely accepted by those who combine the insights of the real world with textbook economics. As the labor economist Albert Rees once noted:

“Beginning in the mid-1970s, I began to find myself in a series of roles in which I participated in setting or controlling wages and salaries. [...] In none of those roles did I find the theory I had been teaching for so long to be of slightest help. The factors involved in setting wages and salaries in the real world seemed to be very different from those specified in the neoclassical theory. The one factor that seemed to be of overwhelming importance in all these real-world situations was fairness.” (Rees (1993, pp. 243–244))

Unlike the writings of Rees, the present paper offers no perspective on wage determination, instead we focus on the role of fairness in considerations of the options of employers when faced with the prospect of downsizing. Further, we do not investigate the actual decision to lay workers off, but we rather focus on the options open to employers, and their preferences among such options, when managing a large reorganization. Specifically, this paper focuses on the following three strategies in downsizing:

- (1) Voluntary exit options (in particular, buy-outs and early retirement arrangements);
- (2) Rules of administrative dismissal (in particular, LIFO (last-in-first-out) and the dismissal rule of a balanced age structure, in which all age groups in the firm are equally hit by a downsizing operation); and
- (3) Indirect measures to prevent or reduce the extent of mass lay-offs, such as short-time working and wage cuts.

The primary aim of this paper is to describe and shed light on the preferences from among these options across employers in a variety of European countries. Secondly, we aim to investigate systematically various antecedents for choosing among dismissal options. We focus on two distinct elements, namely the sense of *generational fairness* and the perceived strictness of *employment protection*. Generational fairness is embodied in some of the rules and norms applied in the labor market (e.g., LIFO) that refer to common norms or explicit rules related to the application of fairness in order to minimize conflict. The notion that young workers ‘deserve a chance’ in times of economic downturns is a view that is widely held in society (OECD (2006), Munnell and Wu (2012)). Indeed, the findings of Kapteyn et al. (2010) and Kalwij et al. (2010) suggest that early retirement arrangements were designed and supported in the 1970s and 1980s in the Netherlands (when youth unemployment rates soared) to accommodate the feeling that young workers were not getting a fair chance. The same may be happening today, given that youth unemployment rates exceed those of older workers by a factor of two to four in most countries, and pressures are mounting to take corrective action, even though this course of action is known to be illusory as the so-called ‘lump of labor’ fallacy suggests (Ilmakunnas et al. (2010), Munnell and Wu (2012)). An unresolved empirical question is therefore whether employers also have these perceptions of fairness, and whether generational fairness plays a

distinctive role in human resource strategies. We contribute to the literature by offering direct evidence of the role of fairness among employers in matters of downsizing.<sup>1</sup>

The second element of focus is the strictness of employment protection rules. In most countries, there is some debate about whether to make employment protection less strict, with the model of Danish ‘flexicurity’ the leading example. In most studies of labor markets, employment protection is approximated in one of two ways. OECD indicators can be used to proxy the strictness of employment protection legislation in order to estimate macroeconomic effects (Venn, 2009), or a specific employment protection rule can be modeled in dynamic general equilibrium models (see Bartelsman et al. 2010) to derive the direct and indirect allocation effects on the labor market. Although both methods have advantages, we complement the insights provided by current approaches by offering direct evidence of the perceptions of employers about the strictness of employment protection in order to estimate the possible effects on human resource strategies.

The third aim of the present study is to gain a deeper understanding of the various cultures in which organizations operate. By studying dismissal policy choices in a representative sample of organizations in six European countries in 2009 (Denmark, Germany, Sweden, Poland, the Netherlands and Italy), our dataset contains a variety of different work and welfare state cultures. To our knowledge, no studies have provided data on employer behavior on such a large scale across such diverse policy contexts. In addition, we explore how employment protection determines the manner in which downsizing is effected. Compared with previous findings on this topic, the pooling of these diverse experiences provides more robust and clearer perspectives on how employers may react to the threat of downsizing.

The remainder of the paper is organized as follows. Section 2 presents a brief overview of the dilemmas which employers face when they face the threat of downsizing. Section 3 shortly describes the methods and data used to test hypotheses concerning downsizing preferences. And the central part of the paper will be section 4 where results are presented and discussed. Section 5 concludes this paper.

---

<sup>1</sup> However, today’s circumstances are different from those of the 1970s and 1980s when countries were enjoying the demographic dividend of a growing population. Today, the demographic dividend may be thought of as a demographic hangover because the growth of the potential workforce has petered out. In addition to the demographic context, the Great Recession of today makes the considerations of downsizing not a fictional choice but rather a dilemma faced by most employers, if not in reality then at least in the backs of their minds.

## **2. DILEMMAS WHEN DOWNSIZING**

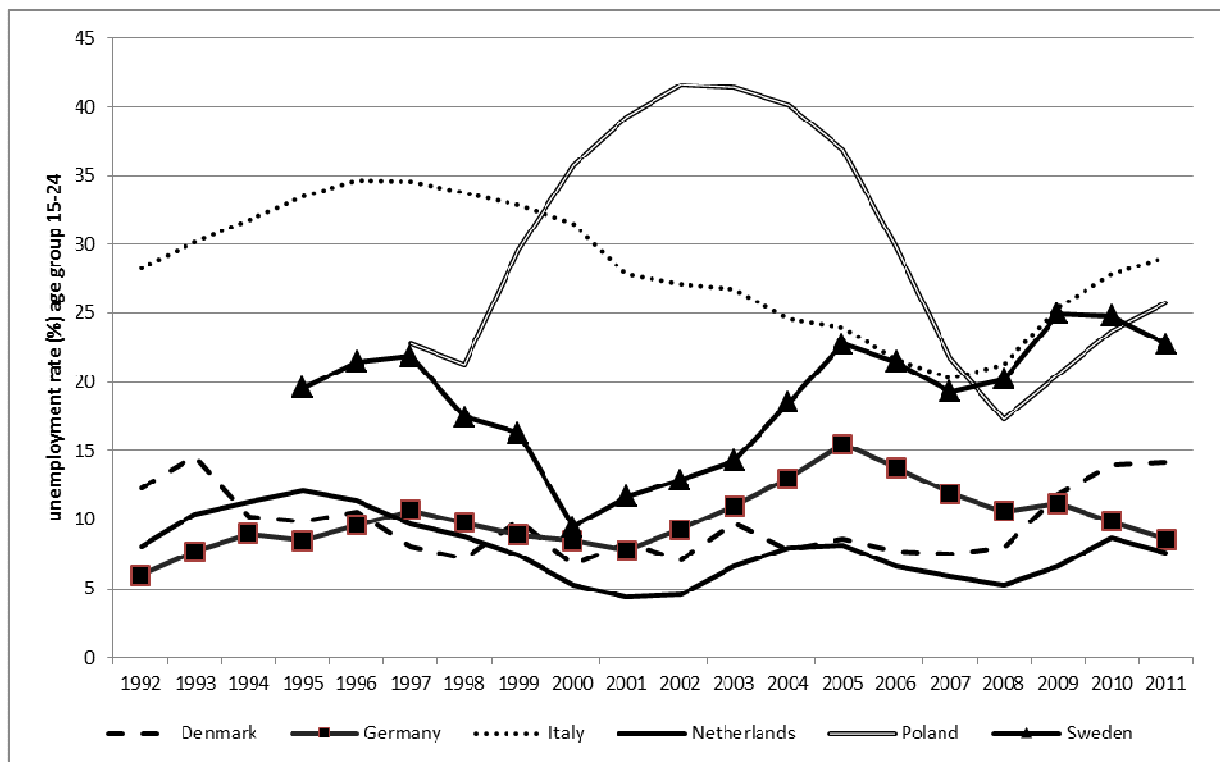
The Great Recession poses fundamental dilemmas for firms because large and negative shocks in demand necessitate a shifting of gears (often manifested as organizational readjustment and downsizing). Although in practice downsizing entails more than simply laying people off, we focus exclusively on so-called employee downsizing, which is a planned set of organizational policies and practices aimed at reducing the workforce with the goal of improving the performance of a firm (Datta et al. (2010)). Although the economic rationale of downsizing sounds plausible, the outcomes of such policies are ambiguous (for a review of the effects of downsizing, see Datta et al. (2010)). The costs of mass lay-offs are not always outweighed by the expected benefits in terms of higher profits and productivity. While such advantages may be the driving force for deciding to restructure, the associated costs can be large and take a variety of forms. Cascio (2010) lists the following direct and indirect costs of lay-offs: severance pay; paying out accrued vacation and sick pay; outplacement costs; higher unemployment-insurance taxes; the cost of rehiring employees when business improves; low morale and a tendency for survivors to be risk-averse; potential lawsuits, sabotage, or even workplace violence from aggrieved employees or former employees; loss of institutional memory and knowledge; diminished trust in management; and reduced productivity.

As mentioned in the Introduction, one particular dilemma is central in public debates, namely the fair treatment of younger workers. The reason for focusing on this specific issue is that this dilemma brings together issues of equity and efficiency. When deciding whether to lay younger employees off, generational fairness is expected to play a role in addition to considerations of profitability. Youth unemployment rates have soared since the onset of the Great Recession in 2008, with rates surpassing 50% in countries such as Greece and Spain. The youth unemployment rates (among those aged 15–24 years) and ratio of the youth unemployment rates to those of older workers are presented in Figure 1a and Figure 1b, respectively. These figures suggest that youth unemployment in Denmark, Germany and the Netherlands has remained relatively low, whereas that in Sweden and particularly in Poland and Italy is now high and volatile. The burden of the crisis is, however, not exclusively confined to younger workers. Middle aged and older workers also feel the effects of a contraction in economic activity. Figure 1b highlights the potential intergenerational tension in this regard. In



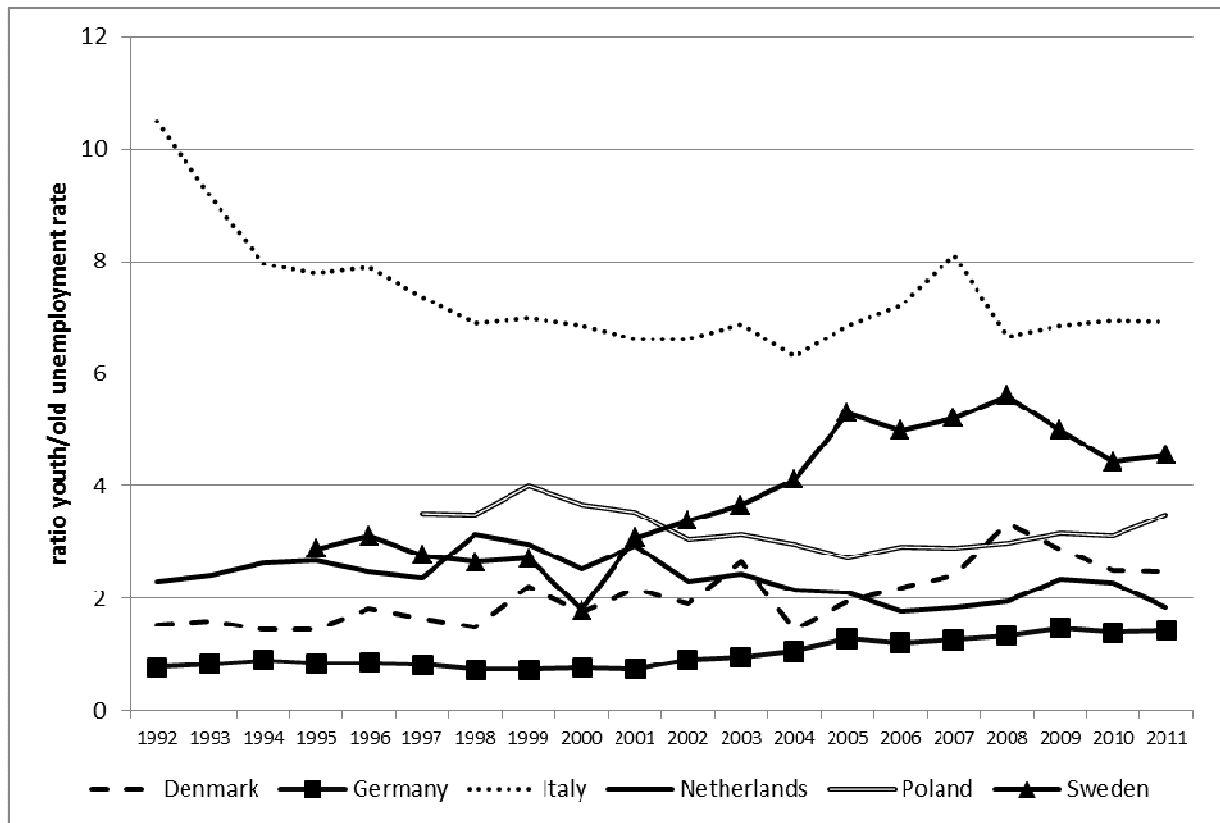
particular in Italy and Sweden, where the unemployment ratio between young and older workers has fluctuated between 4 and 8 for the past decade, one would expect considerations of generational equity to enter the minds of employers.

**Figure 1a: Youth Unemployment Rates (15–24 age group) in European countries: Denmark, Germany, Italy, Netherlands, Poland and Sweden, 1992–2011**



Source: Eurostat

**Figure 1b: Ratio of Youth Unemployment Rates (15–24 years) to Older Unemployment Rates (50–64 years) in European countries, 1992–2011**



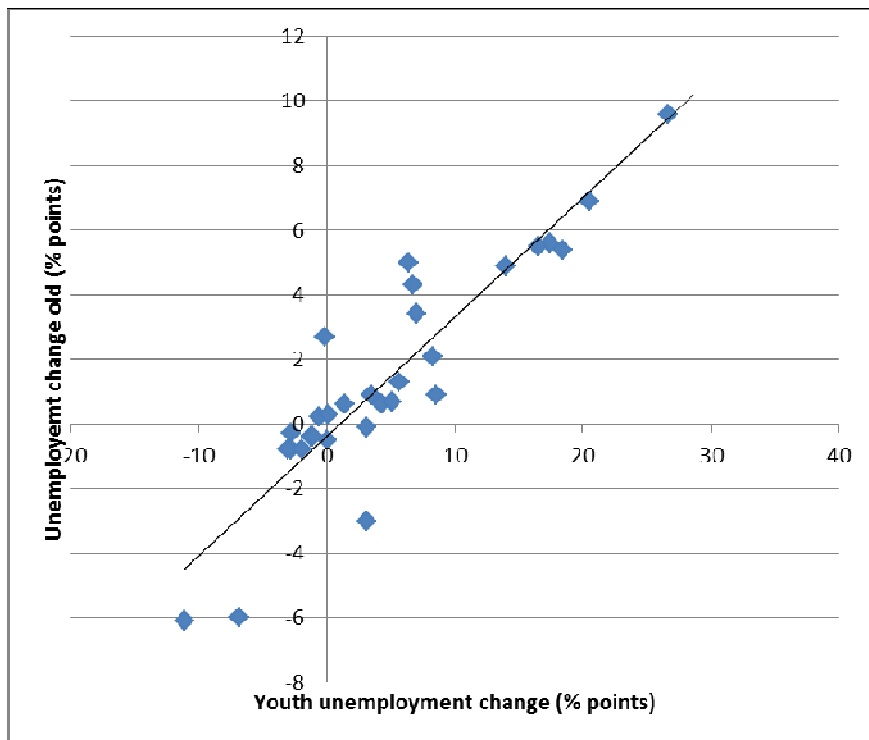
Source: Eurostat

In Europe, the Great Recession could not have occurred at a more inconvenient moment. Financial turbulence struck a number of European countries just as they were beginning to implement pension reforms aimed at counteracting the effects of having an aging population. These reforms include higher ages of retirement and a move to actuarially fair pensions, as well as the transition from defined benefit pension contracts to defined contribution contracts. Overall, the implied changes in income (and subsequently lower pension benefits, see Coile and Levine (2009)) as well as the institutional design changes carried out by governments - such as increasing the retirement age (in the case of the Netherlands, from 65 to 67) - have led workers to adapt their retirement plans and extend their working lives. In the eyes of the public, therefore,

the short-term and long-term concerns are conflicting: longer careers may well come at the expense of providing career opportunities to younger workers. The solution cherished by policymakers and the public is thus to replace older workers with younger ones. However, evidence that age groups can easily be substituted is virtually absent (Kalwij et al. (2010)) and at the macroeconomic level, later retirement does not seem to adversely influence the employment of young workers.

This idea of substitution formed the premise on which early retirement programs were designed in the late 1970s and 1980s. Early retirement arrangements were established in the belief that decreasing the labor participation of older workers would create opportunities for young unemployed people. Studies that have assessed this substitution of old workers for young ones, however, are unanimous in their findings. At the macro level, such measures fall prone to the ‘lump of labor’ fallacy; in other words, the literature refutes the idea that there is a fixed amount of work in the economy, which can be split up and allocated across workers.

**Figure 2: Relationship between changes (in percentage points) in youth (15–24 years) and older (55–64 years) unemployment rates in Europe, 2005–2011**



Source: Eurostat

Nevertheless, the practice of offering early retirement is still common, as the OECD (2006) show in their review of the policies aimed at working longer. The idea of redistributing work – and offering the option of early retirement – is especially prominent in times of recession and high (youth) unemployment. Indeed, a glance at the most recent data on the unemployment rates of younger and older workers shows that both trends move in tandem and that policies facilitating a substitution of old for young workers do not affect macroeconomic labor market figures (Figure 2).

A complicating factor in the day-to-day HR practices of organizations is the question of employment protection. Older workers are generally well protected in most countries (OECD (2006)) by virtue of their length of employment with the company, whereas young workers are still working their way up the firm’s hierarchy. Moreover, although some employment protection comprises part of the remuneration packages offered to employees (Pissarides (2010)), general protection tends to be offered at a sectoral or national level in most western countries, and is often enforced by the state (OECD (2010), Venn (2009)).

Nonetheless, the simple fact that older workers have more protection rights than young ones complicates the options available to an employer who wishes to be fair. An employer who downsizes and abruptly lays employees off is seen to be violating an implicit contract, a set of mutual obligations that link employer and employee. Such a breach of contract could have repercussions not only for those whose contracts are nullified but also for those who survive. Survivors may lose their trust in their principal, display less commitment, withhold effort or increase absence (De Meuse et al. (2004)), which can all have negative economic consequences (cf. Shah (2000)). These real-life repercussions make issues of fairness or procedural justice a topic of some importance for CEOs and owner-directors. In order to minimize disruptions to business operations, employers who perceive the realistic repercussions of downsizing pay close attention to the fairness of the processes used to arrive at major organizational decisions (Hegtvedt and Markovsky (1995)). Employees will judge as fair those processes that provide for “consistency across individuals and time, are free of bias, incorporate and reflect the opinions of people affected, and conform to the moral and ethical standards” (Leventhal et al. (1980)). In this respect, it is understandable why in most western countries the rules of employment protection agreed by all parties are followed closely in matters of downsizing.

The foregoing considerations make fairness and the perceived restrictions on dismissing workers the central focus of our paper. To make our considerations explicit, we focus on the following two hypotheses, both of which are central to the dilemmas faced by employers who face the threat of downsizing:

Hypothesis 1:

*The more employment protection rules are perceived to be strict, the more employers opt for (1) measures (wage cuts, short-time work) that alleviate the size of the employee downsizing operation and (2) measures (early retirement, buy-outs) that facilitate the voluntary exits of workers.*

Hypothesis 2:

*Employers who think it is fair for older workers to step aside to provide younger workers a chance in matters of downsizing (1) do not favor employment protection rules directed at older workers (such as LIFO) and (2) prefer to dismiss older workers through early retirement arrangements or a buy-out.*

### **3. METHODS AND DATA**

#### **3.1 Data Collection**

Data on employers' behaviors and attitudes were collected between March and November 2009. The countries included in this study were geographically dispersed throughout Europe and represented all types of European welfare state. We used data from comparative surveys carried out among employers in Denmark, Germany, Italy, the Netherlands, Poland and Sweden (Conen et al. (2012)). By employers, we mean the key decision makers in a selected business unit of an organization. In some cases, the business unit and organization were the same entity; however, the former could also refer to a subsidiary of a firm that operated at a national or international level.

The response rates of the survey for the sample countries were 11% (Germany), 17% (Italy), 23% (Netherlands), 23% (Poland), 28% (Denmark) and 53% (Sweden). These rates were lower than the average response rates for individual surveys but were in line with the rates

generally found in corporate surveys. In Europe and the United States, for instance, response rates have been found to be 20 to 30% at most (Brewster *et al.* (1994), Kalleberg *et al.* (1996), Van Dalen *et al.* (2009, 2010)).<sup>2</sup> For all countries, we drew a stratified sample of the characteristics of the sectors and sizes of the investigated business units.<sup>3</sup>

### 3.2 Dependent Variable

The central survey question on which we base our findings was as follows: “Suppose, under the current economic conditions, your organization is forced to downsize 20% of your staff. Which of the following policy measures would you favor?” The six options offered were:

- (1) Dismissals based on the LIFO principle
- (2) Dismissals based on the representative age structure of the organization
- (3) Early retirement of older employees
- (4) Buy-outs to facilitate voluntary exits
- (5) Short-time work
- (6) Reduction of wages for all employees

The answer options were: (1) strongly against; (2) against; (3) no opinion; (4) in favor; (5) strongly in favor.

### 3.3 Central Explanatory Variables

The central explanatory variables in this paper focus on the following two variables:

---

<sup>2</sup> Although the questionnaires used in the sample countries were identical, the interview techniques differed by country depending on what was perceived to be the best way to address respondents. Denmark used computer-assisted web interviewing; Germany, the Netherlands and Sweden used paper-and-pencil surveys; and France, Italy and Poland conducted interviews using the computer-assisted telephone technique.

<sup>3</sup> In the analyses at the national level, we weighted the data afterwards to account for the sampling design (see Conen, 2013) in order to ensure all observations were representative of the population of employers. Weights were constructed according to the population of business units from national statistics bureaus and corrected for the sectors and sizes of business units.

- *Generational fairness*: “Younger workers should get preferential treatment in staying on when an organization has to downsize” (1 = completely disagree to 5 = completely agree)
- *Perceived strictness of employment protection*: “How difficult is it for your organization to dismiss an employee who has a long tenure?” (1 = very easy to 5 = very difficult)

Contrary to the majority of published macroeconomic research, which focuses on the *de jure* level of employment protection as measured by OECD (2010), the present study uses the level of employment protection as perceived by individual employers. There is some evidence that perceptions of regulations may be of importance for understanding actual organizational decisions. For instance, Boeri and Jimeno (2005) show that small firms are often exempted from certain aspects of labor regulations or, when enforcement is weak, do not comply with legislation. In general, one would thus expect *de jure* regulations to influence labor demand. For example, the research by Pierre and Scarpetta (2006), who employ the World Bank’s *Investment Climate Survey*, shows that firms in developing countries that face stricter employment legislation are more likely to report that such regulations are a major obstacle to their business operations. However, these authors also show that larger and innovative firms tend to be more sensitive to the strictness of regulation. In short, the individual circumstances in which firms operate matter, because perceptions of the strictness of regulations may offer a better approximation of the ways in which the rules and regulations in a country function.

### 3.4 Secondary Explanatory Variables

We use a number of antecedents to provide additional insights into the preferences of employers:

- Percentage of highly skilled employees in the business unit
- Percentage of part-timers in the business unit
- Percentage of employees aged 50 years or older in the business unit
- Influence of unions, as measured by the response to the item: “The influence of unions on personnel policies is clearly visible in our organization” (1 = completely disagree to 5 = completely agree)
- Firm size, summarized by a dummy variable with three categories (small < 50 employees; middle-sized = between 20 and 250 employees; large = > 250 employees)
- Industry sector: manufacturing = 0; services sector = 1; public sector = 2.

- Position of respondent in the organizational hierarchy (owner-director/CEO = 1, otherwise (i.e., manager, head of department, HR manager, miscellaneous administrative functions) = 0)
- Age of respondent (in years)
- Need to downsize, as measured by the response to the question: “To what extent does your organization face the need to downsize?” (none or hardly = 0; to some extent = 1; a high extent = 2)

Table 1 summarizes the descriptive statistics of the variables used in the subsequent analysis (see the appendix for the country-specific statistics). These sample characteristics suggest that the average employer is 46 years old and that 29% of the employers are owner-directors or CEOs/CFOs. Organizations are represented almost equally across size categories and industry sectors. Further, in the organizations surveyed, approximately 25% of staff are aged 50 years or older and almost the same percentage applies to the number of highly skilled employees. Finally, 67% of the organizations surveyed barely perceived the need to downsize, while 26% felt some pressure and only 7% clear pressure.



**Table 1: Descriptive statistics**

	Mean	Standard deviation
<i>Independent variables: downsize options<sup>a</sup></i>		
<b>LIFO</b>	2.51	1.12
<b>Balanced age structure</b>	2.81	1.02
<b>Early retirement</b>	3.56	0.96
<b>Buy-out</b>	3.32	1.05
<b>Short-time work</b>	3.46	0.99
<b>Wage cuts</b>	2.70	1.09
<i>Explanatory variables</i>		
<b>Generational fairness<sup>a</sup></b>	2.82	0.96
<b>Perceived strictness EPL<sup>a</sup></b>	3.82	0.97
<b>Strength of unions<sup>a</sup></b>	2.69	1.27
<b>% Part-timers in the business unit</b>	0.18	0.23
<b>% Highly skilled employees in the business unit</b>	0.25	0.29
<b>% Older workers (50+) in the business unit</b>	0.25	0.17
<b>Size of the organization</b>		
<b>Small</b>	0.33	0.47
<b>Middle</b>	0.36	0.48
<b>Large</b>	0.30	0.46
<b>Sector</b>		
<b>Manufacturing</b>	0.38	0.48
<b>Service sector</b>	0.30	0.46
<b>Public sector</b>	0.33	0.47
<b>Need to downsize</b>		
<b>None/hardly</b>	0.67	0.47
<b>To some extent</b>	0.26	0.44
<b>To a high extent</b>	0.07	0.26
<b>Age of respondent (in years)</b>	46.39	9.70
<b>CEO/owner-director (otherwise = 0)</b>	0.29	0.45

(a) These variables are all based on a five-point scale.

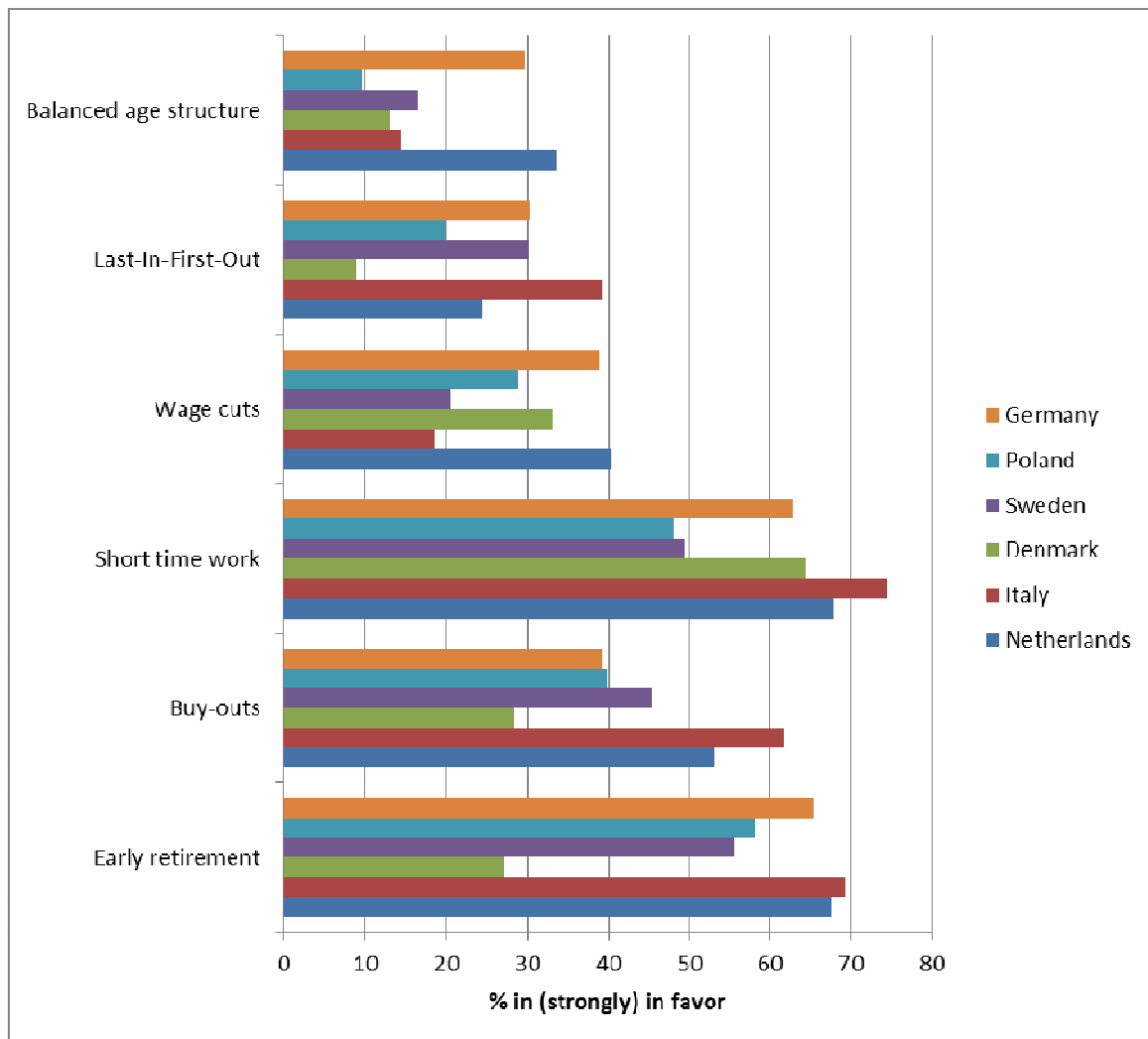
N = 3625; see appendix for the full descriptive statistics for individual countries.

## 4. RESULTS

### 4.1 Basic Descriptive Statistics

For the sample countries, Figure 3 summarizes the preferences of European employers if their organizations faced the threat of downsizing. It is clear that early retirement, buy-outs and short-time work are the dominant preferred options for managing downsizing across all sample countries. By contrast, cutting wages across the board is an unpopular option, although it would still be considered by a number of organizations in the Netherlands and Germany.

**Figure 3: Policy options for dealing with mass lay-offs across European employers, 2009**



Source: ASPA (2009), weighted figures

In our analysis we aim to establish which antecedents help explain these choices by focusing on generational fairness and the perceived strictness of employment protection. Tables 2 and 3 rank generational fairness and the perceived difficulty of employment protection rules by level of employer agreement, respectively.

**Table 2: Generational fairness among employers, ranked by level of agreement**

“Younger workers should get preferential treatment in staying on when an organization has to downsize.”			
	Agree	No opinion	Disagree
<b>Italy</b>	50	14	36
<b>Sweden</b>	36	30	34
<b>Poland</b>	25	29	46
<b>Netherlands</b>	24	20	56
<b>Germany</b>	23	30	47
<b>Denmark</b>	13	49	38

Source: ASPA (2009), weighted figures

Table 2 shows the diverse opinions of European employers with respect to the treatment of young and old workers in the case of downsizing. Italian employers clearly favor younger workers in times of crisis, while Swedish employers are more evenly divided across the various categories. However, employers in the other sample countries disagree that younger workers should receive preferential treatment. This disagreement may be a forceful explanation of the preference for early retirement, because such programs offer higher replacement rates than unemployment or welfare benefits. An additional insight offered by Table 2 is that the preference for younger workers over older ones is largely related to the state of the local labor market (see Figures 1a and 1b). For instance, youth unemployment in Italy is extremely high (approximately 30%) and outranks the unemployment rate of older workers by a factor of 7 (in the 1990s, this was even a factor of 10). By contrast, Sweden, which also has a high level of youth

unemployment compared with the unemployment rate of older workers, displays a relatively high level of generational fairness towards the young.

**Table 3: Perceived strictness of employment protection, ranked by level of difficulty**

Difficulty of dismissing an employee with a long tenure			
	(Very) easy	Neither easy nor difficult	(Very) difficult
<b>Italy</b>	4	13	83
<b>Netherlands</b>	3	27	70
<b>Sweden</b>	3	35	62
<b>Germany</b>	7	31	62
<b>Poland</b>	14	49	37
<b>Denmark</b>	28	46	26

Source: ASPA (2009), weighted figures.

With respect to the perceived strictness of employment protection, employers in Italy, the Netherlands, Sweden and Germany perceive these rules to be relatively strict. In each of these sample countries, the majority of employers state that it is (very) difficult to fire workers who have long tenures, whereas Polish and Danish employers are less certain about the complexity of firing a long-standing employee. These country-level perceptions are largely in line with the OECD's official employment protection indicators (see OECD (2010), Venn (2009)). The only exception may be Italy. According to the OECD's indicators for 2008, the protection of permanent workers against (individual) dismissal is registered as quite flexible; however, the Italian employers in our sample perceive individual dismissal as strictly regulated. This anomaly may be explained on the basis that employers interpret this question in a broad sense (i.e.,

considering collective as well as individual dismissals). Indeed, employment protection for the case of *collective* dismissals in Italy is one of the most restrictive in the OECD.<sup>4</sup>

#### 4.2 Multivariate Analysis

Although these cross-tabulations suggest a particular ranking of options for overcoming the dilemmas of downsizing, we use multivariate regression analysis to examine these driving forces in detail. Table 4 presents the ordered logit analysis of preferences for downsizing options. In this analysis, we distinguish between measures that facilitate employee downsizing (i.e., LIFO, balanced age structure, early retirement and buy-outs) and measures that aim to alleviate or mitigate the threat of downsizing by either cutting the wages of all employees or shortening working hours. We first examine the central hypotheses regarding the influence of generational fairness and the perceived strictness of employment protection on these downsizing options, and then discuss the most important antecedents that explain downsizing preferences.

First, the estimation results suggest that Hypothesis 1 is partially supported by our empirical evidence. Whilst the perceived strictness of employment protection rules is not associated with a preference for wage cuts or short-time work, it does significantly explain the preference for voluntary exit routes, namely early retirement packages (in particular) and/or buy-outs. By calculating the marginal effects (see Table 5), it becomes apparent how strong the driving force of these perceptions are. Almost half of employers (49%) who find it very easy to dismiss a worker would opt for early retirement as a downsizing measure compared with almost three-quarters (74%) of employers who find it very difficult to fire a worker. In other words, the likelihood that early retirement is chosen increases substantially as the level of employment protection is perceived to be stricter.

Whilst the evidence for Hypothesis 1 is mixed, this is not the case for Hypothesis 2. In other words, the empirical results are in line with the stated hypothesis. Columns (1) and (2) show that employers who favor younger workers do not support the use of the LIFO rule and prefer a more balanced age dismissal rule than employers who do not share this sense of fairness.

---

<sup>4</sup> For the various sample countries, we list here the OECD indicators on a scale of 0 (least) to 6 (most restrictions) for these two cases of dismissal: protection of permanent workers against individual dismissal (Ind). specific requirements for collective dismissal (Col): Netherlands (Ind: 2.73; Col: 3.00); Italy (Ind: 1.69; Col: 4.88); Denmark (Ind: 1.53; Col: 3.13); Sweden (Ind: 2.72; Col: 3.75); Poland (Ind: 2.01; Col: 3.63); Germany (Ind: 2.85; Col: 3.75).

**Table 4: Ordered logistic analysis of the preference for using one of the downsizing options**

	Administrative dismissal rules		Facilitating voluntary exit by means of:		Indirect measures preventing downsizing	
	(1) LIFO rules	(2) Balanced age structure	(3) Early retirement	(4) Buy-outs	(5) Short-time work	(6) Wage cuts
<b>Generational fairness</b>	-0,06**	0,17***	0,29***	0,13***	0,00	0,01
<b>Perceived strictness employment protection</b>	-0,03	-0,01	0,27***	0,15***	0,03	0,02
<b>Strength unions</b>	0,01	0,07***	0,05*	0,01	-0,06**	-0,09***
<b>Percentage part-timers</b>	0,32**	-0,01	-0,10	0,09	0,24	0,07
<b>Percentage highly skilled</b>	-0,41**	-0,28**	-0,08	0,37***	-0,15	0,06
<b>Percentage workers 50+</b>	-0,29	0,31*	1,07***	0,52***	-0,06	-0,24
<b>Size (small = 0)</b>						
<b>Middle</b>	-0,10	0,20***	0,27***	0,53***	0,08	0,03
<b>Large</b>	-0,19**	0,40***	0,44***	0,91***	0,16*	0,21***
<b>Sector (Manufacturing = 0)</b>						
<b>Services sector</b>	0,02	-0,11	-0,17**	0,15*	-0,27***	-0,02
<b>Public sector</b>	-0,11	-0,14	-0,21**	0,07	-0,75***	-0,76***
<b>Owner/CEO (other = 0)</b>	-0,48***	-0,22***	-0,27***	-0,42***	0,03	0,42***
<b>Age of respondent</b>	-0,00	-0,01*	-0,01***	0,00	-0,01**	-0,01***
<b>Need to downsize (low extent =0)</b>						
<b>Some extent</b>	-0,01	-0,10	0,15*	0,11	-0,11	-0,03
<b>High extent</b>	-0,01	0,23*	0,53***	0,59***	0,01	0,06
<b>Country (Netherlands = 0)</b>						
<b>Italy</b>	0,65***	-1,87***	-0,69***	-0,42*	0,07	-0,62***
<b>Denmark</b>	-0,77***	-1,20***	-1,34***	-0,99***	-0,02	-0,06
<b>Sweden</b>	0,21*	-0,66***	-0,52***	-0,39***	-0,47***	-0,09
<b>Poland</b>	0,74***	-1,24***	-0,42***	-0,76***	-0,64***	-0,04
<b>Germany</b>	0,67***	-0,47***	-0,24**	-0,66***	0,05	0,58***
<b>Pseudo R<sup>2</sup></b>	0.03	0.05	0.06	0.05	0.02	0.03

Note: N = 3625; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1; cut-off points are not presented for matters of brevity.

With respect to the second part of Hypothesis 2, it is also clear that generational fairness affects the decisions of employers: those who favor younger workers tend to use early retirement programs and buy-outs to facilitate the exits of older workers than employers who do not. Finally, although the coefficients presented do not allow us to provide an exact impression of the driving force of generational fairness, the marginal effects presented in Table 5 seems to support this perspective for the options of early retirement and buy-outs.

**Table 5: Visualizing the marginal effects of generational fairness and the strictness of employment protection legislation on choosing early retirement or buy-outs (based on the estimation model in Table 4, evaluated at sample means)**

<b>Early retirement</b>		<b>Strongly against</b>	<b>Against</b>	<b>No opinion</b>	<b>In favor</b>	<b>Strongly in favor</b>
<b>Favoring young workers in downsizing</b>	Strongly disagree	0.06	0.18	0.24	0.46	0.06
	Disagree	0.04	0.14	0.21	0.53	0.09
	Neutral	0.03	0.12	0.19	0.55	0.11
	Agree	0.02	0.09	0.15	0.59	0.15
	Strongly agree	0.02	0.09	0.16	0.58	0.14
<b>Buy-outs</b>		<b>Strongly against</b>	<b>Against</b>	<b>No opinion</b>	<b>In favor</b>	<b>Strongly in favor</b>
<b>Favoring young workers in downsizing</b>	Strongly disagree	0.06	0.21	0.23	0.45	0.05
	Disagree	0.05	0.19	0.22	0.48	0.06
	Neutral	0.05	0.17	0.21	0.50	0.06
	Agree	0.04	0.16	0.20	0.53	0.07
	Strongly agree	0.04	0.14	0.19	0.55	0.08
<b>Early retirement</b>		<b>Strongly against</b>	<b>Against</b>	<b>No opinion</b>	<b>In favor</b>	<b>Strongly in favor</b>
<b>Strictness of EPL</b>	Very easy	0.06	0.19	0.26	0.44	0.05
	Easy	0.04	0.16	0.24	0.50	0.06
	Neither easy nor difficult	0.03	0.13	0.22	0.55	0.07
	Difficult	0.03	0.10	0.19	0.59	0.10
	Very difficult	0.02	0.08	0.16	0.62	0.12
<b>Buy-outs</b>		<b>Strongly against</b>	<b>Against</b>	<b>No opinion</b>	<b>In favor</b>	<b>Strongly in favor</b>
<b>Strictness of EPL</b>	Very easy	0.07	0.24	0.24	0.41	0.04
	Easy	0.06	0.21	0.23	0.44	0.05
	Neither easy nor difficult	0.05	0.19	0.22	0.48	0.06
	Difficult	0.05	0.17	0.21	0.51	0.06
	Very difficult	0.04	0.15	0.20	0.53	0.07

Note: rows sum to 1, with rounding errors.

The influence of generational fairness on downsizing preferences is therefore clear. Nonetheless, even those employers who strongly disagree with the preferential treatment of younger workers have a 52% likelihood of favoring early retirement as a downsizing option compared with 72% of employers who favor younger employees. In other words, a strong switch towards favoring younger workers implies that the likelihood of so doing increases by 20 percent. While this strong driving force behind generational fairness is less visible in the use of buy-outs, this is largely understandable; buy-outs can also be used to facilitate the exits of younger workers, whereas early retirement is by definition restricted to older ones.

With regard to the other antecedents, a number of other results are noteworthy. First, aging organizations<sup>5</sup> (i.e., those with a high percentage of workers aged 50 years or older) show characteristics in line with the principles of generational fairness. An increase in the number of older workers is associated with a higher likelihood that the employer in question will prefer early retirement and buy-outs as exit routes.

Second, firm size and industry sector seem to be significant. In particular, large organizations are more likely to downsize through early retirement arrangements and buy-outs than small ones, perhaps because they have larger financial reserves to facilitate such choices. Large organizations also show a preference for cutting wages across the board as an option to alleviate the effects of downsizing. The reason why smaller firms tend not to resort to cutting wages may be found in the simple model of Weiss (1980), which shows that firms are in general averse to wage cutting and prefer to lay workers off, because the most talented employees with the best options will resign, thereby leading to adverse selection. In small organizations, production and profitability may depend on just a few ‘star’ workers; once they leave, the firm may unravel. One possible explanation of why large organizations do not entirely back away from cutting wages is that they may possess sufficient economies of scale to create an internal labor market, in which they are able to find suitable candidates if the most talented employees were to resign.

---

<sup>5</sup> The percentage of older workers may indeed capture the stylized effect measured by Autor and Dorn (2009) and Bosch and Ter Weel (2013) that older workers are more often employed than young workers in declining industries or professions.



The estimation results by industry sector also demonstrate the plausible outcome that public sector employers never cut wages and rarely reduce the working hours of their employees. This finding suggests that the labor contracts of civil servants, in terms of wages and hours, cannot be changed even in the worst of financial climates, which may be the result of strong union bargaining.<sup>6</sup> Notably, the explicit role of unions is present in the choices made by employers, judging from the strength that employers perceive unions to have, but the effects are not that great. Unions tend to be able to reinforce the balanced age rule of dismissal and prevent reductions in working hours and wages. However, our results do not show clearly why unions cannot influence the choices substantially for early retirement packages and buy-outs. By contrast, the work of Fischer and Sousa-Poza (2010) shows that strong unions lead to a higher likelihood of employees receiving severance pay.<sup>7</sup>

Third, the sense of urgency to downsize as perceived by employers significantly influences their preferences. Those employers who feel that the need to downsize is real and present are more likely to choose early retirement and buy-out packages than employers who feel little such pressure to act, suggesting that the instincts of employers are to use early retirement benefits when the threat of downsizing is real.

Fourth, the position within the organizational hierarchy affects how decisions over major reorganizations are made. CEOs and owner-directors are averse to downsizing options (e.g., early retirement, buy-outs or applying the LIFO rule) and attempt to alleviate the need to downsize by opting for wage cuts. This is a strong and robust finding which suggests that distance from the top to the bottom may matter in making choices. Of course, it remains somewhat of a puzzle why hierarchy matters. One reason could be that middle managers and supervisors, who are closer to employees, may be better able to assess how wage cuts would affect work morale or lead to negative repercussions (cf. Bewley (2005)).

Finally, since the number of countries is too small to perform multilevel analyses (cf. Maas and Hox (2005)), in order to test for macro-level effects we controlled for country-specific

---

<sup>6</sup> Considering the fact that most public sector organizations are very large, it stands to reason that early retirement programs and buy-out packages are used to solve the downsizing puzzle.

<sup>7</sup> Fischer and Sousa-Poza (2010) offer a complementary cross-sectional view (with the use of SHARE data) on the probability of retiring early with severance pay in a number of European countries. However, it should be noted that the setting – no need for mass lay-offs, no crisis conditions within a firm– and the focus on the employee having retired early is distinctly different, making further comparisons of research findings somewhat difficult.

characteristics by including country dummies, and found these effects to be large and significant. This result suggests that substantial variation cannot be captured by the structural variables included in the present regression analysis and that the institutional structure of a country is highly relevant. Danish employers, for example, are less likely to consider most alternatives to downsizing apart from short-time work and wage cuts. Further, with respect to short-time working, the influence of government programs in Italy and Germany is especially noticeable, where the take-up rate of these programs during the Great Recession has been substantial (Möller (2010), Hijzen and Venn (2011)).

## 5. CONCLUSIONS

When a recession deepens, the instincts or ‘animal spirits’ of employers that were previously suppressed by prosperity or considered to be outdated may resurface. One such instinctive motive related to assisting a business in distress is encouraging older workers to take early retirement. Given the aging populations and unsustainable pension and social security systems of the developed world, an attitude common among western governments has been to reverse this early retirement trend and shift towards ‘active aging’, by encouraging workers to extend their careers substantially (Henkens and Schippers, 2012). However, our findings show that the Great Recession seems to have reactivated the instincts of employers. Specifically, we found that European employers predominantly resort to offering early retirement packages (and to a lesser extent buy-outs) in response to the threat of downsizing, and these preferences are even stronger among employers for whom the need for downsizing is already a fact of life. The only exception to this rule is the response of Danish employers, whose dominant preference to tackle this problem is by reducing the working hours of their employees.

Understanding why employers resort to early retirement can be seen as a reflection of the degree of the generational fairness and strictness of the employment legislation perceived by employers. The use of generational fairness as an important factor of influence in times of crisis reminds us of the ‘animal spirits’ to which Keynes alluded in his *General Theory* (1936). Or, to rephrase this in the lingo favored by behavioral economists (cf. DellaVigna, 2009): it are the non-standard preferences and beliefs which matter in organizational decision making. Further, the perception of the strictness of employment protection is also clearly associated with selected

downsizing options: the more employers perceive these rules to be strict, the more they opt for buy-out routes and early retirement programs. One should however take note of the fact that, even those employers who display no generational bias towards younger or older workers or who do not find employment protection to be restrictive generally prefer early retirement and buy-outs as downsizing solutions. Hence, there seems to be a clear and structural driving force for employers to choose these exit options.

Besides the effects of generational fairness and the strictness of employment protection some firm-specific antecedents are also clearly associated with the preference of employers to offer early retirement packages as a downsizing strategy. Large and aging organizations are more likely to opt for early retirement. Furthermore, this study underscores the diversity of European experiences. Some of this diversity is fairly pronounced. Despite the fact that European employers have some responses in common when dealing with crises, they also demonstrate some differences in their reactions. Denmark remains a divergent case, given that Danish employers seem to have coped reasonably well with the recession by diverging from the instinctive response to send older workers into early retirement. Although it is the case that Denmark relies on a set of active labor market policies, the reality is that, despite the image of the enlightened and fixed design of 'flexicurity', the fundamentals of labor market policies have changed over time as experience has been accumulated (Andersen and Svarer (2012)). The country specificity of employer behaviors and perceptions are a hardwired element of most labor market studies, serving as a silent reminder to policy makers that popular solutions such as exporting the Danish model of 'flexicurity' to other countries must be met with some skepticism. Good or best practices are typically hard to replicate or capture in models, because the tacit mechanisms of labor markets and organizations are often lost in translation.

The finding that fairness matters in labor market decisions may turn out to be of some importance because issues of generational fairness are becoming more and more prominent in the public debate in countries facing soaring youth unemployment rates. In the view of the general public the obvious solution would be to send older workers into early retirement (or at least to reduce their working hours) in order to pave the way for younger workers to forge their own careers. This type of generational fairness resonates with an electorate suffering the consequences of high and rising unemployment (see OECD (2006)). Although, this idea of reshuffling intergenerational labor denies the harsh fact that these types of policies do not work

at the macroeconomic level (Munnell and Wu (2012)), many European employers are inclined to fall back on these old solutions to survive the economic crisis.

## Appendix: Descriptive statistics for individual countries

**Table A1: Descriptive statistics per country**

<i>Independent variables: downsize options</i>	Netherlands		Italy		Denmark		Sweden		Poland		Germany	
	Mean	s.d.	Mean	s.d.	Mean	s.d.	Mean	s.d.	Mean	s.d.	Mean	s.d.
<b>LIFO</b>	2.38	1.10	2.78	1.08	1.93	1.01	2.50	1.21	2.80	0.96	2.73	1.15
<b>Balanced age structure</b>	3.20	1.06	2.36	0.89	2.57	1.00	2.93	0.83	2.57	0.86	2.98	1.02
<b>Early retirement</b>	3.74	0.93	3.59	0.94	3.01	0.96	3.66	0.93	3.60	0.82	3.66	0.98
<b>Buy-outs</b>	3.55	0.97	3.43	1.03	2.94	1.05	3.49	0.99	3.16	0.96	3.23	1.15
<b>Short-time work</b>	3.56	0.93	3.55	0.93	3.52	0.90	3.23	1.01	3.22	0.98	3.50	1.13
<b>Wage cuts</b>	2.78	1.08	2.36	0.97	2.68	1.12	2.57	1.03	2.70	1.05	3.02	1.13
<i>Explanatory variables</i>												
<b>Generational fairness</b>	2.64	0.88	3.15	1.08	2.71	0.77	3.10	0.91	2.74	1.06	2.74	0.94
<b>Perceived strictness of EPL</b>	3.93	0.79	4.46	0.85	2.98	0.93	3.84	0.85	3.37	0.82	4.12	0.88
<b>Strength of unions</b>	2.57	1.18	3.12	1.29	2.78	1.21	3.25	1.12	2.45	1.33	2.21	1.18
<b>% Part-timers</b>	0.31	0.27	0.09	0.17	0.11	0.16	0.16	0.21	0.07	0.14	0.25	0.24
<b>% Highly skilled</b>	0.18	0.27	0.24	0.29	0.20	0.25	0.37	0.34	0.37	0.31	0.20	0.24
<b>% Older workers (50+)</b>	0.23	0.15	0.19	0.17	0.27	0.15	0.32	0.19	0.26	0.20	0.27	0.15
<b>Size of the organization</b>												
<b>Small</b>	0.32	0.47	0.35	0.48	0.33	0.47	0.38	0.49	0.39	0.49	0.28	0.45
<b>Middle</b>	0.35	0.48	0.36	0.48	0.35	0.48	0.32	0.47	0.43	0.50	0.36	0.48
<b>Large</b>	0.33	0.47	0.29	0.45	0.32	0.47	0.30	0.46	0.19	0.39	0.36	0.48
<b>Sector</b>												
<b>Manufacturing</b>	0.37	0.48	0.46	0.50	0.37	0.48	0.37	0.48	0.46	0.50	0.27	0.44
<b>Services sector</b>	0.33	0.47	0.32	0.47	0.30	0.46	0.28	0.45	0.27	0.45	0.26	0.44
<b>Public sector</b>	0.31	0.46	0.23	0.42	0.33	0.47	0.35	0.48	0.27	0.44	0.47	0.50
<b>Need to downsize</b>												
<b>None/hardly</b>	0.63	0.48	0.65	0.48	0.67	0.47	0.54	0.50	0.82	0.20	0.72	0.45
<b>To some extent</b>	0.28	0.45	0.27	0.45	0.27	0.44	0.38	0.48	0.12	0.13	0.23	0.42
<b>To high extent</b>	0.09	0.29	0.08	0.27	0.06	0.25	0.09	0.28	0.05	0.31	0.05	0.22
<b>Age respondent</b>	45.64	9.92	45.32	9.45	48.61	8.79	49.21	9.28	42.61	10.04	47.62	9.13
<b>CEO/owner-director (otherwise = 0)</b>	0.41	0.49	0.09	0.29	0.45	0.50	0.14	0.35	0.15	0.36	0.38	0.49
<b>N =</b>	916		582		546		423		501		657	

## References

Akerlof, G.A., and R.J. Shiller (2009), *Animal Spirits – How Human Psychology Drives the Economy, and Why it Matters for Global Capitalism*, Princeton NJ, Princeton University Press.

Andersen, T.M., and M. Svarer (2012), Active Labour Market Policies in a Recession, *IZA Journal of Labor Policy*, 1(7), pp. 1-19.

ASPA (2009), *Activating Senior Potential in Ageing Europe*, Survey data collected as a project for EU Seventh Framework Programme (FP7/2007-2013), Grant # FP7-216289, NIDI/University of Utrecht.

Autor, D.H., and D. Dorn (2009), ‘This Job is “Getting Old”: Measuring Changes in Job Opportunities Using Occupational Age Structure,’ *American Economic Review, Papers and Proceedings*, 99, pp. 45-51.

Bartelsman, E., P. Gautier, and J. de Wind (2010), ‘Employment Protection, Technology Choice, and Worker Allocation’, IZA Discussion Paper, no. 4895, Bonn.

Bewley, T.F. (1999), *Why Wages Don’t Fall During a Recession*, Cambridge, MA, Harvard University Press.

Bewley, T.F. (2005), ‘Fairness, Reciprocity, and Wage Rigidity’, in H. Gintis, S. Bowles, R. Boyd, and E. Fehr (eds.), *Moral Sentiments and Material Interests*, Cambridge MA, MIT Press, pp. 303-331.

Boeri, T. and J.F. Jimeno (2005), ‘The Effects of Employment Protection: Learning from Variable Enforcement,’ *European Economic Review*, 49(8), pp. 2057-2077.

Bosch, N., and B. Ter Weel (2013), 'Labour-Market Outcomes of Older Workers in the Netherlands, Measuring Job Prospects Using the Occupational Age Structure,' *De Economist*, forthcoming.

Brewster, C., A. Hegewisch, L. Mayne, and O. Tregaskis (1994), 'Methodology of the Price Waterhouse Cranfield Project,' in Brewster, C. and A. Hegewisch (Eds.), *Policy and practice in European human resource management*, London, Routledge, pp. 230–245.

Camerer, C.F., and U. Malmendier (2007), 'Behavioral Economics of Organizations,' in P. Diamond and H. Vartiainen (eds.), *Behavioral Economics and its Applications*, Princeton, NJ, Princeton University Press, pp. 235-290.

Cascio, W.F. (2010), 'Downsizing and Redundancy,' in: A. Wilkinson, N. Bacon, T. Redman, S. Snell (eds.), *The SAGE Book of Human Resource Management*, London, Sage, pp. 336-347.

Coile, C. and Ph. Levine (2009), 'The Market Crash and Mass Layoffs: How the Current Economic Crisis May Affect Retirement,' NBER Working Paper 15395, Cambridge MA.

Conen, W.S. (2013), *Older Workers: The View of Dutch Employers in a European Perspective*, PhD thesis, University of Utrecht.

Conen, W.S., H.P. van Dalen, and K. Henkens (2012), 'Ageing and Employers' Perceptions of Labour Costs and Productivity: A Survey Among European Employers,' *International Journal of Manpower*, 33(6), pp. 629 – 647.

Datta, D.K., J.P. Guthrie, D. Basuil and A. Pandey (2010), 'Causes and Effects of Employee Downsizing: A Review and Synthesis,' *Journal of Management*, 36, pp. 281-348.

DellaVigna, S. (2009), 'Psychology and Economics: Evidence from the Field,' *Journal of Economic Literature*, 47, pp. 315-372.

De Meuse, K.P., T.J. Bergmann, P.A. Vanderheiden, and C.E. Roraff (2004), 'New Evidence regarding Organizational Downsizing and a Firm's Financial Performance: A Long-Term Analysis,' *Journal of Managerial Issues*, 16, pp. 155-177.

Fehr, E., and K.M. Schmidt (1999), 'A Theory of Fairness, Competition and Cooperation,' *Quarterly Journal of Economics*, pp. 817-868.

Fischer, J.A.V., and A. Sousa-Poza (2010), 'The Impact of Institutions on Firms' Rejuvenation Policies: Early Retirement with Severance Pay versus Simply Lay-Off,' Working paper, University of Hamburg.

Hegtvedt, K.A., and B. Markovsky (1995), 'Justice and Injustice,' in: K. Cook, G.A. Fine and J. House (eds.), *Sociological Perspectives on Social Psychology*, Boston, Allyn & Bacon, pp. 257-280.

Henkens K. and J. Schippers (eds.) (2012), *Active Ageing in Europe*, Special Issue of *International Journal of Manpower*, Emerald Publishing Group.

Hijzen, A. and D. Venn (2011), 'The Role of Short-Time Work Schemes during the 2008-09 Recession,' OECD Social, Employment and Migration Working Papers, No. 115, OECD Publishing.

Ilmakunnas, P., J. van Ours, V. Skirbekk, and M. Weiss, M. (2010), 'Age and Productivity,' in: P. Garibaldi, J. Oliveira Martins, and J. van Ours (eds.), *Ageing, Health and Productivity*, Oxford, Oxford University Press, pp. 135-240.

Kalleberg, A.L., D. Knoke, P. Marsden, and J. Spaeth (1996), *Organizations in America: Analyzing their structures and Human Resource Practices*, London, Sage Publications.

Kahneman D., J.L. Knetsch, and R.H. Thaler (1986), 'Fairness and the Assumptions of Economics,' *Journal of Business*, 59, pp. S285-S300.



Kalwij, A.S., A. Kapteyn, and K. de Vos (2010), 'Retirement of Older Workers and Employment of the Young,' *De Economist*, 158(4), pp. 341-359.

Kapteyn, A., K. de Vos, and A. Kalwij (2010), 'Early Retirement and Employment of the Young in the Netherlands,' in: Jonathan Gruber and David A. Wise (eds.), *Social Security Programs and Retirement around the World: The Relationship to Youth Employment*, Chicago, University of Chicago Press, pp. 243 – 259.

Keynes, J.M. (1936), *The General Theory of Employment, Interest and Money*, London, MacMillan.

Leventhal, G.S., J. Karuza, and W.R. Fry (1980), 'Beyond Fairness: A Theory of Allocation Preferences,' in: G. Mikula (ed.), *Justice and Social Interaction*, New York: Springer Verlag, pp. 167-218.

Maas, C. J. M., and J.J. Hox (2005), 'Sufficient Sample Sizes for Multilevel Modeling,' *Methodology: European Journal of Research Methods for the Behavioral and Social Sciences*, 1, pp. 85-91.

Möller, J. (2010), 'The German Labor Market Response in the World Recession – Demystifying a Miracle,' *Journal of Labor Market Research*, 42, pp. 325-336.

Munnell, A.H., and A.Y. Wu, (2012), 'Are Aging Baby Boomers Squeezing Young Workers out of Jobs?', Center for Retirement Research, Boston, Policy Brief, October 2012, pp. 12-18.

OECD (2006), *Live Longer, Work Longer*, Paris, OECD Publishing.

OECD (2010), *OECD Indicators on Employment Protection*, Paris, OECD Publishing.

Pierre, P. and S. Scarpetta (2006), 'Employment Protection: Do Firms' Perceptions Match with Legislation?,' *Economics Letters*, 90, pp. 328-334.

Pissarides, C.A. (2010), 'Why Do Firms Offer 'Employment Protection'?', *Economica*, 77, pp. 613-636.

Rees, A. (1993), 'The Role of Fairness in Wage Determination,' *Journal of Labor Economics*, 11, pp. 243-252.

Shah, P.P. (2000), 'Network Destruction: The Structural Implications of Downsizing,' *Academy of Management Journal*, 43, pp. 101-112.

Van Dalen, H.P., K. Henkens, and J. Schippers (2009), 'Dealing with Older Workers in Europe: A Comparative Survey of Employers' Attitudes and Actions,' *Journal of European Social Policy*, 19 (1), pp. 47-60.

Van Dalen, H.P., K. Henkens and J. Schippers (2010), 'Productivity of Older workers: Perceptions of Employers and Employees,' *Population and Development Review*, 36(2), pp. 309-330.

Venn, D. (2009), 'Legislation, Collective Bargaining and Enforcement: Updating the OECD Employment Protection Indicators,' *OECD Social Employment and Migration Working Papers*, no. 89, Paris.

Weiss, A. (1980), 'Job Queues and Layoffs in Labor Markets with Flexible Wages,' *Journal of Political Economy*, 88, pp. 526-538.