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The use of working time-related crisis response measures during the Great Recession

Angelika Kümmerling

Steffen Lehndorff

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by Angelika Kümmerling

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Executive Summary

Introduction

The Great Recession of 2008–09 and its aftermath was a severe blow for the entire world economy, but it was the industrialized countries that were most badly hit, while parts of the emerging and developing economies mainly suffered from a slowdown in growth. Obviously, many of the recession's effects on labour markets are attributable to these differences in economic performance. Interestingly, however, employment effects were equally contrasting across industrialized countries with comparably substantial economic downturns. There was no uniform or rigid link between economic performance, on the one hand, and labour market outcomes, on the other. One important factor behind these differences was the extent to which firms emphasized internal flexibility measures such as working time adaptations in order to buffer the impact of a drop in demand on the labour market.

In principle, two different types of working-time instruments were used to introduce working-time changes during the crisis. First, work-sharing schemes (with their country-specific institutional background and public subsidies); second, working-time adjustments based on unilateral or bilateral decisions taken at the level of the firm, with or without a framework of collective agreements, but in either case without public financial support. While the former have been studied extensively (Messenger and Ghosheh, 2013), the present report takes stock of working time-related crisis-response measures at the firm level *beyond* those supported by work-sharing schemes. It covers conventional instruments such as reductions of working time with or without financial compensation and variations in the use of overtime hours, but also more innovative approaches such as the use of working time accounts, "working-time corridors"[1] and various other forms of changes in working-time organization, such as teleworking or compressed working weeks.

Main findings

- The arguably single most important observation is that in times of crisis, firms resorted first and foremost to flexibility instruments that had already been in their existing "tool kit" in the pre-crisis years. That is, the importance and nature of working-time measures taken in the crisis obviously depend fundamentally on each firm's established approaches to personnel flexibility in general, and working-time practices in particular, with which they have become familiar under normal business conditions. As a consequence, redundancies and pay cuts were at the top of the list of crisis-response measures of many firms.

- As to the importance of working-time measures geared to tackle the crisis, the single most striking observation is the scarcity of available evidence. This applies primarily to Asia, the Americas and the industrialized parts of Africa but also, albeit to a lesser degree, to Europe. Given this shortcoming, much of the present report draws on evidence from European countries. What is more, even within Europe the amount of information available differs substantially across countries. For a better understanding of these imbalances, the report

[1] A working-time corridor defines a fixed time band (a corridor) in which companies can vary the working time of their employees (either of certain groups of workers or even their entire workforce) (Bispinck, 2006, p. 116)

highlights survey-based findings which support the conclusion that, what may appear simply as a lack of information or a lack of public awareness, or even the well-known Euro-centric bias of many researchers, in reality reflects deficiencies in the practice of working-time organization among firms in many countries.

- When it comes to those firms reported to have used working-time crisis response measures, classical or more conventional approaches such as cuts in overtime work, reductions of weekly working hours, forced or prolonged vacations, temporary lay-offs or temporary plant closures prevailed. In some cases, they were combined with more innovative instruments such as working-time accounts or “working-time corridors”. More generally speaking, firms are likely to apply several flexibility measures at the same time.

- In a small number of countries, the dramatic business slump entailed only minor job losses. Most notably in Germany and a few other European countries, time-banking schemes and other forms of variable working hours substantially helped buffer the impact of the economic downturn on the labour market. However, not all countries with firms with similar expertise focused to the same extent on flexible working-time organization in the crisis; other variables intervened in each firm’s strategic choices. In other words, discussion of advanced forms of working time flexibility is one of potentials, rather than mechanisms. What has to be highlighted, however, is that wherever advanced working-time responses were practiced, they drew on the social partners’ collective bargaining experience at the sectoral level and, even more importantly in the case of the crisis, at the firm level. Without the experience gained in “normal” times, it is hard to imagine how firms can develop innovative approaches to working-time organization in times of crisis.

- Little information has been available so far on innovative working-time measures beyond working-time accounts geared to deal with the crisis. Namely, there is only piecemeal evidence of the introduction and the effects of compressed working weeks, home or teleworking, training activities or the use of sabbaticals.

- In most cases, working-time reductions in their various forms were associated with wage cuts. This is what made these adjustments attractive for employers, but difficult to cope with for employees. Many firms tried to ease the problem for workers by engaging in some kind of partial and temporary wage compensation. This is where the public work-sharing schemes came in. Wherever no such scheme was offered, private solutions had to be found, in part through collective bargaining.

- Internal flexibility measures, such as the reduction of overtime work, working hours, the possibility to accumulate “debit hours” on working-time accounts or training during idle hours, were often applied to the core workforce only while many temporary and agency workers were made redundant.

- Last but not least, the overview given in the present report points at the need for more in-depth research into advanced working-time practices during the crisis and beyond. This observation applies to quantitative studies (e.g. the relative importance of time banking schemes for safeguarding jobs) and to company case studies on how firms coped with the trade-offs and ambiguous interest constellations entailed by the use of innovative working-time instruments during the crisis.

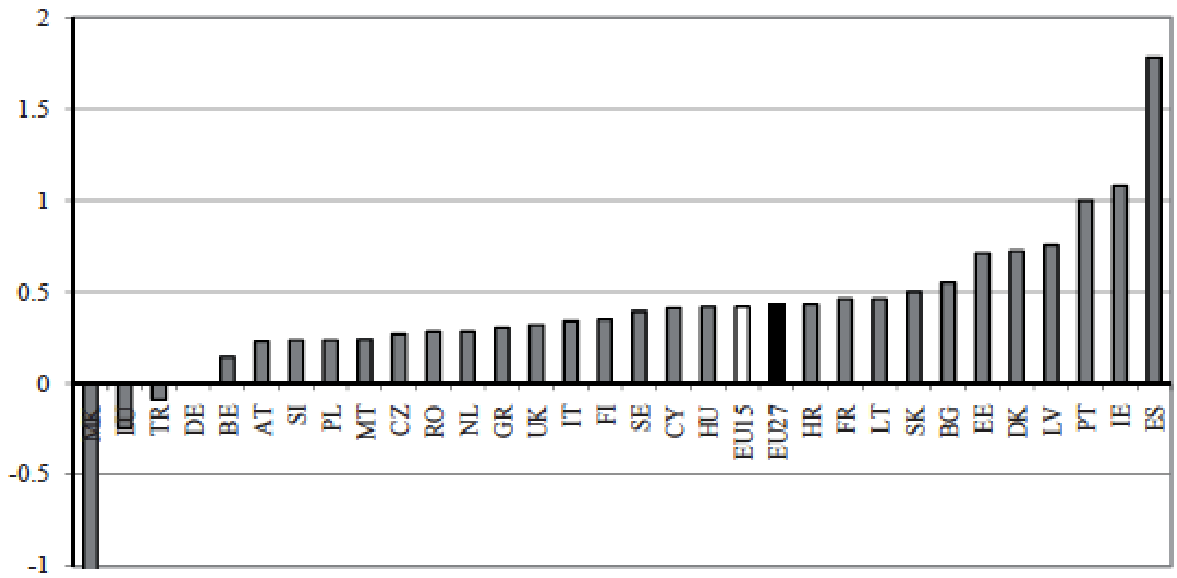
Policy implications

What can be learnt from the findings summarized below for future working-time policies aimed at making it easier to cope with future crises? The single most important lesson is that experience in collective bargaining on working-time organization and expertise in organizing flexible working hours at firm level have to be gained *before* crisis strikes. *The more developed this expertise and the more established the experience in bargaining on compromises over flexible working hours, the greater the potential for negotiating deals on working time organization in a crisis. The "tool kit" used by those benefitting from such a background includes short-term emergency measures as well as working-time models within a mid-term perspective, which help ease conflicts over time and money*. Thus, the lack of evidence on working time-based crisis-response measures around the world should be taken as a signal of serious drawbacks in working-time *practice* at the firm level in many countries, and underscores the need to use periods of economic growth to foster collective bargaining on working-time organization.

1. Introduction

The so-called “Great Recession” of 2008–09 was a severe blow for the world economy but it hit the industrialized economies most badly, whereas parts of the emerging and many developing economies suffered primarily a slowdown in growth. What was remarkable beyond these different economic outcomes, however, were the varying effects on employment in those countries experiencing more or less dramatic business slumps. As indicated by many analyses conducted by the International Labour Organization (ILO), the Organisation for Economic Co-operation and Development (OECD) and the European Union (EU), there was no uniform or rigid link between economic performance, on the one hand, and labour market outcomes, on the other (for an OECD analysis of this variety in the crisis-employment nexus cf. OECD, 2010, pp. 28 ff.). Rather, the differences in employment elasticity to the drop in GDP by country were dramatic, as indicated by the example of 30 European countries in Figure 1. The positive correlation between changes in gross domestic product (GDP) and national employment figures was particularly marked in Portugal, Ireland and, most dramatically, Spain, whereas in other countries it was possible to preserve employment to a much greater extent. These examples from Europe are particularly interesting as among the OECD countries, after Japan or the Russian Federation but more than the United States of America, the EU suffered most dramatically from the economic downturn in 2008–09 (cf. OECD database).

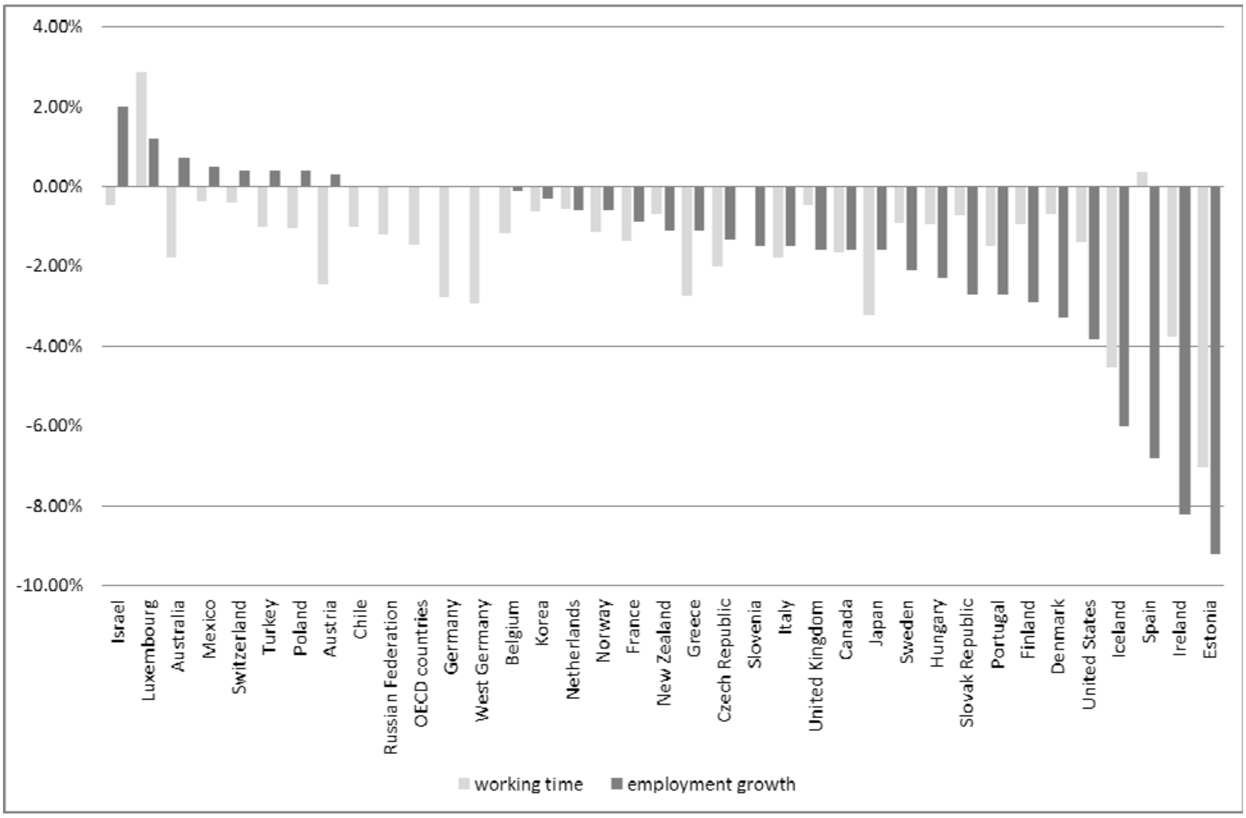
Figure 1. Employment elasticity to GDP, 30 European countries, 2008–09



Source: Vaughan-Whitehead (2011, p. 4).

In addition to the set of influencing factors explored in earlier analyses (cf. Vaughan-Whitehead, 2011, for details), it has been widely accepted that one major factor behind these differences was the emphasis put on working-time adaptations geared to buffer the impacts of a drop in demand on the labour market. The importance of working time is demonstrated in Figure 2, which presents the changes in employment and working hours in OECD countries in 2008 and 2009, that is, during the peak of the global financial and economic crisis.[2]

Figure 2. Changes in employment and annual actual working hours in OECD countries (2008–09)



Source: OECD database; http://stats.oecd.org/Index.aspx?DatasetCode=AVE_HRS.

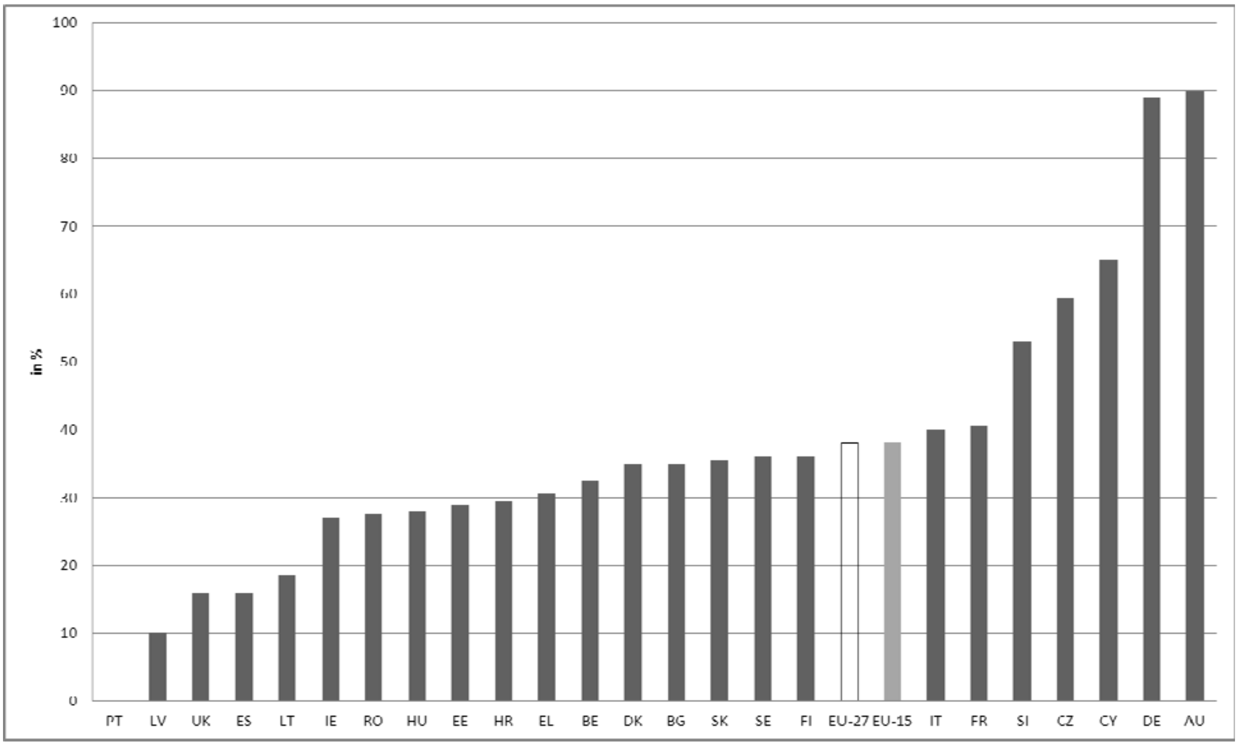
The general picture given by Figure 2 is that, within the very short period of time when the world economy was hit by the Great Recession, the overall labour market responded by and large in one of three ways. In a first group of countries, stability or even minor growth in employment (with the exceptions of Israel and Luxemburg, which had considerable employment growth) was accompanied by a reduction in working hours (here, too, Luxemburg stands out, with rising GDP and working time). This feature was shared by no particular regional cluster of countries; indeed, it was observed in a large array of countries such as Australia, Mexico, the Russian Federation, Germany and Poland. A second group of countries exhibited minor drops in employment in combination with reductions in working hours by percentages of overall working hours exceeding the percentage of employment reduction. Finally, a third group of countries witnessed substantial drops in employment accompanied by minor reductions in working hours (with the exception of three smaller countries with substantial reductions in both employment and working time). The latter two groups of countries include the majority of EU countries and the United States. In other words, the figures for Estonia or Ireland, on the one hand, and

[2] The OECD makes the reservation that comparisons between countries may be misleading, as the data sources are not homogeneous and data collection and processing have not been fully standardized. In what follows, we therefore do not go into details on individual countries but rather confine ourselves to drawing a broad-brush picture of major features with respect to the potential relevance of working-time responses to the crisis.

Austria and Germany, on the other, show that EU members had starkly different crisis responses regarding employment and working time. It is this general picture, apart from some other aspects to be highlighted in the following chapter, which makes Europe particularly relevant for the purposes of the present report.

This observation is underscored by an analysis of the contribution of working-hour reductions to the containment of job losses in Europe, as computed on the basis of Eurostat data (Figure 3). For a small group of countries there is some evidence that companies resorted more frequently to working-time reductions than in previous downturns (Vaughan-Whitehead, 2011, pp. 30-31).

Figure 3. The role of working hours in the reduction of labour input without layoffs, 2008–09



Source: Vaughan-Whitehead (2011, p. 12).

These figures reveal considerable differences in the adjustment strategies selected by firms. Arguably, the response of employers to an economic crisis depends not only on the depth of the crisis but also on "the degree of flexibility they have in adjusting labour which is influenced by the institutional arrangements in the labour market (such as wage setting institutions, unionization, employment protection legislation, etc.)" and the nature of industrial relations (Cazes et al., 2009, p. 3; European Commission, 2011, p. 151). That is, each country's labour market outcomes were strongly related to country-specific company flexibility strategies geared to cope with fluctuations in demand, and these strategies, in turn, were influenced by labour market institutions and labour market policy approaches.

It is generally accepted that two different types of working-time instruments were used to charge working time during the crisis: crisis work-sharing measures (also known as short-time work schemes), with their country specific institutional background and public subsidies, and working-time adjustments based on unilateral or bilateral decisions taken at company level, either with or without a framework of collective agreements, in either case without public financial support. While the former type of measure has been studied extensively (Messenger and Ghosheh, 2013), working time adjustments *beyond* work-sharing schemes have so far gained surprisingly little attention in academic as well as policy oriented publications.

It is the latter responses on which the present report is in particular focused. We will be looking, first, at more conventional instruments such as reduction of working time without financial compensation, or the variations in the use of overtime hours; second, we will be looking at more innovative approaches which, in particular, take advantage of working time accounts, so-called ‘working time corridors’ and of other various forms of changes in working time organization. As the incidence, practice and implications of crisis work-sharing measures (short-time work) have been dealt with comprehensively elsewhere (Messenger and Ghosheh 2013), this paper will only incidentally address this measure (for instance, in Section 5, which discusses inter alia the use of training activities during the crisis). The overview starts with an outline of the conceptual background of working-time responses to the crisis, so as to enhance understanding of the importance of the respective company-level approaches and the limitations to gathering data on these approaches.

2. Predominant flexibility patterns as a framework for crisis response at company level - The reasons for the scarcity of information

The extent to which the effects on employment of an economic crisis are buffered or moderated at company level depends very much on each company’s approach to “personnel flexibility”. A basic understanding of the various underlying concepts of personnel flexibility helps to make sense of the striking differences across countries when it comes to the importance of working-time policy as a crisis-response measure at company level. It also helps further understanding of why so little information is available on working-time-related crisis-response measures beyond work-sharing schemes in general, and why the picture of such measures is even patchier, to say the least, in the world beyond Europe and in small- and medium-sized enterprises (SMEs) in Europe and beyond.

2.1 Usual practice before the crisis prepared the ground for crisis responses

Our basic assumption for what follows is that both the importance and the nature of working-time measures taken *during the crisis* depend fundamentally on personnel flexibility approaches in general, and working-time practices in particular, which predominated *before* the crisis. To use a simple example, a firm used to reacting to business fluctuations with hire-and-fire practices will most likely react to crisis by dismissing employees. In contrast, the first and most obvious reaction to a crisis for a firm which relies primarily on overtime as a way to adapt to fluctuations in demand will be to cut overtime hours as far as possible, before resorting to dismissals. Finally, a firm with more sophisticated practices of flexible working-time management developed and tested in “normal” times will have a bigger “tool kit” of working-time techniques and, arguably even more importantly, greater experience and expertise in negotiating working-time organization when it comes to crisis-related working-time adaptations. Given this simple but nevertheless, as will be demonstrated later, quite realistic basic assumption, it is useful to look at earlier findings on company flexibility approaches over the past ten or twenty years. What is more, as the literature tells us, these approaches reflect by and large clearly distinguishable country-specific patterns.

In principle, companies choose from a set of flexibility measures that can be distinguished by two criteria: whether they refer to internal or external labour markets, and whether they provide numerical or functional flexibility. The combination of the two results in four different categories of flexibility pattern (Table 1), which can be combined in various configurations of internal and external, functional and numerical flexibility.

Table 1. Patterns of personnel flexibility

	quantitative (numerical)	qualitative (functional)
internal	Working-time organization: - variable working times - employment of part-time workers	Work organization: - multitasking, multiskilling - job enrichment, job rotation - delegation of responsibilities
external	Outsourcing of working time: - workers with temporary contracts - agency staff - hire and fire	Outsourcing of competencies: - self-employment subcontractors - external companies, networks

Source: Own representation, drawing on Atkinson (1984), Gadrey et al. (1999), Lehndorff (1999) and Merllié and Paoli (2001).

Companies applying mainly internal-numerical flexibility strategies target first and foremost the core workforce by altering the organization and duration of working time, for instance by reducing working hours (e.g. by the use of short-time work schemes), or increasing working time through overtime. In contrast, employers who adapt external-numerical flexibility measures rely primarily on external labour markets to deal with fluctuations in demand, for instance by employing workers with fixed-term contracts or agency workers or, more traditionally, by preferring hire-and-fire approaches. Internal-functional measures aim to improve employee resources by provided training and further training to broaden their scope of operation (job enrichment or rotation). Companies pursuing an external-functional flexibility strategy rely mainly on “buying” competencies as needed (use of freelancers or self-employed subcontractors) and tend to outsource certain parts of production or certain services.

There is a large amount of empirical evidence on the predominant flexibility approaches influenced by, among other variables, national economic development trajectories and the institutional environment in which firms operate (cf. various contributions by: Auer, 2001; Hall and Soskice, 2001; Bosch et al. 2009). In a statistical analysis of individual companies in five European countries, Schief (2006) showed that companies in a given country typically preferred either internal or external adaptation or a specific mix of both to achieve the requisite labour force adjustments. Thus, company numerical flexibility strategies are strongly influenced by the location (country) of the company, which is (except in the United States) more important than the country of origin (Table 2). In a nutshell, there are country-specific profiles or configurations of company emphases on particular flexibility patterns.

Table 2. Dominant numerical flexibility patterns at enterprise level in five European countries

	Flexibility measure	Nature of measure
Germany	Working time flexibility (flexi-time, working-time accounts)	Mainly internal
France	Contract worker, temporary staff	Mainly external
United Kingdom	Overtime work	Internal
Netherlands	Overtime work, temporary staff	Mixed
Portugal	Overtime work, hire and fire	Mixed

Source: cf. Bauer et al. (2002), Schief (2006, p. 237).

As already mentioned, it is important to note that each of these flexibility measures is usually not used exclusively. For instance, companies may use overtime and at the same time also employ contract workers. Moreover, these flexibility strategies represent more general approaches, the use of which is not restricted to times of crisis.

As the information gathered for the present report suggests, however, in times of crisis companies will first and foremost use those flexibility instruments with which they are familiar and which are part of their overall personnel strategy. Hence, a typical reaction of many employers in many countries in the current crisis was to resort to external flexibility measures (e.g. dismissing agency workers, terminating temporary contracts, and eventually dismissing core workers), as this has been the predominant approach in earlier crises. The alternative approach, in turn, prioritized internal flexibility through working-time measures (work sharing, short-time work, time banking), which in consequence led to what is called “labour hoarding”, that is, maintaining employment by accepting a drop in productivity per hour (Dietz et al., 2011). In some countries, labour hoarding may have been used more frequently than in the previous crisis in the early 2000s, as has been observed in the case of Germany (Bosch, 2011).[3] What matters for the present report is the more general experience behind such country-specific aspects. That is, the priority given to internal flexibility by many firms in the present crisis was based on both the experience and the expertise gathered in the years prior to the crisis.

The observation that the use by some countries of mainly internal flexibility measures in general and working-time measures in particular during the 2008–09 crisis reflects the earlier practice and expertise of many firms leads to a reverse assumption that must be kept in mind when looking at the cases presented in the following sections. The overall drawback faced by the authors of the present report is the remarkable scarcity of information. While the use of crisis work-sharing or short-time working schemes is well documented and analysed, gathering of information on working-time measures *beyond* short-time schemes is far from trivial. The question is whether the scarcity of information reflects a lack of practice, rather than simply a lack of public awareness or attention by researchers or policy makers. There is some indication that the former may be more relevant than the latter. There is a small number of quantitative studies dealing with the incidence of working-time responses beyond short-time schemes. In a nine-country analysis, Fabiani et al. (2010) found that in their sample of countries, except for Austria and Belgium, working-time reductions were the exception rather than the rule in company crisis-response strategies. Similarly Westergaard-Nielsen and Neamtu (2012) found in a Danish sample of companies with at least 20 employees that working-time adjustments had rarely been used. While there was some variation across sectors (with working-time adjustment used the most in the transport sector and the least in construction work and services), Westergaard-Nielsen and Neamtu conclude that,

[3] This may have been related inter alia to ongoing demographic change with an imminent or actual skills shortage, which may make hire-and-fire strategies more cost-intensive.

“it is somewhat surprising that the reduction of costs is so focused on reductions in employment and that there is so little use of the other flexibilities in wages, bonus payments and in hours” (p. 11). Given these findings, our crucial point in the present report is that the scarcity of information should not be regarded as a drawback for broader analysis. Rather, it is in itself relevant to the subject as it tells a story about a *drawback in working-time practice*.

2.2 The world beyond Europe: Scarcity of information reflecting limited practice

A similar conclusion must be drawn from the *regional* limitations, or one-sidedness, of the information available. While the evidence on working-time-based crisis-response measures in Europe may be scarce, it is almost nonexistent outside Europe. Most of the empirical evidence used in the present report is on European countries. Within Europe, in turn, the information available is on a small group of countries. Very little is known about working-time measures used in Asia, the Americas or the industrialized parts of Africa. Again, one could argue that this reflects a simple lack of coverage in the media and of attention in research. More probably, however, the lack of information reflects also a lack of practice.

As far as the United States are concerned, this lack of evidence may be attributed to the long-standing and well-documented priority given by many firms to more traditional hire-and-fire practices. Working-time measures are relevant to the extent that they focus on overtime but are much less relevant when it comes to more elaborate and formal methods of flexible working-time organization as practiced in some European countries (Lee, McCann and Messenger 2007; for an early analysis cf. Rosenberg, 1994). As to Latin America, Asia and Africa, it should not be forgotten that the effects of the global crisis differed substantially across regions and countries. In some of the emerging economies, growth rates dropped but remained positive. Wherever emerging or developing economies were drawn into a more severe crisis, however, it is fair to assume that any crisis-response measures taken at company level were geared to avoid mass redundancies that would have stoked public attention and awareness. Thus, the not-more-than occasional evidence that such measures were used sparks suspicion that they were not much practiced beyond Europe. Little is known about how firms in emerging or developing economies dealt with the working-hours/wages-for-living problem. As Lee, McCann and Messenger (2007, p. 121) note in their ground-breaking study on working-time trends and developments around the world, in many developing and transition countries “overtime payments often constitute a regular and substantial element of wage packages and are relied on to ensure a decent standard of living”. Thus, it is difficult for companies to refrain from dismissals by way of working-time reductions without subsidies, given the lack of work-sharing schemes in many countries (cf. also for what follows Cazes et al., 2009, p. 12). In the same vein, working-time reductions without wage compensation may appear too heavy a burden for people who may already be close to poverty when in employment (while the financial burden may be even worse once they are unemployed). In short, any attempt to reduce working time for the sake of safeguarding jobs in a crisis puts workers between a rock and a hard place. Nor is it obvious what will be the company’s priority in such a situation. The only assumption which can be taken for granted is that working-time measures *beyond* cutting overtime are very unlikely. Given the overall trend prior to the crisis as observed by Lee, McCann and Messenger (2007, p. 137), it must be kept in mind that “’formal’ forms of flexibility are not highly influential on workplace practices due to the availability of backdoor methods, such as a reliance on overtime or informal employment”. It is this environment which confronted the authors (p. 124), with the problem that “information on national- and firm-level policies on working time flexibility and the extent to which techniques for working time flexibility are used in practice is very limited”. It is exactly this limitation which the authors of the present report had to face and which led them to conclude that lack of information signals a lack of practice, and the lack of practice is understandable given the economic background in many developing and emerging economies.

2.3 The world of SMEs: Informalities and a lack of research

A similar consideration applies to the fact that little information is available on the working-time crisis-response measures taken by SMEs (< 250 employees). We will highlight SME working-time responses wherever possible, given their importance for the economy, be it an advanced capitalist economy or an emerging or developing economy. By way of example, in 2012, 99.8 per cent of all non-financial enterprises in the EU were SMEs, the bulk of them micro-enterprises, that is, enterprises with fewer than ten employees. While SMEs in the EU account for a smaller proportion – 67.4 per cent – of workers in the non-financial sector (cf. also for what follows Wymenga et al., 2012, p. 15) than in other parts of the world, even in the EU it was SMEs that were particularly hard hit by the crisis, in terms of both number and people employed. Moreover, although the number of enterprises started growing again in 2010, the number of people employed fell for another year.

Given the importance of SMEs both in Europe and worldwide, it is surprising how little is known about how they tackled the crisis. Again, what appears to restrain our analysis is a well-known phenomenon over a long period of time before the crisis. As noted by Croucher (2013, pp. 62, 55), “studies on working time which focus on SMEs are scant. (...) Empirical research which focuses on the availability and outcome of flexible working arrangements in SMEs has been relatively limited”. Croucher also points at more recent studies highlighting the “often less formal ways” that SMEs use flexible working-time organization and takes this evidence as “support for the argument (…) that this informal approach is due to a general lack of formal HRM in smaller firms”: “Most companies made informal arrangements and owner-managers generally made ad hoc decisions on an individual basis, responding to employees’ requests, highlighting the importance of owner-manager attitudes and closeness of workplace relationships“ (p. 61).

These observations from the pre-crisis years go a long way towards explaining why there is so little information and research on the working-time-related crisis-response measures taken by SMEs. Authors who faced this same dilemma observed that:

(a) SMEs are not systematically covered by the media (Glassner and Galgoczi, 2009, p. 24) and it is therefore difficult to make assumptions about how they tackled the crisis in general, and used working-time instruments in particular;

(b) research addressing working-time-related crisis-response measures has, in most cases, focused on work sharing (short-time work) or other forms of (partly) subsidized working-time reductions because these measures are often subject to collective agreements and/or are regulated by law (e.g. France, Germany), which in turn facilitates access to data; and

(c) SMEs are more likely to practice informal flexibility measures that are not documented and thus are difficult to analyse from the outside.[4]

[4] To some extent, however, this difficulty applies to many flexibility measures taken across the board and is far from being restricted to SMEs. As Golden (2009) reports for the United States, about one half of companies with flexi-time practices offer these measures on an ad hoc and informal basis.

Other authors assume that[5] SMEs have fewer possibilities to introduce crisis-response measures as they encounter more difficulties changing production or labour use (CBI, 2009; Cziria, 2011).

The latter assumptions are in line with the results of a survey in the United Kingdom that found that smaller companies were in general less likely to resort to changing work organization and working patterns (including working-time measures) (CBI, 2009). Similarly, Kerkhofs et al. (2010) found that in the EU's 27 Member States, smaller companies had introduced fewer flexibility measures[6] than large(r) companies. Thus, as in the years before the crisis, there is strong evidence that lack of information reflects a lack of practice, rather than simply a lack of public awareness of what is happening within the world of SMEs.

2.4 Section Summary

To sum up, the patchy picture in what follows should be understood as a serious pointer at shortcomings in working-time practice. To put it bluntly, there are strong reasons to believe that practice in working-time related crisis-response measures has been poor, and research into this poor practice has been even poorer so far. This statement applies to research into the incidence of such measures but even more so to research into their effects on firms' performance beyond the evidence of imminent job protection. This caveat, again, can be seen against the background of earlier findings which boiled down to the conclusion that "the relationship between working-time arrangements and outcomes is highly context-sensitive" (Croucher et al. 2013, p. 61). What was true for the pre-crisis years is equally true for the situation in 2008/2009. What has been documented at best is the incidence of working-time related crisis-response measures taken at firm level. It is up to future research to shed light on the mid-term effects of such measures.

Keeping this in mind, we will distinguish in our description of working time crisis responses at firm level between, on the one hand, "classical" measures such as cuts in overtime work, reductions of weekly working hours or temporary plant closures. It will be shown that these measures were widely used in a variety of industries as well as across firms of different sizes (Chapter 3). Chapters 4 and 5, on the other hand, address more formalised or even "innovative" working time related instruments, in particular time banking, training activities during working time and further schemes such as homeworking, re-organization of working time etc.

It has to be noted that in almost all cases we found these measures were not stand-alone approaches but were frequently used in association with other instruments, such as the extension of company holidays or the use of working time accounts (if available). Thus, it can be assumed that establishments that have introduced one measure in order to secure jobs are also likely to use others as well. The paper also shows that job security measures and dismissals policies are co-existing on firm level with the former applying to the core employee only. As piecemeal data material is predominant in the current research field we frequently will resort to single cases in order to illustrate our findings.

[5] Correspondingly, SMEs are more likely to use less formal working contracts (or even none at all), which in turn might have an impact on the existence and practice of flexible working-time arrangements.

[6] Because Kerkhofs et al. (2010) use a cluster method in their analysis, information on single working time instruments cannot be obtained. Within the analysis, their concept of flexibility measures comprises flexible working hours, irregular working hours, overtime, part-time work, temporary agency work and fixed-term contracts, variable elements of pay and autonomous teamwork, thus integrating both internal and external flexibility instruments.

3. The use of working-time crisis-response measures beyond work-sharing schemes

Working time measures beyond the use of works-sharing schemes supporting the adjustment of actual working time to the actual work load include the use of overtime, and correspondingly the reduction of working time. Both measures belong to the internal flexibility concept that attempts to deal with variations in demand by focussing primarily on the core employees as the decisive parameter. Working time reductions in the course of lower demand can contribute to the avoidance of dismissals and thus help to preserve employment at company-level. Both collective or at firm-level agreed working time reductions can be either financially (partially) compensated or not. Uncompensated working time reductions are associated with proportional or disproportional losses in earnings. In many countries the instrument of short-time work was implemented and used to mitigate the effects of forced working time reductions on wages (see Messenger and Ghosheh 2013 for an overview on various forms of existing worksharing schemes/ short-time work). A way of reducing working time without wage adjustments is the use of time banking schemes that are one result of the gradual replacement of paid overtime work through flexible working time regulations (see Chapter 4 for more information on time banking).

The following chapter deals with various forms of working time reductions and their role during the crisis. While the focus is on more traditional schemes such as cuts in overtime work and temporary plant closures, we will also differentiate between sector-level and firm-level measures and between working time reductions with or without pay compensations.

3.1 Reduction of overtime hours

When demand impairs, cutting overtime work will be the most likely immediate reaction of many establishments. Against the background that 75% of companies in the EU work overtime at least occasionally and that extra pay is the most widespread compensation of overtime work (Riedmann et al. 2006, p. 14), the retrenchment of overtime can result in massive cost savings. While the use of overtime work in times of an upswing or generally high demand is a widely accepted tool to for the ‘breathing’ of companies (Haipeter and Lehndorff 2004), the cutting of overtime is generally not likely to be sufficient in severe crises and sudden breakdowns of the economy. Thus, this tool was mainly used in combination with other measures, as illustrated by the following examples taken from all over the world.

- In Hungary working reduction in the form of cutting regular overtime in combination with abolishing shifts to tackle the crisis was among the first measures taken, particularly by car manufacturers and car components suppliers (Neumann and Edelényi 2009). As the authors state there are no systematic statistics available about how many companies and workers have been affected by these measures. An example for a company reducing the number of daily shifts is Denso Kft, an example for the former is Suzuki in Esztergom.

- A Croatian case study conducted by Franičević (2011) at a construction supplier with a total of 162 employees in 2008 (including fixed-term contracts, agency workers and security jobs) illustrates that the suspension of overtime often is only a starting measure. The company, which does not have a union or other employee representative, initially reduced overtime work from 7.5% in 2008 to nil in 2009 for core workers, while at the same time dismissing most of the temporary staff. As both measures did not prove to be sufficient, further adaption was necessary in 2010. Working hours for production workers only (by then nearly three quarters of the workforce) were reduced by 25% and wages likewise. As these measures proved not to be sufficient further dismissals followed, so that as of September 2010 the company employed only 120 workers. Franičević (2011) found similar patterns in three other case studies he conducted in larger establishments in Croatia and in different sectors (construction, ship building and a producer of electrical components).

- A similar procedure can be found in a Brazilian case study of a large employer showing that cutting of overtime hours is most often combined with or followed by further measures in order to overcome a crisis. Faced with very low sales figures the company initially banned all overtime work and refrained from renewing contracts of fixed-term workers. At a later time all production employees were set on unscheduled collective vacation, only administration remained unaffected. As all these measured proved to be not sufficient, the company suspended the working contracts of 25% of the workforce for five months (= temporary lay-offs, in accordance with Provisional Regulations 1,726 and 1,709-4 and of article 476-A of CLT). Additionally a training program for those set on temporary layoffs was provided and wage loss compensated by a fund provided by the Ministry of Labour and additional payments by the company. The training started mid-January and the employees stayed in training for about six weeks as the situation of the company improved. Still, 15% of those trained workers resigned and had to be replaced (Eichhorst et al. 2011, p. 56-57).

- In Japan, during the crisis overtime hours have been reduced by nearly 25% (Steinberg and Nakane 2011). In the Automotive industry reduction of overtime work was accompanied by temporarily moving from a two-shift system to one shift, plant closures for up to 25 days and forced paid vacation. Although layoffs of core employees have been avoided contracts of so-called 'non-regular' workers have not been renewed (Bungsche 2009).

These are just a few examples which illustrate the more general and absolutely unsurprising story that cutting overtime is the most likely first reaction in situations of dropping demand. Once the crisis deepens, other measures have to follow which may include internal as well as external flexibility instruments. Thus, firms which cut overtime may or may not give priority to consecutive working-time related crisis responses. It is a starting point in any direction.

3.2 Facilitating overtime work and extending statutory working time

While as shown above the cut in overtime hours is among the first measures many companies took in reaction to the crisis, others headed in the opposite direction and gave more leeway for overtime work. Facing the crisis some governments took action and changed the statutory basis for overtime work in order to facilitate immediate working time adjustments of firms. As imminent job losses are the most likely effect of short-term working time extensions in a crisis it has to be assumed that the logic behind these approaches was to improve mid-term price competitiveness by reducing labour costs, rather than safeguarding jobs in the crisis.

By way of example, Lithuania, from August 2009, has allowed four overtime hours per day as long as the statutory annual overtime limit of 180 hours is not exceeded (Masso and Krillo 2011). Similarly, in Romania, the reference period in which working hours have to be adjusted to the statutory limit has been extended from three to four months. Employers are now entitled to demand working weeks beyond 48 hours, as long as the average work week within a four month time frame does not exceed 48 hours (Dimitru 2011). It should not be taken as a surprise that in these two countries working time adaptations played a minor role only.

A similar path was chosen in Hungary, where amendments to the Labour Code declared an enhancement of the statutory working time from 40 hours a week (excluding overtime) to 44 hours between April 1 2009 and December 31 2011 as long as the average working time does not exceed 40 hours. According to the Labour Code act this enhancement of the length of the basic weekly working time is not automatically associated with a corresponding rise in pay. During the time where employees have increased their working time they are protected from redundancies due to business operations (Fodor and Neumann 2009). Moreover, the new amendment allows for an increase in the statutory maximum of overtime hours to 300 per year (+100 hours) if a collective or individual agreement was concluded. (Fodor and Neumann 2009).

It is more than obvious that in these cases the greater public awareness of potential implications of working time flexibility as an instrument to adapt labour volume to decline of business were instead used as a trigger for steps towards greater working time flexibility more broadly, including more leeway for working time extensions, irrespective of their potential negative short-term impact on employment in the crisis. This approach has to be seen in the context of current initiatives within the EU geared to cut labour costs as the shortest way to an improvement of international competitiveness which has been, for the time being, given priority in countries with already low labour costs by EU standards.

3.3 Reduction of working hours with (partial) wage compensation

As already mentioned, if not financially compensated to some extent, reductions in working time geared to safeguard jobs may entail serious financial problems for workers, especially in jobs or countries with low wage levels. In order to mitigate this effect many countries introduced public schemes such as crisis work-sharing/ short-time work or expanded schemes already existing. In the current crisis, work-sharing schemes have played an important role, primarily, but not exclusively, in West-European countries. National work-sharing programs come in many forms but they all have in common, that they "attempt to alleviate problems for workers and employers while helping to keep firms going through hard economic times" (Messenger and Ghosheh 2013, p. 2). The usual cut in working hours and wages associated with work-sharing is alleviated through wage supplements that compensate for a loss in earnings, at least partially. Similarly, employers who safeguard jobs by implementing the work-sharing scheme are often granted certain benefits or incentives, sometimes in form of subsidies for training activities (ibid. p. 2).

Although work-sharing schemes have been a success story in the recent crisis, not all countries have introduced such schemes and, equally important, in those countries where they exist, not all companies or employees were entitled to apply for the subsidies. More generally and for various reasons, the preference of employers for the use of these schemes differed very much across countries. Moreover, as was the case in Germany, many firms were not entitled to implement the short-time scheme without first exhausting other possibilities to reduce working hours (such as ending overtime work and clearing working time accounts – see section 4 below). Thus, irrespective of the existence of public schemes, working time reductions without or beyond these schemes were often needed.

Companies can reduce working hours with or without providing financial compensation to employees. Working time reductions with at least partial wage compensations are often following the logic of short-time work schemes, without having been named as such, and are mainly applied by larger companies (Dolezelova 2009). Hence, given the sometimes limited amount of information provided, it is not always possible to disentangle short-time work schemes from other programs. What is more, boundaries are often blurred and hybrid forms exist, too, as the following examples show[7].

In Bulgaria, flexibility with regard to working time had been unknown at the onset of the crisis, with workers usually being employed on a full-time basis within a fixed standard working day. Thus, in 2010, an agreement on the anti-crisis package was launched that included the introduction of flexible working hours, part-time work for a set period of three months, and specific unpaid leave for economic reasons. This resulted in more and more companies resorting to part-time work, which was subsidized by the state by "equal to one-half of the minimum salary per month". (Kirov 2010, p. 47)[8]. But also companies that were not entitled to apply for state subsidies increasingly reduced working time (for instance, by resorting to a 6-hours day) or by asking their employees to take paid or unpaid leaves (ibid., p. 48).

A similar path was taken by companies in the Czech Republic where, for instance, the largest automotive company introduced the four-day week in 2009 for all of its 24,500 "regular" employees. According to an agreement negotiated by the employer and the union, employees were compensated for the lost day by receiving 75% of the average wage. This and the effects of the German and domestic car-scrapping bonus contributed to a quick recovery (Dolezelova 2009). A similar solution was found by Hyundai, Czech Republic, which compensated its employees with three thirds of the average wage for one day off per week. This form of partly compensated working time reductions, among others, has also been introduced by the Jablonex Group, a large glass producer and jeweler, Zetor Tractors, lorry producer Avia and car components producers (ibid. 2009).

In Germany at the start of 2010, the social partners in the metal industry launched an agreement called 'Future in Work' (Zukunft in Arbeit, ZiA) containing follow-up action and aiming at companies having already introduced and exhausted work-sharing. First, it was agreed to introduce a possibility to extend the statutory period of work-sharing (18 months at that time) for an additional six months by way of *voluntary company agreement*. The agreement encouraged firms which had exhausted the potential of the public short-time work scheme to carry on with reductions of weekly working time in combination with partial wage compensation. Weekly working time could be reduced to a minimum of 29 hrs in Eastern-Germany or between 28 and 26 hours in Western Germany. "A reduction to 28 hrs is enforceable through an arbitration committee; a reduction to 26 hrs is to be settled through a works agreement. Any reduction below 31 hrs is to be compensated. In the case of 28 weekly working hours, 29.5 hrs are to be paid, in case of 26 hrs, it is a wage-equivalent of two extra hours". This agreement was time-limited, in that working time reductions were only possible for the period of twelve months, and not beyond the end of June 2012 (Stettes 2012). There is no information about use and application of the ZiA on company-level available.

As can be seen by three examples of medium-sized Estonian companies, SMEs, too, may combine working time reductions with a variety of other measures. What the examples also show is that, as in many other countries including Germany, working time measures geared to safeguard jobs were focused on the core staff, making other employees (such as agency staff) subject to external flexibility, that is, dismissals:

[7] Working time adaptations that act as a supplement to crisis work-sharing/ short-time work agreements can be found at Rhodia and Renault in France as well as in numerous German companies such as Man Nutzfahrzeuge, Salzgitter Flachstahl and Siemens, as well at Electrolux (Italy) and DAF Trucks (the Netherlands) (European Commission 2011, p. 134; Annex, Glassner and Keune 2010, p. 18).

- Estiko Plastar is a medium-sized Estonian packaging materials producer with roughly 150 employees. Having been hit hard by the crisis, the company set about one third of its employees to part-time work (80% of former working time), but managed to offer full wage compensation. Instead of reducing the pay according to the working time, the company abandoned the usual paid five-day Christmas holiday. Between 2008 and 2010 the labour force decreased by about 10%. Most of them were close to retirement age and reportedly left the company by mutual agreement (Masso and Krillo 2011, p. 75).
- A similar approach of decreasing staff and resorting to part-time work with full wage compensation was run by an Estonian producer of mechanics and electronics, with about 400 employees in 2009. Next to redundancies, the company introduced the four-day working week without cutting wages accordingly. In 2010 about 50% of those workers who had been made redundant could be hired again.
- The described pattern could also be found in a middle-sized company (308 employees) of the Estonian clothing industry. First of all, the number of employees dropped by nearly 20% although they were told that this was not only due to the crisis but also for overdue re-organizational reasons. The majority of those who had to leave reportedly left voluntarily or by mutual agreement. In 2009 the company introduced part-time work for some 30 employees. At the same time changes in contracts could be enforced. The contract foresees now the possibility to increase working time up to 40 hours per week according to the company needs. The contract also now entails summarized working time calculations that allow for working on weekends in order to meet fluctuation in demands (Masso and Krillo 2011, p. 76).

3.4 Reduction of working hours without wage compensation

Reductions of working hours without pay compensation may occur with or without the involvement of unions, and are often accompanied by temporary job guarantees under the imminent threat of redundancies.

This approach to working time reductions played a significant role for the safeguarding of jobs in the Russian Federation. At the onset of the crisis about 20% of the workforce worked shorter hours or had to take involuntary or quasi-voluntary leave (Gimpelson and Kapeliushnikov 2011, p. 11). Involuntary working time reductions for a period of six months are in accordance with the Russian Labour Code. Since the onset of the crisis more than 1.2 million employees have reportedly been transferred to part-time work (The Moscow Times 2009). As Gimpelson and Kapeliushnikov conclude, the reduction of working hours was mainly initiated by employers “and many workers had to accept this option, given the lack of better alternatives” (p. 11). In consequence, the entire Russian economy was affected by both job cuts and working time reductions, with the manufacturing sector most exposed in both dimensions (Table 3).

Table 3. Annual changes in output, employment, working hours and real wages, 2009 to 2008, in percentage points

	Output	Employment	Working hours	Real wages
Total economy	-7.9	-1.7	-2.4	-3.5
Industry	-10.0	-5.9	-4.8	-5.7
Manufacturing	-15.8	-7.2	-6.2	-7.2

Source: Gimpelson and Kapeliushnikov (2011, p. 12).

In Greece, the Labour Inspectorate (SEPE) reported an increase of working time contracts that featured a four-day week, some of them converted from full-time contracts. According to Stamati (2009), an aluminium producer asked its employees to sign an amendment to their labour contract that reduces working time for a period of six months from eight to 6.5 hours a day at pay cuts of 20%. Officially this measure was on a voluntary base but the Thessaloniki Metal Syndicate criticized that workers were forced to sign these contracts to avoid being dismissed.

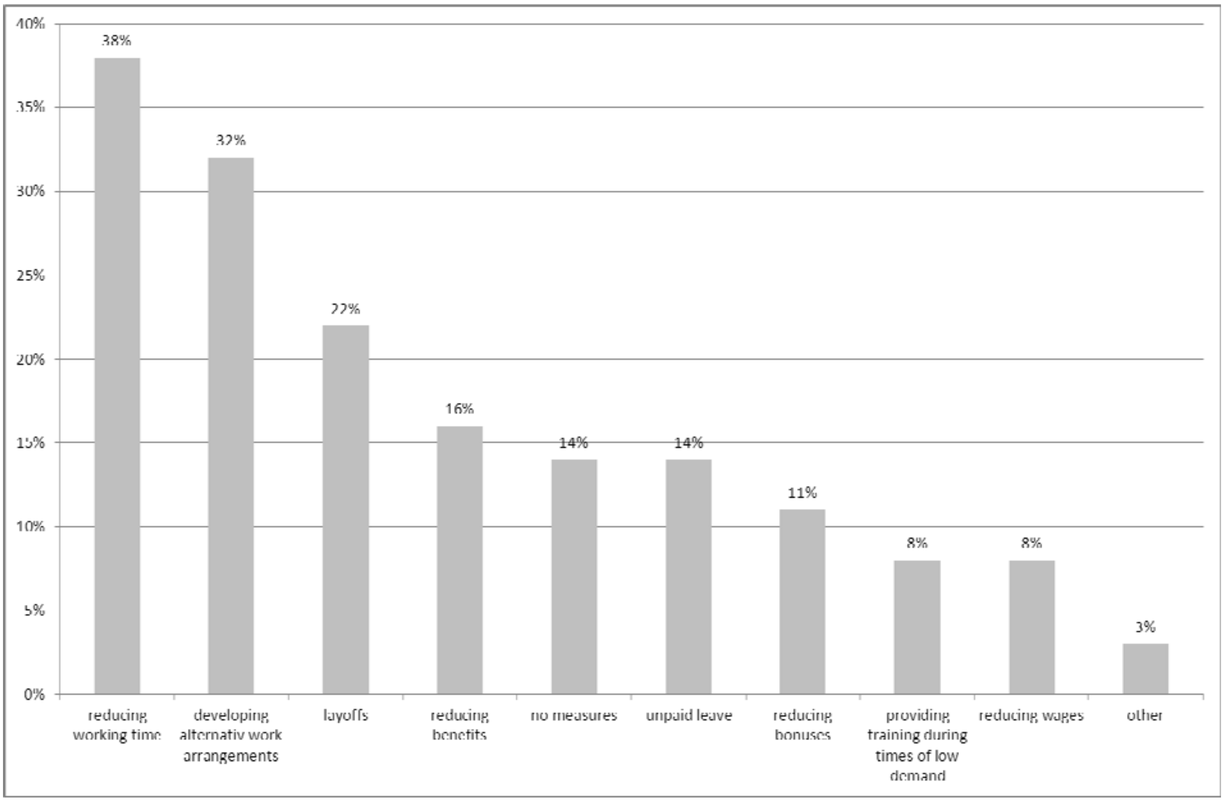
In Germany, Daimler renegotiated its firm-level ‘jobs pact’ including, in exchange for time-limited job guarantees, a working time reduction without pay compensation by 8.7% for all (mainly white collar) employees who were not on short-time work (Kraemer 2009). Likewise automotive producer Jaguar Land rover and JCB signed agreements on working time and pay reduction to avoid redundancies (European Commission 2011, p. 165).

In some cases, employee representatives managed to bargain particular social benefits against working time reductions without wage compensation. As was reported about the case of a car component producer in Cyprus, workers were set on a four-day week for a four month period but the employer continued to pay social insurance contributions on the basis of a five-day week base (Eustathopoulos 2009). Interestingly, in the latter case mainly high-skilled women were affected.

Significant working time reductions were also reported from medium-sized companies. For example, 250 workers at the manufacturing branch of the Aluminium Industries in Cyprus reduced their working time by 2-3 weeks within a period of six months. Likewise, in Lithuania a series of larger firms but also SMEs abandoned one working day and resorted to a four-day week.

It is in the same vein that crisis-adjustment strategies adopted by SME in the Indonesian furniture industry have been analysed by Tambunan (2011). Within a small but random study of 39 SMEs, none of which employed more than 20 workers (the majority had five to ten employees), employers were asked about the labour adjustment measures taken since the end of Q2 2008 and how their employees have been affected by these measures. As exhibited in Figure 4, reducing working time stood out with almost two out of five firms adopting this strategy, followed by what is called “alternative work arrangements” (unfortunately no details have been given on the meaning of this item, thus leaving it unclear to what extent this measure included adaptations of working time). The analysis suggests that all or most of the working time related adjustments entailed pay cuts. The author also mentions that women, temporary and unskilled production workers were most affected by reductions in working time and wages. As the furniture industry in Indonesia is a male dominated industry, women in this sector are often only employed as unskilled helps “that do simple tasks” and are not considered “a necessity” (ibid., p.10). In times of lower demand they are easily abandoned because their work (mainly packaging) will be temporarily taken over by the remaining (male and skilled) staff.

Figure 4. Labour adjustment measures used by Indonesian SMEs in the furniture industry



Source: Tambunan (2011, p. 9).

3.5 Obligatory holidays and collective holiday shutdowns

Further, and rather classical, responses to major cyclical fluctuations geared to reduce working time and save operating costs are temporary shutdowns or the introduction or extension of factory holidays. In some countries holiday shutdowns have been a significant measure in the crisis, for instance in Denmark, where it was amply used. "The industrial holiday was thought to be a relic from a distant past but has been resurrected by companies as a means to deal with the current economic recession. (…) Thus, holiday shutdowns can be seen as a third measure to mitigate the employment effect of the recession, along with redundancies among mainly production workers and those involved in work-sharing schemes among a broader spectrum of employees" (Jørgensen 2009). In Denmark holiday shutdowns have been extensively used by SMEs during the crisis. Available data show that nearly half of all SMEs were closed for holidays (made possible by the so-called Holiday Act) for a period between one and three weeks in July (ibid.). The majority of these companies (45%) belong to the (manufacturing) industry, 28% to services, 26% to the construction sector and 22% to retail. There are significant differences regarding the duration of the holidays, with enterprises in industries usually closed for a longer period compared to those in retail.[9]

Beyond Denmark, temporary shutdowns were practiced in various European countries, covering different sectors and establishments of differing sizes. In many cases, companies resorted to plant

[9] This pattern may suggests that the causes for using holiday closures during this period may be different for firms in industries or services, with the latter using this possibility because of seasonal fluctuations in demand and the former because of cyclical variations.

closures, either in combination with other flexibility measures or consecutive to other measures once the latter had proven not to be sufficient. Some examples may illustrate the varieties of patterns, including either individual leaves or collective shutdowns, while the leave could be either paid or unpaid.

- Temporary company shutdowns were reported in particular from automobile manufacturers and suppliers (PSA, Renault, Toyota, Dacia, Ford, Michelin) in France, Spain and Slovakia. At Michelin, the plant closure was accomplished by resorting to working time accounts, the extension of holidays and, eventually, by the use of the French public work-sharing scheme (chômage partiel) (Glassner and Galgoczi 2009, p. 17). In the UK, too, car producers and suppliers were reported to implement plant shutdowns next to dismissals primarily of temporary or fixed-term workers. Temporary shutdowns were frequently practiced also by SMEs. According to a survey of the Federation of Small Business (FSB) in the UK, 10% of its members reportedly planned to close their enterprise for a two-week period over Christmas (Glassner and Galgoczi 2009, pp. 23-24.)

- In Hungary extended obligatory (Christmas) holidays were a widespread measure. While some companies sent their workers on a longer paid annual leave, others reduced salary accordingly. Companies using extended Christmas breaks as a response to the crisis included Michelin, Nokia and Villeroy and Boch. Audi Györ, too, closed its plant for four weeks at the end of December 2008 but was able to take advantage of flexible working time schedules for this purpose. It has to be stressed, however, that all too frequently these measures protected the core staff only, and temporary agency workers or those on fixed-term contracts were excluded from these time buffers (Glassner and Galgoczi 2009, p. 24; Neumann and Edelényi 2009).

- In Latvia, unpaid holidays were frequently used as a cost-saving measure, also in the public sector as well. For instance, the Company Register set its employees on unpaid holidays for the period of two days in January 2009; likewise the University of Agriculture decided to introduce a three-day unpaid holiday in April 2009, which affected some 1300 employees. More leeway was granted to the employees of the Technical University of Riga, who could choose the timing of an additional seven-day leave within a three-month period. These examples add to the general picture that in these countries working time reductions usually entailed wage cuts (Berdnikovs 2009).

- In Lithuania many companies suffering from economic turbulences asked their employees to take their paid annual leave or, if this was not sufficient, to take an additional unpaid leave. For instance in December 2009 all 68 workers of an electrode manufacturer took regular leaves, and in January 2010 had to resort to unpaid leave. Paid annual leave was also taken by the 300 employees of a furniture company and some construction companies (Blaziene and Zabarauskaite 2009). As the authors state, in the majority of companies of Lithuania trade unions do not have a say and employers often take unilateral decisions without having to consult a union or employee representative. In the rare cases where collective bargaining took place, such as a small company with roughly 65 workers, the sector union and the employer agreed that workers should either take short unpaid leaves (up to two weeks) or use their regular holiday entitlement. This measure was supplemented by training courses paid by the company, which have been taken up by nearly one third of the workforce (Blaziene and Zabarauskaite 2009).

- So-called “voluntary unpaid leave” was reported from Infineon, Austria, where executive staff was asked to take unpaid leave and to accept pay reductions of up to 15%. These voluntary reductions were not subject to a collective agreement and were based on individual contracts between the employer and the respective employee (Adam 2009). Similarly, at two Norwegian newspaper publishers journalists agreed to take an extra week of unpaid holidays (Nergaard 2009).

- A different form of compulsory holidays was chosen at Arcelor Mittal Steel in Romania where workers took ten days of rotating annual leave (Ciutacu 2009).

- In the Netherlands an agreement in the lamp manufacturing industry granted employees 3.5 additional days off during 2010 in response to reduced production. Employers could cancel these days off if their situation improved and instead make one-off payments to the employees (European Commission 2011).

- As a result of labour negotiations A paid leave scheme for 350 workers was practiced by Ssangyong Motor Co., South Korea's smallest automobile producer (Korean International Labour Foundation 2008).

3.6 Section Summary

A common feature of the working time measures reported so far has been the direct link between working time reductions in various forms and wage cuts. Wage cuts make these adaptations attractive for employers but difficult to cope with for employees. Hence, the occasional engagement with all sorts of deals geared to ease this problem for workers, such as partial and temporary wage compensation. In contrast to these more traditional approaches, more recent or 'innovative' approaches took advantage of existing forms of flexible working time organization, such as working time accounts or 'time banks'. Taken at face value these arrangements are not interesting for employers in times of crisis, as workers can reduce their hours (by reducing the 'assets' on their accounts) while wages remain unchanged. Thus, firms' personnel costs are not reduced. As a closer look reveals, however, innovative working time arrangements are cost saving in a mid-term perspective. It is in this wider time frame that the following evidence must be interpreted.

4. Time banking schemes

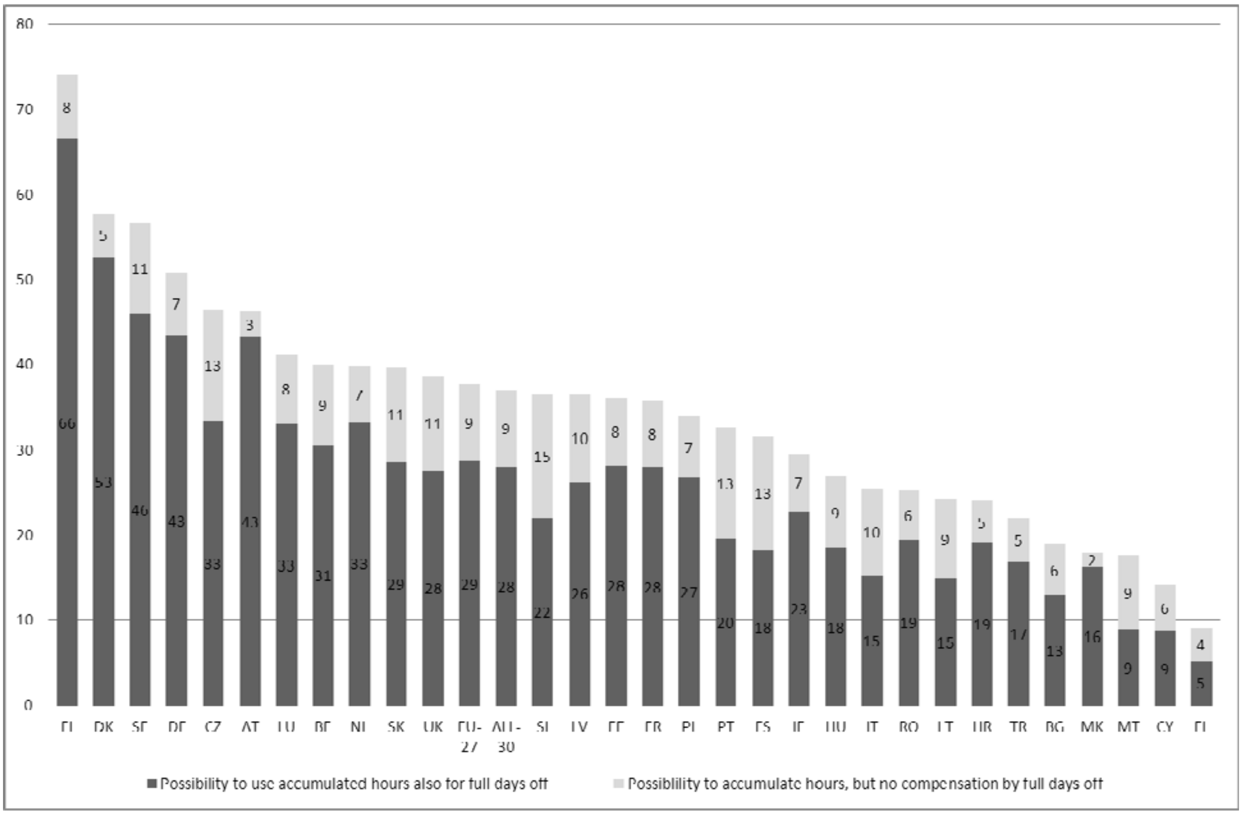
Working time accounts or time banking schemes allow for greater flexibility with regard to working time, as it enables employees to vary their daily working time usually in set limits (Seifert 2004, p. 2). Working time accounts allow for an increase in working time during times where demand is high, whereas hours can be reduced when demand is dropping (Dietz et al. 2012, p. 74). Depending on the way working time accounts are implemented and regulated, this greater flexibility is supposed to be working for the benefit of both employers and employees, which is why those schemes are often referred to as representing a "win-win" situation (Munz 2006). This implies that time banking systems are aimed to serve different purposes. On the one hand they shall allow for more employee flexibility in that, for instance, workers decide when to start or finish their daily work or – in the case of more long-term oriented accounts – at what time to take a period of leave. On the other hand, these accounts are designed to help firms cope with variation in demand. This ambiguity suggests that in some companies and employees time banking may indeed imply a “win-win” situation, but it may entail conflicting objectives or outcomes in other companies.

Working time accounts exist in many variations. They may differ in the amount of hours that can be saved, in the time span envisaged (short-term or long-term accounts), in the elements that can be saved (which may include time elements such as hours worked beyond the weekly standard, but also pay elements such as overtime bonus), the procedure of consuming time ‘assets’, and in the extent to which workers may also accumulate ‘time debts’ rather than solely ‘time assets’. It is also possible to establish parallel types of accounts geared to serve different purposes. For instance, companies may run one category of accounts in order to deal with demand fluctuations, while a second category of accounts is reserved for individual flexibility purposes. In Germany this difference gained greater importance, as in many cases the public work-sharing short-time scheme was only granted under the condition that no assets were left on the former (‘collective’) account, while some remaining assets on the latter (‘individual’) account were accepted. There is also evidence, however, that some companies dissolved the barriers between the two accounts in order to tackle the crisis (Riedmann et al. 2010); in some cases this was not in accordance with the law. Further, while some accounts are from the outset developed in a way that negative balances are permitted, in some firms the crisis triggered agreements explicitly aiming at time debts of workers being balanced by longer hours in times of economic recovery (Zapf and Brehmer 2010).

The variety of flexible working time arrangements and working time accounts together with their different labelling makes it difficult to capture their incidence in companies and among employees. The European Company Survey (ECS) deals with this problem by asking whether these accounts allow for accumulating and taking off hours, days or even longer periods. According to the results of the ECS in 2009, 38% of companies in the EU-27 (with ten or more employees) have implemented time banking schemes that allow for accumulating hours (Riedmann et al. 2010), though there is much variation across countries (cf. Figure 5). The survey also provides evidence that working time accounts in the EU-27 are less widespread within the industry sectors (33%; construction, manufacturing and energy) compared to the service sectors (41%) (Riedmann et al. 2010, p. 10). Figure 5 makes also clear that the majority of firms are using time banking schemes that allow for taking full days off while a much lower but still notably large proportion uses less flexible accounts. Moreover, there is evidence that, working time accounts may be of greater importance as a crisis-response measure in larger companies than in SMEs. This might be associated with the sheer prevalence of hours account systems in the latter[10] (ibid.; see also for an in-depth analysis of the prevalence of various forms of working time schemes in Germany, Riedmann et al. 2011, also Ellguth et al. 2013).

[10] A reason for this pattern might be that larger companies are more likely to have introduced Human resources departments that in turn are better able to deal with the often rather complex matter of working time accounts (Riedmann et al. 2010).

Figure 5. Flexible working time arrangements by country and flexibility scope (in %)



% of establishments with at least ten employees
Source: ECS 2009; Riedmann et al. 2010.

Against the background of the seemingly high incidence of flexible working time measures across Europe, it has to be stressed, however, that they are not always available to the entire staff but are often restricted to certain employee groups (administration, managers, etc.) (Riedmann et al. 2010, 2011). Furthermore, men are somewhat more likely than women to use this form of working time arrangement (Plantenga und Remery 2009, Riedmann et al. 2010). There is also evidence that companies running atypical working hours (i.e. night, shift or weekend work) are more prone to restrict flexible working time arrangements to certain employee groups than companies that work standard hours (Riedmann et al. 2010). There is only limited data available on the average amount of hours saved on these accounts. A German company survey that was conducted before the Great Recession showed that working time accounts on average allowed for a positive balance of 69 hours at the maximum and 39 hours for a negative balance (Groß and Schwarz 2010, cited from Zapf and Herzog-Stein, 2011, p. 61).

4.1 Use of working time accounts during the crisis

Company case studies suggest that, like other measures, the use of working time accounts geared to tackle weaker demand is often accompanied or followed by the application of related instruments such as the recourse to work-sharing, temporary plant closures or even dismissals. In this regard Glassner and Galgoczi refer to a hierarchy of instruments that were used by firms (2009, p. 12).

When it comes to the implementation and use of flexi-time in general and long-term working time accounts with greater volumes of time banks in particular, German companies are, on average, amongst the more advanced in Europe. Indeed, the use of working time accounts (together with short-time work and a reduction of agreed working time) was often referred to as one of the reasons why Germany, in spite of being strongly hit by the crisis, has not experienced a significant drop in employment as did other countries (Zapf and Herzog-Stein 2011, see also Figure 2). According to Fuchs et al. (2010, p. 1) the drop in the German GDP of 4.7% in 2009, all other things being equal, should have resulted in a loss of roughly 1.5 million workplaces. However, employment decreased only by 5,000 employees mainly for two reasons: a) companies that suffered from the crisis were reluctant to make employees redundant (entailing what is called "labour hoarding"); b) job losses in manufacturing were by and large compensated by job growth in services as the analyses of the respective figures reveal[11] (Bosch 2011, p. 247). In the case of labour hoarding flexible working time models played a vital role. As Fuchs et al. (2010, p. 1) analysed, annual working time in 2009 decreased by 41.3 hours (-3.1%) compared to 2008. The use of working time accounts and the reduction of overtime contributed roughly 15 hours (36%) to this overall drop, work-sharing (short-time work) 13.4 hours (32%), and temporary reductions of agreed working time and the increase of part-time work 7.5 hours. According to the WSI (Wirtschafts- und Sozialwissenschaftliches Institut) works council survey about 34% of establishments with 20 and more employees and a works council used working time accounts to reduce effective working time during and shortly after the great recession (Zapf and Herzog-Stein, 2011, p. 63). To what extent, and whether at all, working time accounts contributed to avoid dismissals, however, is difficult to distinguish and remains controversial amongst researchers. While Burda and Hunt (2011) concluded that the contribution of working time accounts to job savings was at the same level as the amount saved by work-sharing schemes, Ellguth et al. (2013, p. 2) argued that working time accounts may have been indeed likely to have served as a breather during the crisis but that there are currently no unequivocal employment effects of working time accounts assessable. Indeed, analyses show that average working time taken from time banking schemes remains in a comparably limited framework. Table 4 shows in detail how far companies have made use of saved hours in order to deal with the crisis, by distinguishing companies that reduced up to 19 hrs, 20 to 39, 40-59 or 60 or more hours in manufacturing and services. Across the sectors, a small majority has taken the equivalent of one standard work week of their time accounts, while the remainder have taken more than one week. The table also reveals that working time accounts have been used to a greater extent in manufacturing than in services, which was to be expected given that the crisis has the former hit harder than the latter.

Table 4. Average reduction in German working time deposits, summer 2008 to autumn 2009 (in %)

Scope of reduction	All companies	Manufacturing sector	Services sector
Up to 19 hrs	20.5	17.1	25.2
20-39 hrs	31.9	27.1	38.4
40-59 hrs	21.9	23.8	19.2
60 hrs or more	25.8	31.9	17.2
Total*	100.1	99.9	100

Source: IAB; cf. Stettes (2011); see also Zapf and Brehmer (2010).

* Deviations from 100 due to rounding.

[11] Between the third quarter of 2008 and the second quarter of 2010 employment in manufacturing decreased by around 468,000 while growing in public and private services by 452,000 during the same period (cf. Bosch 2011, p. 247).

Data do not reveal whether companies had no need to take more hours from the accounts or whether accounts had not accumulated more hours. As has already been mentioned, in many companies applying time banking schemes there exist more than one type of account, e.g. short-term accounts and long-term accounts run in parallel, with transfers of hours between the different accounts either possible or not possible (Seifert 2004). Other than short-term accounts long-term accounts are often dedicated to a life-course perspective, primarily geared to facilitate early retirement. In Germany the so-called Flexi II law, that came into effect in 2008, regulates long-term working time accounts, and makes it clear that credits on a long- term account under Flexi II are excluded from being used for economic reasons– even when employees wish to do so (Riedmann et al. 2011)[12]. As the incidence of long-term time banking systems according to the Flexi II law are not very widespread (only about 2% of companies have them implemented and only a minority of employees makes use of them, Seifert et al. 2013), a conflict of interests in the use of the time savings is currently not expected to cause many difficulties.

In many European firms time banking accounts were used simply by reducing the volume of hours ‘saved’ on the accounts (‘credits’), particularly in the metal and electrical industry as well as in the automotive sector, as at STMicrolectronics, Airbus, Bosch, Snecma in France, ThyssenKrupp Nirosta in Germany and Michelin and Opel in Spain.

Some firms agreed on running the time accounts into the negative that is, accumulating “time debts” on employees’ accounts which were to be balanced once business picked up. For instance, the German medium-sized manufacturer of plugs Mennekes reduced working time about 150 hours within six months. In order to prevent employees from going on short-time work and thus from a loss of money, Mennekes allowed the already existing time banking scheme to become negative. In an employment pact (Beschäftigungspakt) with the works council, it was agreed that these hours would be worked without extra pay after the recession (Kraemer 2009). A similar approach was run by Adria Mobil in Slovenia, a producer of motor homes and trailers, who, next to 30 days of unpaid leave, introduced the three weeks working month with full pay compensation under the pre-condition that employees would cover the hours after the crisis (Rojec 2009). Tyre producer Michelin granted employees paid days off during the crisis to be made up in the future (European Commission 2011, p. 159).

As the crisis proceeded some governments realized the potential advantages of time banking schemes and facilitated their introduction. This has been the case for instance in Poland and Slovakia. The Slovakian government introduced in March 2009 the ‘flexikonto’ as an amendment to the Labour Code (until 2011) to which employers suffering from loss of production could apply for. The Law stipulates that any implementation of flexible working time schedules has to be agreed with representatives of employees, although there is evidence that this has been often avoided (Cziria 2009a). During this period, employees were on temporary leave (unintended time-off) whilst receiving full wages. The working time account had to be balanced after economy has recovered. According to Cziria (2009a) these measures were primarily used by companies in the automotive and electric industries. Specifically, Volkswagen Slovakia used this measure several times in 2009 (Cziria 2009a). As a consequence of these measures the Slovakian automotive branch did not announce significant dismissals of employees among core staff. While it is true that temporary agency work contracts have been cancelled and fixed-term employment contracts have not been renewed, an important reason for this was that “most of the companies implemented anti-crisis measures allowing employers to use more flexible working time arrangements, mainly the so-called ‘flexikonto’” (Cziria 2009b).

[12] For instance, employees may want to use their credit hours saved in a long-term account according to Flexi II in order to avoid short-time work which is associated with income loss. In this case the law forecloses this usage and the employee has to work short-time even if this implies lower earnings.

In Brazil, working time accounts (banco de horas) are regulated by law (Law 9601/1998), although a lack of clarity regarding their implementation and use still exists. For instance, it is not legally regulated whether the introduction of working time account is subject to collective bargaining or whether an agreement between employer and employee would be sufficient. Consequently, many agreements have been taken to court (Eichhorst et al. 2011, p. 29) which in turn resulted in insecurity among companies and employees concerning the system of "working time accounts". Still, the use of working time accounts was an important counter-crisis measure, particularly in companies relying on high or specific skilled employees (ibid., p. 52). According to Eichhorst et al. (2011) firms in Brazil can be divided into two groups, those that resorted to external flexibility measures such as hire and fire and those who tried to maintain employment by using internal flexibility measures (…) "Companies initially placed their employees on 'collective vacations' (or temporary plant closures) or offered them paid leaves of absence. Upon the workers' return, they sought to reduce working time, reaching agreements to use employees' leave hours or to reduce working hours while cutting salaries. If the situation did not improve, some companies made use of the temporarily suspensions of contracts – temporary layoffs" (ibid., p. 53). Indeed, total hours worked in the industries sector fell by -7.4 hours in 2009 compared to 2008, although this statistic does not reveal which of a variety of possible components are accountable for this phenomenon (ibid., p. 52). Eichhorst et al. (2011) refer to a case study they conducted in a Brazilian company that used working time accounts for workers in production in order to cope with the crisis. No figures were given with regard to the amount of hours accumulated; it has been agreed by collective bargaining, however, that time debits would be balanced as soon as economy gained momentum, and by working 30 minutes more per day at the maximum. "The company did not succeed in convincing the union leaders to change this clause in a time of crisis. In short, hours compensation took years to be completed" (ibid., p. 55).

4.2 Working time 'corridors' or 'bands'

While working time accounts are, both historically and in theory if not always in practice, *individual* accounts which have to be transformed (partially or totally in times of crisis) into a *collective* form of adapting working hours to business fluctuations, there are also ways to vary working hours collectively more directly. These approaches may be summarized under the term "working time corridors": "Working time corridors enable companies to vary the regular working time of certain groups of workers or the company's entire workforce within the limits of a fixed band" (Bispinck 2006, p. 116), for instance 30 hours at the lower limit and 40 hours at the upper limit. The underlying idea is that, as stipulated for instance in the framework agreement in the German chemical industry, companies may deviate from the standard 37.5 hour week for a certain period of time, either towards a 40 hour-week in periods of strong demand or shortage of labour supply, or vice versa towards 35 hours in weaker periods. In any case, these deviations must be negotiated at firm level and accepted by the collective bargaining parties. It is more than obvious that this kind of arrangement can easily be used as a time buffer in periods of crisis. Note, however, that wages may vary along with working hours if not agreed otherwise.

The concept of 'time corridors' or 'time bands' is also relevant for any kind of working time account as agreements on flexible hours ought to stipulate a time span in which the normal hours should be worked on average. By extending this time span from, say, one month to one year or even to two years, agreements provide a greater leeway for periods of shorter or longer hours, either on an individual or a collective basis. By way of example, in Denmark 77% of all firms are covered by agreements on varying weekly working hours under the condition that the average within a one year period does not exceed 37 hours (Westergaard-Nielsen and Neamtu 2012, p. 6; on similar agreements in Germany cf. Bispinck 2006).

In the crisis, the potentials implied in these concepts to adapt working hours to fluctuations in demand gave way, in some countries, to moves towards more agreements on annual hours. Thus, in the Netherlands the social partners in the transport sector agreed on several measures aimed at enhancing working time flexibility and job preservation, among those were: a) "a temporary expansion of the obligatory and voluntary time-for-time regulations, allowing for a more flexible scheduling of working hours"; and b) the right for the employer to unilaterally determine "when the working time reduction days agreed in the sector collective agreement have to be taken up" (Glassner and Keune 2010, p. 11). In Poland, the extension of the averaging-out period from primarily three months to one year was part of the so-called anti-crisis package agreed by a Tripartite Commission (Czarzasty 2009).

While the actual effects of the latter initiative on job protection are far from obvious, other applications of the concept of 'time corridors' or 'time bands' have become an important instrument in some European countries, most prominently in Germany. In this country the instrument of a (mostly temporary) collective working time reduction geared to safeguard jobs on a large scale was used for the first time in 1993 at the Volkswagen AG with its introduction of the 28.8 hour/ four-day week (Haipeter and Lehndorff 2009). In the subsequent years the possibility to decrease standard working time in order to deal with economic downturns has been adopted in several collective agreements of various German industries (Table 5). Next to defining a 'time corridor' for weekly working hours these collective agreements usually contain regulations about the maximal period in which working time can be reduced, to whom this applies, possible compensatory payments, conditions and alternatives (Bispinck 2009).

Table 5. Possibilities for temporary working time reductions according to selected German collective agreements

Sector	Standard working time	Can be reduced to….
	Hours	….hours
Banking industry	39	31
Printing industry	35	30
Iron- and steel industry	35	28
Wood and plastics (regionally only)	35/38	32/30
Motor trade and repairs (regionally only)	36	30
Metalworking industry (regionally only)	35/38	30/33
Local government (East)	40	80-75% of current wt
Paper processing (West/ East)	35/37	30/32
Travel agencies	38,5	30
Textile cleaning services	38,5/40	33.5/35
Insurance	38	30
		…by …%
Clothing (West)	37	6.75%
Textile industry (regionally only)	37/40	6.75%

Source: WSI-Tarifarchiv – Stand: April 2009, cf. Bispinck (2009, p. VI).

As Table 5 also shows there is a wide array of potential hours reductions which may contribute to the safeguarding of jobs in crisis period. In most cases the application of these collective agreements in the recent crisis was subject to voluntary company agreements within the framework of the sectoral agreement. Note that only some of these agreements stipulate partial pay compensation (Bispinck 2009), which implies pay cuts for many employees. Irrespective of this ambiguity this type of agreement played an important role in German work-sharing initiatives in 2008/2009.

4.3 Section Summary

While it remains difficult to single out their effects in precise numbers, it has been widely acknowledged that time banking systems and other forms of variable working hours contributed significantly to the overall stability of employment during the 2008/09 crisis in Germany (cf. the overviews given by Bosch 2011 as well as Boulin and Cette 2012). However, research also suggests that in some countries with an equally established practice of working time accounts, their use during the crisis was much less developed, as was the case in Germany during the preceding crisis in 2003. Most prominently, in the 2008/2009 slump, it was the Nordic Countries where time banks were not used as a key instrument within the crisis-response tool kit. Rather, companies resorted primarily to temporary closures and temporary or permanent layoffs (Anxo 2011). Thus, talking about advanced forms of working time flexibility is talking about potentials, rather than mechanisms.

On the one hand, this observation points to the lack of research into advanced working time practices during the crisis and beyond. This shortcoming applies both to quantitative studies (e.g. the relative importance of time banking schemes for the safeguarding of jobs), as well as to company case studies exploring the handling of tradeoffs and ambiguous interest constellations with regard to working time accounts and their utilization during the crisis. On the other hand, however, it should be underscored again that the main problem to be tackled here is not the scarcity of information but the scarcity of practice.

5. Other specific working time measures

There is very limited information on innovative working time measures geared to tackle the crisis beyond working time accounts. As indicated earlier, it is fair to assume that the lack of information reflects a lack of practice, rather than primarily a lack of public awareness. In what follows we report, first, on the incidence of crisis response initiatives combining working time reductions with training activities. Second, we give some examples of companies offering work-life balance measures, including compressed working weeks, individual working time patterns and home working, in so far these measures have been applied during the crisis.

5.1 Reducing working time by promoting training activities

Improvement of skills or further training especially in the time of crisis is not only important with regard to the employability of the unemployed, but also to keep employees up to date in order to be able to support the recovery of the economy when conditions are improving. There is evidence that the likelihood to engage in training activities is higher among multinationals, medium and large enterprises as well as enterprises in knowledge-intensive industries (cf. Eurofound 2011, p. 7). Furthermore, it is predominantly medium- and highly-skilled employees that benefit from these in-company training initiatives simply due to the fact that they are often more difficult to replace. As to the prevalence of training activities in the Great Recession, however, the European Foundation concludes that "it would appear that the current economic crisis is in general having a negative impact on the engagement of enterprises in training activities" (ibid, p. 11).

Training activities are often, if not necessarily, connected to short-time schemes. In this regard, in Austria, Belgium, Chile, Lithuania, Luxembourg, France, Germany, Japan, and Uruguay (among others) training of workers in short-time work was subsidized by the state, while in the Czech Republic, Hungary, the Netherlands and Slovenia "provision for training during some of the hours not worked is a pre-condition for receiving public income support" (Boulin and Cette 2012, p. 6, Eurofound 2011, Messenger and Rodriguez 2010). In Malta, training is compulsory for employees working short-time (ibid, p. 16). Stuvoy and Jørgensen (2009) conclude for Denmark that companies of all sizes *either* chose short-time work *or* training measures in order to maintain their staff. Although no details are provided, the authors report further that many employers used the available time for training measures intensively to make up for the preceding period of high demand in which training and education were neglected in many companies.

In Germany, in contrast, further training played no major role in connection with the widely used short-time scheme. This is in accordance with experiences in previous crises (Crimmann et al. 2010). Glassner and Galgoczi (2009, p. 14) report about an initiative of the large automotive supplier ZF Friedrichhafen who "used times of crisis-induced inactivity for training purposes". In general, however, in spite of special incentives for training activities of German companies using short-time work were provided, only a small number of companies and employees participated in training measures during the crisis (2010). Accordingly, Crimmann et al. (2010, p. 29) stated that only 17% of the financial budget provided by the German Federal Employment Agency to support further training for establishments on short-time work has been requested. Reasons for this reluctance might have included the uncertainty about the duration of the crisis and various bureaucratic obstacles, but also a lack of organizations offering efficient training programs due to earlier cutbacks in public funding of training in the course of changes in labour market policy over the preceding years (cf. Bosch 2011).

In some other countries, too, while state programs or other public support were initiated or already available to promote training measures (such as in Bulgaria, the Czech Republic, Estonia, Lithuania, the Netherlands or Spain, among others), there is only limited evidence on actual take-up rates and effects of most of these public training initiatives apart from individual case studies (cf. for further examples Eurofound 2011):

- In Greece, the Ministry of Employment and Social Protection announced an employment-promotion program targeted in particular at protecting employment with special measures for SMEs (e.g. in-house training) (Stamati 2009). Employees in SMEs who were forced to reduce their working hours could receive remuneration from this program. Although no systematic data is available, it was estimated that not much has changed with regard to training activities (Lampousaki 2011). Further measures to boost training activities in establishments with 50 or more employees were boosted in 2010 by the OAED (Labour Force Employment Organization) (ibid.).

- In Hungary the government introduced the so-called 4+1 employment and training program for companies in all sectors (except for the public sector) that were affected by working time reductions. The rationale of this program was "to allow employees to partake in training on the fifth day of the week – hence the name 4+1" (Neumann and Edelényi 2009) whereby up to 75%

of the salary together with the social contributions was covered by the Labour Market Fund (Glassner and Galgoczi 2009). Later this concept was extended in that employees in this program have to be reimbursed at least 50% of their working time. There is no systematic evaluation of the take-up rate or success of the program available. Neumann and Edelényi state however, that “these types of actions have been taken by a considerable number of companies in trouble, regardless the size”. For example, the 4+1 program was used by both small enterprises with less than 50 employees and large companies with nearly 10,000 employees. In this regard the car component supplier Sokoró was mentioned as an example of good practices (Csokay 2011). Sokoró implemented training measures until the end of the year 2010 with 40% (139) of employees taking advantage of the training. Most of the participants were professionals, the main training areas were foreign languages, logistic, IT and management. The training measures were supported by 91.4 million HUF (100% of expenses). The author concludes however, that it is “hard to prove that policy measures had any real effect”.

- In Slovenia, a new funding system was implemented intended to co-finance further education and training measures of employees in micro- and small enterprises as well as for employees in companies that have to reduce their weekly working time to 36 hours (Rojec 2009).

- In Malta, state-funded support of training initiatives within the Temporary Aid Scheme was part of a stimulus package launched in early 2009 by the government in order to combat the crisis. Employees who were set on a four-day week (within a work-sharing scheme) were entitled to receive training on the fifth day. This training day was compensated by the state with minimum wage, sometimes complemented by the respective establishments (Eurofound 2011, p. 39). Between the fourth quarter 2008 and the second quarter 2009 32 Maltese requested to participate in the Temporary aid scheme but only four companies fulfilled the eligibility criteria. All in all around 1,500 employees took part in training activities (ibid. p. 17). Debono and Borg (2009) consider this package as a decisive for the decisions of Maltesian establishments to engage in training activities at all (for case study evidence on its take-up by individual companies’ cf. Debono and Borg 2009).

- In South Africa, a training layoff scheme, developed by the government and the social partners, was launched geared to secure jobs and promote employability. The training layoff scheme is financed by the National Skills Fund (NSF) and the Sector Education and Training Authorities (SETA) and is eligible to employees threatened by dismissal. Base of this scheme is an agreement between an employer and a trade union or the individual worker. Participation in this training layoff scheme is voluntary. During the training layoff scheme employers have to pay full contributions to a basic social security package and the employee will be paid a training allowance that is set at 50% of an employee’s basic salary, up to a maximum of R6,239. This allowance will be paid for a three month period (to be extended for another three month) (cf. Department of Labour 2009). The take-up rate of this measure was not very high. Within nearly one year after the introduction only little more about 6000 workers participated in the training layoff (Economic Development Department 2009/2010). Widely used was the training scheme layoff in the automotive industries and in metal and engineering were it contributed to prevent job losses (see Grawitzky 2011 for the role of collective bargaining and single case evidence). It is not quite clear why employees or employers in general were unwilling to make use of this instrument. According to the Department of Labour one reason might be that employees facing a retrenchment prefer to take retrenchment packages and try to find another job elsewhere instead of stay under the condition of reduced payments (Ollis 2010). In the meantime the conditions of the training layoff scheme have been altered in that access was dissociated from the global economic crisis, the training could be spread over an indefinite period as long as combined with short-time work and training allowance increased up to 75% of a workers' basic salary (Grawitzky 2011).

- In Chile, a Labour Training Permission scheme (Law No. 20.351) was negotiated by tripartite national agreement (National Agreement for Employment, Training and Working Protection in 2009). Employees within this scheme do not provide services to the employer but attend training courses. During this time employees are not entitled to receive wages but are compensated by an equivalent to 50% of the average of their last six month' income (the maximum amount is limited to 190,000 Chilean pesos, funded by the Compulsory Unemployment Insurance). During the contract the training the work contract with all the workers' rights remains in force. Training permits are granted for a period up to five month (continuous or discontinuous). The period of validity of this measure was from. July 1 2009 to July 2010.

Initiatives geared to promote and support training activities during the crisis were also started by collective bargaining actors. In France PSA Peugeot Citroen concluded a company agreement that connected training measures with the implementation of temporary unemployment. Employees who participated in these training measures received 100 per cent income compensation (Glassner and Keune 2010, p. 15). According to Lovén (2009) the truck manufacturer Scania Sweden tried to avoid dismissals by implementing an alternating work schedule of training and working days, in addition to a four-day working week and a 10% pay cut. Initially the union was reluctant to accept the decrease in working time and payments, but was overruled by the employees who voted for this proposal. Further training activities that were introduced with the involvement of the social partners were reported from ArcelorMittal Ostrava, Czech Republic; Piaggo Aero Industries, Italy; Ferro, the Netherlands; COBOT, Belgium and Energy & Utility Skills, UK (cf. Eurofound 2011, p. 29).

5.2 Other working-time measures

Teleworking

The term 'home working' refers to the possibility to work at least a part of the contractual working time from home. There is not much evidence that teleworking has been used much during the crisis in order to save company costs. As it was primarily manufacturing which was hit by the crisis, teleworking was not an obvious option in the first place, let alone the question to what extent the expectation of such cost cutting effects is realistic. At any rate, teleworking is not very widespread in the EU. As Platenga and Remery (2009) found for the pre-crisis years, about 2% of male and 3% of female employees had the possibility to work at home.

Nevertheless, in Estonia and Lithuania teleworking has been promoted as of 2010. The latter has established a new type of working contract. A so-called "distance work employment contract may establish that an employee will perform his job functions in other places than a workplace (…) The details of such employment contracts will be established by the government and collective agreements" (Masso and Krillo 2011, p. 101). There are also indicators that companies in Latvia are increasingly using home offices to save administrative costs (Berdnikovs 2009); unfortunately no further specifications about the take-up of these provisions are given. Similarly, the connection with the crisis is unclear.

Career breaks and sabbaticals

As was the case with other forms of working time reduction, the crisis may have triggered individual leave schemes with a greater life course orientation, while having positive short-term side-effects on employment.

An interesting scheme, called ‘paid career breaks’, has been reported from the Irish banking sector. Irish Life & Permanent’s banking units offered employees two or three years paid career breaks in October 2008. In 2009 some 6% of the workforce, particularly younger staff, applied for this scheme that pays €20,000 for a two-year and up to €35,000 for a three year break. This measure allowed for saving expenses while maintaining qualified personnel in anticipation of a recovery of the economy in the years 2010/11 (Dobbins 2009). According to Dobbins other banks also considered the application of similar schemes, but further evidence is lacking. Similarly, but not as generous, are “sabbatical” offers from GM in the UK. Employees who agreed to take a sabbatical between January and September 2009 were paid 30% of their salary (Glassner and Galgoczi 2009, p. 23). No information about the effect of this measure has been given. According to the CBI annual employment trends survey in the UK, the share of companies in the UK that offer career breaks or sabbaticals had been rising notably from 2004 to 2007 (CPI 2009). It has to be noted however, that sabbaticals or career breaks are mainly offered to (higher) qualified personnel (European Foundation 2009).

In Austria the application for a so-called educational or training (Bildungskarenz, covering the period between 1 August 2009 and 31 December 2011). leave of employees has been eased and increasingly used. Training leaves can be taken between three and twelve months. In 2009 an average of 4,894 persons has taken part in this this scheme, an increase of more than 200% compared to the previous year (EMCC 2011, Mahringer 2010). Employees on training leave receive training benefits that is taken from unemployment benefit funds. Also training leave is taken into account in the calculation of employees’ pension entitlements. It is said the relatively long period of absence may cause difficulties for smaller companies as specific knowledge and skills are lost during the absence of employees (EMCC 2011)

Compressed work weeks

Earlier evidence from the United States points at cost saving potential of so-called compressed work weeks. Employees on compressed working weeks (CWW) usually have a standard full-time work contract but are allowed to deviate from the normal eight-hours a day/ five days a week principle by working ten hours a day/ four days a week, although other schedules are also possible (Baltes et al. 1999). If it is organized within a collective schedule a compressed working week can contribute to cost savings as energy costs can be reduced by the reduction of operating hours per week (while capital costs may be raised by shorter operating hours). Moreover, productivity may be enhanced by decreasing absenteeism (Facer/ Wadsworth 2008; for opposing evidence cf. Baltes et al. 1999). The latter expectation draws on possibly positive implications for work-life balance due to more days off work per week and a decrease in commuting time and costs. Older research in the U.S. (dating back to 1995) indicated that every fifth company offered compressed work schedules to their employees, and that these schedules were practiced in particular in manufacturing industries (Baltes et al. 1999) or public enterprises (Facer and Wadsworth 2010).

In an attempt to deal with increasing energy costs the US state of Utah introduced the mandatory four-day work week for the majority of its state employees between 2009 and 2011. The result was positively assessed by most of the employees. Moreover, energy use decreased by 10.5% which translates in reduced energy spending of $502,000, also and due to changing commute patterns, gasoline use declined notably and resulted in a savings of $1.4 million (ibid., pp. 1043).[13]

As to the 2008/2009 crisis there is hardly any evidence of firms re-organizing their working time schedule with CWWs as a crisis-response measure[14]. One both interesting and unusual case is reported from an Italian company, Alfa Acciai, a large steel mill with around 740 employees, which introduced new operation hours. The company decided to adjust hours of operation to the energy costs and to run machinery only at night and on weekends. At the same time weekly working time was reduced by 25% and wages by 7-10% (as night and weekend work was compensated by extra pay the wage cut was not proportional to the working time reduction). This agreement was approved by the workforce and trade unions (Pedersini and Coletto 2009).

6. Final Conclusion

The evidence reported in the present report is very much in line with earlier findings on state-subsidized work-sharing schemes, in so far as the relevance of working time based crisis-response measures differed dramatically across countries. When looking beyond work-sharing schemes, which have been the subject of the present report, the picture is similar. This leads us to the following three conclusions:

1. The basic story is that firms tend to respond to a crisis along predominant patterns of flexibility already established in previous years. In consequence, when hit by the crisis in 2008/2009, most companies followed the more traditional ways of response. Thus, redundancies and pay cuts were at the top of their list.

2. Equally, once working time measures were part of the agenda, it was again the more traditional reactions which dominated the scene. For obvious reasons cutting overtime was at the top of the list, but working time measures were extended to various forms of obligatory, mostly collective, forms of time off such as (temporary) lay-offs, temporary company closures, forced and/or prolonged holidays and non- or only partly compensated working time reductions. In most cases, these more traditional approaches entailed substantial wage reductions for workers. This is where the public work-sharing schemes came in, and where the latter were not offered, private solutions had to be found. Some of them were based on collective bargaining, while many of them were based on the de facto unilateral decisions of employers.

3. Given a widespread lack of experience in collective bargaining on working time issues, more advanced alternative approaches were hard to imagine. In this respect, companies with greater experience and practice in flexible working time organization were in a better starting position. *When hit by the crisis they had a bigger 'tool kit' of crisis-response instruments consisting in various working time adaptations*. Wherever available these companies took advantage of

[13] Utah expected to save around $3 million on energy costs due to rescheduling the working week. As energy prices dropped during the first year of the introduction, saving was reduced (Facer and Wadsworth 2010, p. 1043).

[14] In fact, some establishments did introduce measures such as a compressed working week (among others Solarworld in 2009) and there is also evidence that on country-level efforts were made to further promote working time related flexibility instruments. For instance the Republic of South Korea announced in 2010 that it would introduce tele-work, flextime, compressed working weeks and part-time work (Labor Today 2010) – however the objective of these measures was first and foremost not to counteract against the crisis but rather to support work-life balance issues.

public work-sharing schemes, too, as much as they may have used the full range of other, more traditional working time measures.

It should be mentioned that the evidence available also points at the problem that even the more advanced internal flexibility measures geared to safeguard employment were focussed on the core employees, while in most cases temporary and agency workers were made redundant. Thus, during the crisis the gap between both categories of employees was likely to be deepened. Nevertheless, the little evidence we have points at the importance of collective bargaining expertise on working time issues at firm level.

Thus, bottom-line of the present report is the lesson to be learnt for working time policies geared to prepare the ground for potential crises in the future. Experience in collective bargaining on working time organization as well as expertise in organizing flexible working hours at firm level have to be gathered *before* a crisis. *The more developed this expertise and the more established the experience in bargaining on compromises over flexible working hours, the greater the potentials for negotiating deals on working time organization in a crisis. The 'tool kit' of these firms includes short-term emergency measures as well as working time models within a mid-term perspective which facilitate to balance conflicts over time and money*. Thus, as indicated at the beginning of the present report, the scarcity of evidence should not be taken primarily as a weakness of public awareness. It should be taken as a signal of drawbacks in working time *practice*. Periods of economic growth should be used to overcome this shortcoming. Once "the house is burning", it may be too late for the "firemen" to save it.

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