

Germany: Short-time working allowance

Background and objectives of the report

General information about the scheme

Characteristics of the scheme

Assessment and lessons learnt

Bibliography

Background and objectives of the report

The global economic crisis hit Europe in mid 2008 and also had a considerable impact on the region's labour markets. Although almost all Member States have seen a decrease in gross domestic product (GDP) in the wake of the crisis, measures to protect labour markets from the effects of this have had varying success.

The reduction of working time has played a major role in lessening the impact of lowered production output on employment levels, and this project aims to investigate short-time working and temporary layoff schemes which have been used as a means of avoiding redundancies by many Member States during the recession.

To do this, the European Foundation for the Improvement of Living and Working Conditions (Eurofound) conducted an in-depth analysis of public short-time working and temporary layoff support schemes available in nine Member States (Austria, Belgium, France, Germany, Italy, Luxembourg, the Netherlands, Poland and Slovenia) during the recent economic crisis, supplemented by an analysis of ProAct, a regional support scheme in Wales (Eurofound, 2010). An emphasis was placed on those Member States offering public income support instruments for two types of reduced working time: those linked to a social security element, such as publicly supported social security contributions or dismissal protection during or after a period of short-time working or a temporary layoff; and those linked to a training element, such as a requirement to undertake training during non-worked hours in order to receive income support, or to receive an enhanced level of public financial support. The analysis encompassed a wide geographical mix and covered both short-time working and temporary layoff schemes.

This is one of the individual country reports describing its national public support scheme. It is based on a literature and document review, as well as on qualitative semi-standardised interviews with national stakeholders conducted in the spring and summer of 2010. The main objective is to provide as detailed a description as possible of the characteristics and working methods of the scheme, and to assess its short-term effectiveness.

A comparative analysis of the individual schemes forms the thematic part of the ERM Annual 2010 – **Extending flexicurity** – **The potential of short-time working schemes**. This is supplemented by a secondary analysis of European data on short-time working and temporary layoff schemes, and an assessment of the relationship between short-time working and flexicurity.

General information about the scheme

The German public short-time working support scheme is one of the oldest in Europe and aims to help companies retain trained workers and jobs during times of economic recession, and to reimburse workers' loss of income during periods of temporarily reduced working time (BA, 2010a). The first version of the scheme was introduced with the so-called 'potash law' in 1910. Following the hyperinflation of 1923, a general short-time working scheme came into effect in 1924 providing wage compensation for affected workers. The system of short-time working allowances that is in place today has its roots in the 1927 Labour Exchange and Unemployment Insurance Act. In post-war Germany, new regulations were drawn up for short-time working at the end of the 1960s and widely applied during the economic downturn of the mid 1970s. More recently, short-time working played an important role in the early 1990s when the former East Germany's planned economy became a capitalist economy (BMASa). The main objective at that time was not the preservation of jobs but the cushioning of the workforce and employers while they adjusted to the new production culture and retrained to meet new employment opportunities (Deeke, 2009a). In Western Germany, short-time working had an important bridging function during the economic downturn in 1992/93. Throughout the 1990s, short-time working regulation was amended, mainly by obliging employers to cover employees' social security contributions during short-time working, and to ensure that all possible internal measures had been exhausted, such as using holiday

entitlements or working time accounts, before they applied for short-time working support (Deeke, 2009a). As a consequence, short-time working is not a stand-alone solution anymore and has to be seen as one of a set of different instruments of a company's internal flexibility.

Currently, there are three types of public short-time working support available.

- Short-time working as a result of economic difficulties/temporary shortfall of orders. This allows employers to reduce the number of hours worked in times of temporary economic difficulties.
- The seasonal short-time working scheme which allows enterprises to adapt working hours to seasonal economic volatility in the construction sector or other sectors subject to seasonal variations, usually caused by poor weather conditions. Allowances are available from 1 December to 31 March when the weather prevents any work from being carried out or the volume of new orders is not sufficient to maintain a company's employment level.
- Finally, employers can use short-time working where there is a permanent loss of employment. Where employees should be made redundant because of a permanent and unavoidable loss of workload, and it is impossible for them to be redeployed within their company, they can be grouped into a separate unit (often a transfer agency) and offered retraining to help them find new employment. A service to match skills and vacant jobs at other companies is also offered, and workers can be offered up to six months temporary employment with another employer while their wages are subsidised by the scheme. This type of short-term working is mainly applicable for companies in restructuring processes.

The following pages refer to the first type of short-time working, triggered by economic difficulties, as this is the form most used during the recession of 2008/09.

Short-time working arrangements in Germany are generally regulated by law and under the responsibility of the federal government (Federal Ministry of Labour and Social Affairs, BMAS). Relevant regulations are laid down in the third book of the German Social Security Code (SGB III). If eligibility criteria are met, employees are legally entitled to receive the support. It is paid to the employers and passed on to the workers.

The government delegates the administration of short-time working schemes to the Federal Employment Agency (BA). Employers must apply to the local employment agency (AA) if they want to introduce short-time working. In order to standardise procedures, detailed guidelines are provided by the BA setting out the administrative process as well as clarifying the benefits available.

A second anti-crisis package was introduced in January 2009 and in the new framework, after consultation with employers' and employees' organisations and the BA in the form of a working group on employment security, the BMAS simplified the eligibility criteria and the administrative procedures for short-time working support (DGB, 2009a). All involved stakeholders considered the short-time working allowance to be a suitable instrument to cope with the anticipated effects of the crisis. This general consensus was mainly triggered by the joint objective of maintaining the unemployment rates at the relatively low level achieved after the last economic crisis in the mid 2000s. Repeated discussions took place among social partners and the government, and it was quickly agreed that some amendments were necessary, because otherwise the existing scheme would not be able to deal with the effects of such a deep recession. The result was a slight delay in the creation of an appropriately adapted short-time working scheme because of the need to draft and implement new legislation, but this was handled relatively quickly.

In addition to the legal regulations, there are in most sectors sectoral collective agreements on working time arrangements, including short-time working. These are not new or specific to the recession. They differ among sectors

and regions: for example, the required notice period for informing workers about the introduction of short-time working varies from between five days and one month; the number of reduced working hours permitted also varies, as does how far wages can be reduced or pay should be increased when the short working period ends. Nevertheless, in the main they all address the following issues (WSI, 2009a, 2009b and 2010; Herzog-Stein/Seifert, 2010):

- involvement of the works council;
- length and extent of short-time working and coverage of additional wage compensation;
- period of time between the announcement and the introduction of short-time working and requirement for reannouncement in case of interruption of short-time working;
- conditions, such as limitations on the net wage reduction for employees on short-time working, dismissal protection, wage claims in case of dismissal, and the exclusion of pay cuts in case of marginal short-time working usually less than 10% reduction of working time;
- effects on other elements of collective bargaining.

When short-time working is being arranged, employers and works councils cooperate closely with the BA: The regulations stipulate that once employers and employees/works councils have agreed on short-time working within the framework provided law and sectoral collective agreements, the local AA needs to be contacted to clarify the conditions for receiving the short-time working allowance.

In general, the works council has to agree to the introduction of short-time working as this temporarily changes one of the employer's major contractual obligations (DGB, 2009a). If there is no works council, the employer has to get agreement from each affected individual employee. Where there is a works council, it is able to influence whether or not short-time working will be introduced and will carefully check whether all preconditions for short-time working have been fulfilled and whether other solutions are available. A works council will also be involved in the design of the short-time working measures, clarifying to what extent short-time working will be implemented, or how the non-worked hours are to be distributed across the working week. The results of the discussion between employer and works council are summarised in a collective agreement at company level. A standard sample agreement is published by the German Trade Union Confederation (DGB).

Characteristics of the scheme

Application process and administration of short-time working support

The application for short-time working allowance has to be made in writing using the relevant forms available on the internet. These can be faxed or e-mailed with scanned signatures to the local employment agency (AA). The AA is obliged to check the eligibility of all applications and is authorised to audit all relevant company documents such as working time accounts and to conduct further investigations if necessary (BA, 2010a). If the application is approved by the AA, the employer pays workers the normal wage for hours worked, topped up with the allowance for the non-worked hours. This allowance is reimbursed and the BA provides a table showing how to calculate it on the basis of the worker's gross wage, payroll tax class and the percentage of allowance to be applied (BA, 2010a).

The company sends in a monthly statement of the number of reduced hours and the amount of compensation paid for them. In practice, therefore, the allowance may differ from month to month, but has to be within the parameters defined by law and the employment agency's approval.

In general, the aim is to reimburse paid allowances within 15 working days after the application (BMASc), and in practice it turned out that this was generally the case. The speed of reimbursement is one of the performance indicators regularly checked by the BA and as a result good statistical information is available for this aspect of the scheme. In spite of the high number of short-time working applications that had to be dealt with during the crisis, the employment services kept within the target times because additional staff members were devoted to the task through internal redeployment as well as recruitment.

Eligibility for income support

In general, in order to be eligible for short-time working support, the following conditions need to be fulfilled (169ff, SGB III; BMASb; Eichhorst/Marx, 2009; BA, 2010a; DGB, 2009a):

- The workers (including part-time workers and employees on fixed-term contracts) must have paid sufficient social security contributions. This means that workers not obliged to pay social security contributions, for example, because of their low number of working hours are not eligible for short-time working allowance, and nor are workers who have reached retirement age or receive sickness benefits.
- There must be a substantial reduction of working time (up to 100%) as a result of legally recognised causes such as the temporary shortage of orders or supplies, or internal restructuring caused by general economic developments which requires, for example, automation, extension or limitation of production facilities, or their adaptation for a new product, or unforeseeable weather conditions.
- The reduction of working time must be temporary and unavoidable. 'Temporary' means that there is a strong possibility that within a certain amount of time usually the maximum period for which short-time working allowance can be paid full-time work will be restored. The exact point of time when the company will be able to return to full-time work can of course not be predicted, but it is sufficient for the firm to offer plausible arguments showing that their hopes of recovery are realistic. 'Unavoidable' means that the company has to have tried all feasible alternatives to compensate for the lack of work. Industries and sectors where the ebb and flow of work is routinely seasonal or cyclical are not eligible for support.
- In the calendar month for which short-time working support is requested, the usual working hours of at least one third of all employees, excluding trainees, or one or more specific units must be affected, and the resulting wage cut has to amount to more than 10% of their monthly gross wage. When this is the case, all workers, including those whose income will drop by less than 10%, are eligible for the short-time working allowance.
- With few exemptions, the company has to have exhausted all other options, such as balancing working time accounts or granting leave days. However, only holiday entitlements for previous years must be used up before a company can resort to claiming the allowance; the current year's entitlements must be granted in accordance with workers' preferences. The company also has to actively pursue new orders and this means that employees specifically responsible for sourcing new work must not be subject to short-time working.
- The reduced working time has to be reported in writing to the regional employment agency. The report has to include an agreement between the employer and employee representatives or between the employer and the affected employees. The application must give credible proof of the lack of work and the eligibility of the company and its affected employees for short-time working allowances. A statement from the employer and the works council declares that all information given in the application form is correct. The employment agency regularly checks the documents with the companies.

While receiving public short-time working support, additional employees can only be recruited in parts of the company not subject to short-time working, and it has to be proven that the intended job cannot be filled by other employees among those on short-time work measures.

During the current economic crisis, some changes have been made to these provisions. The new regulations were enacted on 1 February 2009 and remain valid until 31 December 2010. The most important changes concerning income support are as follows (BMASb; Eichhorst/Marx, 2009; DGB, 2009a and 2009b; BA, 2010b).

- Working time accounts no longer have to be exhausted before a company applies for short-time working allowances.
 (Negative working time accounts did not have to be settled before the crisis).
- Temporary agency workers do not have to be released before short-time working can be introduced for the core staff, and it is possible to extend fixed-term contracts during short-time working. During the crisis, temporary work agencies are also eligible for short-time working support.
- An application for short-time working allowances can also be made if less than one third of the employees are affected, provided that the affected workers' gross pay is reduced by more than 10% by the proposed short-time working. Where this is the case, however, only those workers losing more than 10% of their gross wage are eligible for the short-time working allowance.
- Application procedures have been simplified. The application forms have been shortened from four to two pages in a cooperative process involving the BMAS, employers' and employees' organisations and BA.

Extent of income support

If all criteria are met, a company is eligible to receive short-time working allowances which are paid from the unemployment insurance fund at the same rate as unemployment benefits. The allowance, therefore, amounts to 60% of the loss of net income of the affected workers (67% if a child lives in the worker's household), up to a monthly maximum of $\[mathebox{\ensuremath{\e$

The BA has the right to temporarily place the recipients of short-time working allowance in an additional job. Short-time workers are obliged to talk to the BA if asked for interview, and to take up any feasible employment that is offered. In practice this hardly ever happens since the primary objective of the scheme is to preserve existing jobs. However, if a job is refused without good reason, BA will withdraw the short-time working allowance for three weeks. The income from any additional employment can obviously increase the income of a worker, while at the same time reducing the short-time working allowance (Eichhorst/Marx, 2009; BA, 2010a).

Some collective agreements provide for supplements to these state-funded short-time working allowances. Such supplements have to be covered by the employer and can result in the maintenance of net earnings at between 75% and 100% of workers' regular wage (EIRO, 2009b; WSI, 2009a and 2010).

- In the wood and plastics industry in Saxony, workers receive 75% of their net wage.
- In the metal industry in North Württemberg/North Baden, the guaranteed wage level for short-time working is 80% of the gross monthly wage.
- In the chemical industry, supplements raise the net earnings for non-worked hours to 90% of the regular net wage.
- In the wholesale trade in North Rhine-Westphalia workers receive an additional 16% of their average net earnings over the preceding three months, up to 100% of the workers' regular wage.

Within the general legal framework social partners have agreed upon sectoral and/or regional instruments. An example of this is the 'Future in Work' agreement in the metal and electronic industry (IG Metall, 2010a and 2010b).

In early 2010, the trade union and employers' representatives established a pilot measure in North Rhine-Westphalia that was later on also adopted in other regions (Baden-Württemberg, Bavaria, Lower Saxony). It guarantees that workers who have been on short working time for more than 12 months cannot be dismissed for a further 12 months. To supplement the state allowance during the first six months of short-time working, holiday and Christmas pay is divided by 12 and paid out on a monthly basis instead of once a year.

During a further six months of short-time working, working time can be reduced (for example, from 35 to 28 hours in North Rhine-Westphalia or to 27 hours in Lower Saxony) but the workers are paid as if they had worked a higher number of hours.

Workers also received a one-off payment instead of a wage increase in 2010. It was agreed that a general wage increase of 2.7% for North Rhine-Westphalia and Lower Saxony could be brought forward or delayed for two months as of 1 April 2011.

The agreement also covers job security for trainees and an arrangement to give workers in training a consistent income by spreading wages for hours worked across working and training periods.

Duration of income support

The individual length and organisation of short-time working must be agreed between employers and employees or employees' representatives. The reduction in working hours does not have to be the same for all employees and can be based on collective, company or individual agreements.

The maximum duration of state-funded short-time working allowances is six months (section 177, SGB III), starting with the month in which the application was received by the BA or in the month when all eligibility criteria were fulfilled, whichever is the later. If an authorised short-time working period is interrupted within three months of commencement, it can be resumed without a new application. This provides the employer with a high level of flexibility to spread the permitted maximum six months of allowance over a longer period. If it is necessary to apply for a further six months' support, however, there must be a gap of at least three months between the new application and the end of the previous six months' support.

The law allows for the maximum duration to be extended by ministerial decree to up to 12 months when exceptional circumstances in the labour market in specific industries or regions make it necessary, and up to 24 months in case of exceptional circumstances on the overall labour market (section 182, SGB III). These provisions have been widely used in the past. In the context of the current economic downturn, short-time working arrangements that have been in place in 2009 may be extended to up to 24 months. For measures that commenced in 2010, the maximum duration is 18 months (Bundesgesetzblatt, 2009; BA, 2010a).

Security aspects of the scheme

In general, social security contributions in Germany are shared between employers and employees. For the non-worked hours during short-time working, however, the company has to pay both employers' and employees' contributions. Contributions for non-worked hours are based on 80% of the gross wage that would normally have been paid to the worker for those hours. The usual percentage for contributions is applied to this figure (Bach and Spitznagel, 2009; BA, 2010a).

During the recent crisis, these provisions have been modified until the end of 2010 for all short-time working that began in 2009. At the moment the BA reimburses 50% of the social security expenses paid by the employer for non-worked

hours for the first six months of short-time working. From the seventh month onwards, the BA covers 100% of these costs.

Until the end of 2010, if an employee on short-time working is enrolled in a training programme for at least 50% of the non-worked hours, the BA reimburses 100% of the employer's social security contributions from the first month onwards and covers training costs under certain circumstances (BA, 2010a; see below for more details).

The reimbursement is calculated as a lump sum for all workers receiving short-time working allowance (for a 50% refund the calculation is total normal wage – total actual wage = balance x 80% x 19.6% or, for a full refund, 39.2%) (BA, 2010a).

In July 2010, this support was extended until March 2012 because it was feared many companies would not use the short-time working scheme, despite its extended duration to 18 months, if they had to bear the higher social security contribution costs.

The design of this programme helps to reduce the employee's loss of pension entitlements and to maintain their health insurance while on short-time working (BMASb). For the employer, however, this means that a cut in working hours does not cut labour costs by the same proportion. By bearing the cost of the additional insurance contributions, they therefore contribute indirectly to the funding of the short-time working scheme (Bach and Spitznagel, 2009).

However, neither employers nor employees have to pay unemployment insurance for hours not worked (Bach and Spitznagel, 2009). Although employees on short-time pay contributions only on the hours worked, they remain entitled to the same level of unemployment benefit as if they were working full time. Any unemployment benefit will be calculated on the full-time wage they were earning before short-time working was introduced.

The state parental allowance is calculated as 67% of a worker's average net wage during the previous 12 months, regardless of whether or not they were on short-time working. This means that parental entitlements are cut when hours are reduced (DGB, 2009a).

Dismissals are possible during authorised short-time working periods. However, the worker concerned has to be returned to their usual full-time employment during the notice period and the employer loses entitlement to the short-time working allowance.

Training element of the scheme

Short-time working in Germany can be used for training subsidised by the Federal Employment Office (BA). The BA covers social security contributions for reduced working hours, as described earlier, as an incentive to encourage employers and employees to take advantage of training opportunities during periods of short-time working.

In the past training had been mainly offered to employees on short-time working where the outcome was likely to be permanent loss of their job. During this crisis, the government has extended the existing training measures to all employees on short-time working (BMAS, 2008; DGB, 2009b). This was one of several anti-crisis measures to support employees' qualification enhancement, partly to counteract an anticipated lack of skilled labour and partly to foster firms' competitiveness (DGB, 2009a).

There are two types of support. Which one is offered depends on the existing qualifications of an employee:

- If the employee has no formal qualifications, or has been working for at least four years in a field not related to his/her formal qualifications, they can be supported through training programmes that result in the award of a recognised qualification or the acquisition of certified qualification modules. In these cases, the BA covers all training costs and subsidises for childcare and travel expenses (BMAS, 2010). Training has to be provided by an officially recognised training provider, and the company has to approach the local employment agency (AA) for consultation before enrolling employees in training (DGB, 2009a). If an application is successful, the AA issues a training voucher to the employee that can be used at any officially recognised training centre. The BA publishes a flyer entitled 'Support for occupational training', providing information about how to find a suitable training provider and appropriate courses. This training cost support is not confined to workers on short-time hours and was generally available before the crisis to poorly-qualified workers.
- Employees who have a recognised qualification and work in a field related to it are also eligible for training support during short-time working. They may either enrol in training programmes that provide them with workplace-related knowledge, or take training courses that are useful to the labour market to increase their employability. Examples include language courses or the acquisition of technical skills useful in a range of occupations, such as a forklift truck licence). For these employees, the BA covers 25% to 80% of the training costs, depending on the type of training, the size of the enterprise and the individual circumstances of the employee (BA, 2010a). The BA covers up to 60% of costs for general training relevant to other companies or occupational fields, while for specific training relevant to the trainee's current or future job with their current employer, up to 25% of the training costs will be covered. For SMEs, these support rates are raised by 20% for small enterprises with fewer than 50 employees, and by 10% for medium-sized enterprises with fewer than 250 employees (DGB, 2009b). Training support for disadvantaged employees is increased by 10%. Training is co-funded by the European Social Fund (ESF). There is no legal entitlement to funding and support is discretionary and granted on the basis of available ESF funds. The preconditions are that the beneficiary is a recipient of cyclical short-time working allowance and can demonstrate a need for training, and that participation does not prevent him or her from returning to full-time work. ESF-funded training can either be received from an officially recognised training institution or it can be conducted in-house (BMASb). ESF-funded support is only accessible to short-time workers and was introduced during the crisis to improve the adaptability of workers to the requirements on the labour market through tailor-made qualifications.

It is up to the employer to decide which type of funding to approach. This, however, will be based on the target group of workers participating in the training and the type of training that it is proposed to provide.

Training which the employer is legally obliged to give, such as accident prevention, or which largely benefits the interests of the employer by providing knowledge or skills specifically tailored to their business is not eligible (BA, 2010a).

Both employers and employees may apply for training support during short-time working. Applications are made to the local AA. In the application the employer has to provide a qualification plan and confirm that the training is in line with the eligibility criteria.

It is assumed that as soon as new orders are realised and the company can return to full-time working, employees should return to their regular job. Training measures already begun should be adapted and continued under the changed framework conditions (DGB, 2009a).

Budget devoted to the scheme

The budget available to the BA to cover short-time working allowances stems from unemployment insurance funds and is therefore financed by employers' and employees' contributions.

Table 1 shows the planned and actual annual budget for the three most recent short-time working schemes.

Table 1: Planned and actual annual budget for short-time working allowances (without reimbursement of social security contributions) in Germany in € thousand, 2005-2009

Short-time working due to economic reasons and seasonal short-time working						
	Planned	Actual	Difference			
2005	550,000	416,079	-133,921			
2006	410,000	150,309	-259,691			
2007	490,000	238,566	-25,143			
2008	335,000	287,276	-47,724			
2009	3,744,000 (of which, estimated for economic reasons, 3,444,000)	3,267,029 (of which, granted for economic reasons, 2,975,431)	-476,971 (of which, earmarked for economic reasons, -468,569)			
	Short-time working in pro	eparation for permanent loss of curren	nt employment			
	Planned	Actual	Difference			
2005	85,000	219,087	134,087			
2006	240,000	199,267	-40,733			
2007	217,000	183,705	-33,295			
2008	200,000	131,232	-68,768			
2009	297,300	292,262	-5,038			

Source: Bundesagentur für Arbeit – Geschäftsberichte 2005 – 2009. Figures rounded up to the nearest € thousand.

In 2009, the government had earmarked a total of $\[\in \]$ 3.44 billion for short-time working allowances due to economic reasons, $\[\in \]$ 300 million for seasonal short-time working allowances and about $\[\in \]$ 297 million for transfer short-time working allowances. This is roughly 7.5 times the amount allocated to the budget for 2008. The total expenditure for short-time working allowances and social security contributions was $\[\in \]$ 4.57 billion for short-time work due to economic reasons (BA, 2009a), about $\[\in \]$ 640 million below the planned budget, about 1.51% of the national budget, compared to 0.03% and 0.04% in 2007 and 2008 respectively.

The federal government has also set up a fund of €2 billion for continuous and other training measures for 2009/2010. This fund supports companies that train their staff during short-time working as well as young people who do not have a vocational training degree or who have so far failed to secure an apprenticeship or training position (EIRO, 2009c). For 2009, €150 million was devoted to training during short-time working, of which about €32 million has been used.

For 2009 and 2010, the funds from the European Social Funds (ESF) have been increased by €200 million. This money is to be used to support training measures during short-time working as described below, and for counselling services to help enterprises maintain employment (BA, 2009b).

There are also costs to employers and employees for short-time working since they have to bear the residual income loss not covered by the short-time working allowance. Estimates by the Institute for Employment Research (Institut für Arbeitsmarkt- und Berufsforschung, IAB) show that employers still have to pay 24–37% of the regular labour cost of the non-worked time even where 100% of social security contributions for those hours are reimbursed from public funds.

This percentage increases to 35–48% when 50% of social security contributions are reimbursed, and may be as high as 59% where a collective agreement provides for a supplement to the allowance. These residual costs arise because some non-wage labour costs, such as holiday pay, bonuses or other additional payments, have to be paid regardless of how many hours are worked (EIRO, 2009b).

Monitoring of the scheme

The BA is obliged to check whether short-time working support has been lawfully introduced (BA, 2010c). In addition to the monthly statements that companies have to provide to be reimbursed, at the end of each quarter the local employment agency (AA) sends out a form on which employers must summarise the short-time working measures they have used during the previous three months. AA checks the forms and enters the information into a database where they can be analysed. The main indicators regularly monitored from this information are the stock of short-time workers, the number of employers using short-time working schemes, the number of authorised and declined applications, the share of non-worked hours and the duration of short-time working. In contrast to other labour market instruments, however, only aggregated data rather than individual data are available for monitoring short-time working support.

If a company fails to provide the required information, or provides incorrect information, any allowance received has to be repaid and a fine can be levied. If criminal offence is suspected, the matter will be forwarded to the Attorney General (BA, 2010c).

Throughout the crisis, the heads of the regional AAs and the BA have conducted monthly telephone conferences to discuss the situation and jointly decide how to deal with difficult applications. This has contributed to the coherent approach of all local AAs which have been well prepared for a wide range of issues by this regular exchange of information and experience.

Transparency of the scheme

There are numerous sources of information available in Germany on short-time working, short-time working allowances and training. The BMAS and the BA have a joint website (http://www.einsatz-fuer-arbeit.de/) with very detailed information on short-time working and training, and support for the application process. The website offers dedicated sections for employers and employees, including checklists to assess one's own eligibility for short-time working allowance and frequently asked questions. In addition the BA's own website also offers a broad spectrum of information on short-time working and the support it can offer (http://www.arbeitsagentur.de).

An information leaflet is available in English and Turkish. A telephone hotline has been established to answer questions regarding short-time working and eligibility for the scheme which is open from Monday to Thursday, 8am to 8pm, although calls are not free.

The BMAS has also integrated regional governments in the dissemination of information about the amended short-time working support at regional level. Works councils have been actively approached to inform them about the new regulations and to encourage them to use short-time working at their establishments. In a similar way, local AAs contacted the companies in their regions and provided them with information.

The social partners provide information on short-time working schemes and support applications. The German Trade Union Confederation (DGB, http://www.dgb.de) as well as the Confederation of German Employers (BDA, http://www.arbeitgeber.de) offer topical information on their websites and have actively contacted their members to disseminate information (such as leaflets/brochures) about the changes.

Finally, the short-time working scheme has been extensively covered in the media during the recent recession, partly based on press releases published by the BMAS to inform the general public about political decisions. Some papers have even established special sections where all articles about short-time working are listed.

Impact of the scheme

While short-time work had not been very extensively used in previous years, it has been an important measure to mitigate the effects of the recent financial and economic crisis on the German labour market. The huge increase in the number of applications for short-time working started in November 2008, when more than 7,000 applications were registered with the BA, affecting more than 164,000 employees (out of a total German labour force covered by social security provisions of about 27.5 million workers, as estimated in June 2008).

This compares with about 2,600 applications made in October 2008, affecting around 57,000 workers. In December 2008, the number of applications reached about 17,800 (about 404,000 affected workers), rising to almost 25,000 in March 2009. The number of affected workers reached its highest level in February 2009 – more than 700,000. From April to October the numbers began to decrease. About 6,900 applications were made affecting 103,000 employees in October 2009. The number of applications then rose again sharply, peaking in December (about 16,000 firms registering more than 226,000 workers).

Throughout 2009, the number of registered applications was roughly three times higher than in the previous year and affected almost four times as many employees (see Table). Since the beginning of 2010, applications have been steadily decreasing again; 6,100 applications affecting 67,300 workers in March 2010, and 2,300 applications registering 30,000 workers on short working time in July 2010. Since, at the same time, unemployment figures remain more or less stable it is assumed that short-time workers are returning to full-time employment rather than moving into unemployment.

In 2007 about one third of the applications for short-time working were made for economic reasons; in 2008 this rose to 50% of applications and to 80% in 2009. In the 'peak' month of March 2009, 94% of all applications cited economic reasons as the basis of their request for support. Broken down by the number of workers registered in each application, this shift in why support was needed was even more dramatic. In 2007, about 35% of the affected persons were registered for economic reasons. This rose to 70% in 2008 and to 92% in 2009. In March 2009, almost 98% were registered in short-time working applications that had been made for economic reasons.

Table 2: Applications for short-time working, 2007-2010

Year	Applications	Employees concerned	
2007	41,753	411,919	
2008	53,201	898,434	
2009	162,435	3,626,711	
Jan-June 2009	106,681	2,749,119	
Jul-Dec 2009	55,754	877,592	
Jan–June 2010	39,224	418,159	

Source: Bundesagentur für Arbeit (http://www.pub.arbeitsamt.de/hst/services/statistik/detail/s.html; June 2010)

Analysed by region, in 2008 about 78% of the applications for short-time working allowance for economic reasons, accounting for 84% of the workers receiving the allowance, came from western Germany. These shares increased slightly in 2009 and dropped to 71% (applications) and 76% (workers) in the first half of 2010.

In 2008, 41% of all applications for short-time working allowance for economic reasons, accounting for 76% of the registered workers, came from manufacturing firms, followed by the construction sector (30% of applications and 10% of affected employees) and the trade sector (10% of applications and 4% of workers). In 2009 the manufacturing sector's share of affected workers receiving the allowance decreased slightly to 71%, while the trade sector's share rose to 15% of applications and 7% of affected employees. During the first six months of 2010 this trend continued, at least as far as numbers of affected workers are concerned.

As the number of applications rose, the number of workers on subsidised short-time working also increased dramatically because of the extension of state provisions for short-time working allowances in response to the financial crisis. As Table 3 shows, the use of short-time working support had been comparatively low in the years of economic growth before the crisis. The rise in short-time working began in the third quarter of 2008. The monthly average data show an increase from about 4,000 enterprises with less than 40,000 short-time workers in August 2008 to more than 17,000 firms with about 270,000 on short-time work in December 2008. This increase is far above the usual cyclical volatilities and the figures continued to rise. On average, in 2008 about 57,700 short-time workers were active in 4,360 firms (Deeke, 2009a).

The peak was reached in May 2009 when more than 1.4 million short-time workers were registered, and in July 2009 when more than 61,000 companies made applications. The number of affected workers then steadily decreased to about 809,000 in December 2009. While the first drop in short-time working during the summer of 2009 is attributed to the holiday season, the further decrease at the end of 2009 implies an increase of working time due to improved order levels stimulated by global recovery (Schneider/Gräf, 2010). For May 2010, the estimated number of short-time workers amounts to about 481,000, being about one third of the level of May 2009 (Source: Bundesagentur für Arbeit http://www.pub.arbeitsamt.de/hst/services/statistik/detail/s.html; data extraction July 2010).

In 2009, the yearly average total of short-time workers was more than 11 times higher than in 2008 and almost 17 times higher than in 2007. While in 2007, 43% of companies and 39% of short-time workers received the allowance for economic reasons, these figures were as high as 89% (firms) and 95% (employees) in 2009.

Table 3: Number of workers and enterprises benefiting from public short-time working support, yearly averages, 1998–2009

	Total		For economic reasons	
	Workers	Enterprises	Workers	Enterprises
1998	115,205	7,812	100,326	7,586
1999	118,647	6,528	103,138	6,248
2000	86,052	5,516	63,833	5,124
2001	122,942	7,049	98,471	6,583
2002	206,767	12,395	179,636	11,830
2003	195,371	13,404	162,056	12,690
2004	150,593	11,726	116,456	10,833
2005	125,505	10,998	95,158	9,977
2006	66,981	6,577	47,209	5,568
2007	68,317	8,334	26,405	3,597
2008	101,540	10,052	57,692	4,360
2009	1,142,674	56,244	1,088,815	49,943

Source: Bundesagentur für Arbeit (http://www.pub.arbeitsamt.de/hst/services/statistik/detail/s.html)

As women generally work in occupations that are less subject to economic volatility and characterised by a higher continuous demand for skilled labour (such as the services sector), female workers were less affected by unemployment and short-time working than male workers (BA, 2010b). The available data show that between 2001 and 2009 on average between 74% and 85% of short-time workers (both for general and for economic reasons) were male, with the higher proportion being reached in 2007 and 2008.

In 2008, on average, 62% of the companies receiving short-time working allowance (and 38% of those receiving it for economic reasons) belonged to the construction sector, followed by the strongly export-oriented manufacturing sector (16% overall, 31% of this number registered for economic reasons). In contrast, 43% of employees receiving the allowance (68% of this number registered for economic reasons) worked in manufacturing and 39% in construction (16% for economic reasons). It is estimated that in 2009 and the first four months of 2010, the manufacturing sector was the major recipient of short-time working allowances. About two fifths of companies and three quarters of workers registered belonged to this sector. While short-time working support was still important for the construction sector (20% of the companies and 6% of registered workers overall, and 13% of firms and 3% of employees registered for economic reasons in 2009), it also gained importance in trade (13% of firms and 6% of employees overall, and 15% of companies and 6% of employees registered for economic reasons in 2009).

It is estimated that in May 2010, about 13% of short-time workers were employed in micro companies of less than 10 employees, 21% worked in firms of 10–49 employees and 12% in firms with 50–99 workers. This means that in spite of the high percentage of smaller enterprises among the beneficiaries they are still underrepresented compared to their share of the total workforce. 41% of the total workforce is employed by companies with fewer than 50 employees, but only 34% of registered short-time workers are employed by such companies. It is also true, however, that as the number of large companies on short-time working decreases, the number of smaller firms making applications for support increases. It is also noticeable that, compared to previous crises, the average number of affected workers per company is lower (Brenke et al, 2010).

Workers in the west and in the south were more likely to work short time than those in the east and the north. This not only holds true in absolute terms, but also in relative terms when assessing the number of short-time workers as a share of all workers in the region. In general, it can be seen that those regions that had the most advantageous economic development, the most favourable employment situation and lowest unemployment before the peak of the crisis in June 2008, or which were strongly export-oriented, had the highest usage of short-time working during the crisis (Schwengler/Loibl, 2010; Schneider/Gräf, 2010).

While in 2007 about 53 million working hours have been subsidised by short-time working allowances of all types, this reached 66 million hours in 2008 and more than 550 million hours in 2009. In December 2009, the average reduction of working time amounted to 31.8% overall and 29.4% for short-time working as a result of economic difficulties.

Where short-working time is interrupted and then resumed, the available statistics count this as two different periods of short-time working. About 43% of the workers receiving short-time working support for economic reasons fell into this category. 34% of the employees received the short-time working allowance for economic reasons for six to 12 months, 11% for three to six months and 12% for up to three months. The available data show that the number of workers on longer periods of short-time working is increasing, suggesting the formation of a base of short-time workers (Brenke et al, 2010). This is particularly prevalent in the metal and machinery and car manufacturing sectors.

Assessment and lessons learnt

In general, flexible working times offer companies cost and productivity advantages by adjusting working time to market conditions and fluctuating demand. Working time accounts, short-time working and similar measures help employers avoid dismissals (and the associated costs of firing and rehiring), maintaining skill levels and team productivity created by established working teams (DGB, 2010; Herzog-Stein/Seifert, 2010). This might also increase workers' commitment to the company and, as a result, their motivation and engagement. Short-time working provides the capacity to react flexibly and quickly to volatile production levels, including the ability to return immediately to full-time work if order levels improve. The system also avoids potential labour law-related conflicts and the costs of re-hiring workers after paying for costly redundancy packages.

Workers, at the same time, benefit from job security which is particularly important in times of high unemployment. State support also compensates the workers partially for their loss of income and maintains a certain level of social security (DGB, 2010) which, in turn, contributes to the stabilisation of purchasing power.

From a macroeconomic perspective, these benefits result in a working population willing to spend their income which is, in turn, beneficial for the whole economy. Against this background, the public expenditure on short-time working seems to be justified, particularly as its share of the overall anti-crisis package was comparatively low and it was carefully targeted. Furthermore, it seems fair to assume that the cost of the short-time working allowances is no higher than unemployment benefits would have been had workers been dismissed instead, and that the scheme has had a more favourable effect on workers' employability. This is particularly likely to be the case if non-worked hours are used for training, giving the worker a better position on the labour market (DGB, 2010).

Impact of the crisis

The recent economic crisis was marked by a dominance of internal numerical flexibility that was stronger than in previous crises in Germany (Herzog-Stein/Seifert, 2010). More companies applied for short-time working support, but the average number of affected workers per company was comparatively low (Brenke et al, 2010).

The German labour market did comparatively well throughout the recent recession. Although Germany experienced one of the highest drops in GDP in 2009 compared to other EU Member States, its employment figures remained quite stable (Schneider/Gräf, 2010). This is widely attributed to its working time flexibility measures including short-time working and the public support for it (BA, 2010b), as well as the use of working time accounts and overtime (Schneider/Gräf, 2010). Companies affected by lower demand adjusted the number of working hours rather than dismissing workers, and investigated all possible alternatives before public short-time working support was applied for.

The scheme was adjusted in the early days of the financial crisis to make more companies eligible and as a result was widely taken up by employers. Among the changes, the dropping of the requirement that one third of the firm's staff must be affected to qualify made the system more workable particularly for SMEs. The reimbursement of between 50% and 100% of the social security contributions led to lower costs for the enterprises and made it more attractive. As a result it was used by firms that had not used it before.

The expansion of the scheme to cover temporary agency workers helped avoid conflicts between permanent and temporary staff. It has to be noted, however, that a significant number of temporary agency workers had already been made redundant at the beginning of the crisis and therefore did not benefit from short-time working.

It seems this successful extension of the public support scheme depended on a strong and constructive partnership between employers' and employees' representatives as well as the government. This was possible because of the long-

standing tradition of tripartite dialogue in Germany, facilitating the decision-making process since it was an established 'common procedure' the various parties were familiar with.

A further factor in the success of the scheme was the close link of the short-time working allowance to the existing labour market and social security policy frameworks (European Commission, 2009). During the current crisis it was also beneficial that companies, workers, their representatives, the government and the Public Employment Service were already familiar with short-time working due to its long history and use in Germany. Consequently, it was not very difficult for all involved stakeholders to understand it, especially when it was even made easier to handle during the crisis. An indicator of this is that not all of the workers registered under the scheme actually had their hours reduced demonstrating that companies were well aware that it was possible to apply for the support and use it as a kind of safety net, only to be employed if really needed. During recent years the trend has been for employers and employees to prefer consensus and the positive acceptance of short-time working.

The sharp rise in short-time working during the recent recession was expected and the use of the scheme was actively promoted and funded by the government with the aim to avoid (mass) dismissals.

Measuring results

The effectiveness of the measure, in terms of the number of jobs and possibly companies that have been saved due to short-time working arrangements, is difficult to assess. Research suggests that the use of working time accounts, short-time working and similar instruments to reduce working time has saved some 1.2–1.5 million jobs (IAB, 2010; Herzog-Stein/Seifert, 2010; Schneider/Gräf, 2010), and also the BA attributes the comparatively low rise in unemployment to the application of short-time working (BA, 2010b). It has to be considered that the comparatively good situation of the German labour market during and after the crisis is not only due to the publicly supported short-time working arrangements – which alone are thought to account for about 300,000 to 350,000 saved jobs – but also largely to the many initiatives taken by companies without public intervention, particularly through the use of working time accounts (Hans Böckler Stiftung, 2009; Herzog-Stein/Seifert, 2010). Enterprises combined public support with other internal measures, such as the reduction of overtime, the amortisation of credit time or build-up of debit time in working time accounts, the withdrawal from previously agreed longer working times. The BA has appraised companies' HR policies in this respect as 'perspicacious' (BA, 2010b).

Of course, it is uncertain at this point in time whether jobs have really been sustainably saved or whether the impact on the labour market has merely been delayed and at high cost. Currently (Summer 2010), the decreasing number of short-time workers in combination with relatively stable unemployment figures suggest that short-time workers return to full-time employment rather than becoming unemployed. Nevertheless, the final sustainability of jobs will depend on how long the economic and labour market downturn lasts.

Issues around short-time work

The use of short-time working can only be temporary, not least because of the residual costs that have to be borne by the employers (EIRO, 2009b). It is only feasible for financially strong firms (Schneider/Gräf, 2010). However, the waiving or reduction of income-loss compensation for the workers would constitute a considerable problem for low income earners. This makes this option unrealistic for sectors with low average wages or a high percentage of low earners. At the same time, the lowering of working time with proportional reduction of wages creates the danger for employers that highly skilled workers are poached by competitors offering full employment and higher income (Herzog-Stein/Seifert, 2010).

One of the preconditions for the success of short-time working in Germany during the recent crisis was the comparatively low number of fixed-term contracts on the labour market. While, for example, in Spain 30% of all

employees and 80% of new recruits have a fixed-term contract, this is true of only about 15% of the workforce in Germany. Consequently, for Spanish companies it is much cheaper to dismiss employees than to maintain employment levels while reducing the working hours of individuals (Schneider/Gräf, 2010). Among German employers, however, there is a further incentive in choosing not to make workers redundant based on their experience from other crises of recent years when it turned out to be difficult to rehire workers with appropriate skills once recovery was underway. Employers' perception of the workforce as a 'scarce and valuable commodity' had a considerable influence on the popularity of short-time working in Germany.

It is sometimes argued that granting short-time working allowances might subsidise non-sustainable jobs and delay necessary economic restructuring (Eichhorst/Marx, 2009). However, in times of crisis the more pressing issue is often to find a way to reduce companies' costs while maintaining employment. National stakeholders are convinced that short-time working is only applied by employers who think that a return to full capacity will be possible within a short period of time. If not, they will react in a more 'structural' way. An example of this can be seen in the manufacturing sector where employment levels have decreased during the current crisis as firms have begun to assume a more permanent drop in orders.

About 40% of the workers affected by short-time working during the crisis were employed by companies with fewer than 100 employees, and 8% in companies with fewer than 10 employees. This is in line with previous analyses of the application of short-time working in Germany, concluding that the typical firm using short-time working is a small enterprise (Deeke, 2005). This shows that short-time working also avoids dismissals in firms that are below the threshold for dismissal protection and which could, if they wished, set free workers more easily than larger companies (Handelsblatt, 2010). Furthermore, companies applying short-time working use a broader spectrum of flexible work arrangements in terms of numerical and functional adjustments (Deeke, 2005).

The role of training

Some authors (such as Eichhorst/Marx, 2009) argue that it is necessary to invest in training and to enhance the employability of workers, and therefore take a positive view of the most recent change in Germany's short-time working support to combine non-worked hours with training activities. State authorities have sought to give incentives to both employers and employees to participate in training, whether or not short-time working is being used. Although in absolute terms the response is limited (about 112,400 employees participated in ESF co-funded qualification measures during short-time working in 2009), this is seen as a success since in previous years training participation has been considerably lower. Consequently, it is assumed that without the additional incentive and support, the affected workers probably would not have received further education. Furthermore, there is anecdotal evidence that, perhaps to avoid bureaucracy, companies and workers used the non-worked hours for training but did not apply for public support.

One reason for the low interest in the training measures is that during the crisis, the priority of most companies lay in finding solutions to the urgent issues of work reorganisation, including the design and implementation of short-time working itself, rather than dealing with training questions (Deeke, 2009b). Qualifications require a longer lead time to plan and to see through to completion. This not only poses a problem for smaller enterprises not disposing of specialised HR units, but also for large enterprises if they have to come up with individual training plans swiftly for a large number of employees.

Companies and training providers need to develop flexible modular training concepts that can be combined with the sporadic occurrence of non-worked hours. The first step towards this is to identify training needs and this is difficult for some employers, particularly the smaller ones and the ones who do not have established structures for implementing employee qualification measures. Consequently, it would help to provide them with the type of networks or agencies already available in some industries and regions such as the 'Bildungsberatungsstellen' in North Rhine-Westphalia.

Due to the high level of flexibility inherent to the German short-time working model, in the way that the number and location of non-worked hours can be announced at short notice and may vary from week to week, it is also difficult to find a qualification programme that is not only suitable in terms of content, but also can be flexibly aligned to non-worked hours.

Another important barrier hampering training during short-time working is the administrative burden related to it. Eligibility for support (particularly for ESF funding) needs to be approved. This process is judged to be complicated and lengthy by many enterprises. It may also be that employers (particularly relevant for larger companies) cannot take advantage of training providers they have worked with previously, because they are not qualified under the regulations of the system, making it necessary for the companies to find other solutions. In contrast to that, the qualification voucher system is deemed to be user-friendly and particularly suitable for SMEs because it makes it possible to choose the training offer that is appropriate for the worker. However, to choose a training course, the employee needs to be well-informed about the available training offers. This is difficult bearing in mind the heterogeneity and lack of transparency on the training market. It is recommended that the administrative procedures for training, particularly for measures targeted at low qualified workers, are supplemented by a more intensive advice and consultation process and with the possibility of qualification networks (Deeke, 2009b).

ESF-funded training for higher qualified workers does not cover cost in full. The employer has to finance parts of the training while at the same time facing the risk that in the medium to long term, the employee will not stay with the company.

The German system is designed to minimise negative effects for short-time workers on their eligibility for social security benefits. Short-time workers' pension contributions are only slightly lower. Unemployment and health insurance benefits are not affected at all. Actually, short-time workers may be considered to be better off since they are exempt from paying contributions while their time on short-time working still counts as full-time work for the purpose of qualifying for benefits, and their normal full-time wage before starting short-time work is used to calculate the unemployment benefits.

From the viewpoint of the firm, however, the coverage of both employers' and employees' social security contributions during short-time working is a significant financial burden. Consequently, the state reimbursement of some parts of these contributions during the crisis is considered to have made the measure more attractive to companies (DGB, 2009a). At the same time, the reimbursement of 100% of social security contributions from the 7th month onwards is seen as a disincentive to employee training during the non-worked hours (Deeke, 2009a).

At the time of writing in June 2010, some cases of fraud in relation to short-time working support have been uncovered. 1,446 cases were regarded as suspicious. It is assumed that working times have been recorded in an improper way in 852 cases. In about 580 cases initial suspicions could not be confirmed and a further 305 cases were passed on to the Attorney General (Source: BA). This is a very low proportion of the total number of applications made for short-time working support during the last two years.

The general perception of short-time working by social partners is positive. Employee representatives appreciate it as a mechanism to limit redundancies and employers value their increased internal flexibility. Nevertheless, it is argued that labour market instruments such as short-time working allowances cannot alone counteract the negative effects of the crisis, and further initiatives by the government, such as support for R&D and innovation, are also needed (EIRO, 2009c).

During the recession, the German model of short-time working allowance was presented at several international forums and has been transferred to several other European countries, adapted to their respective framework conditions (BA, 2010b). This can be seen as an indicator of both European appreciation of the German approach and its transferability.

Irene Mandl with Sebastian Schulze-Marmeling

Bibliography

Bach, Hans-Uwe, Spitznagel, Eugen, Betriebe zahlen mit – und haben was davon, IAB-Kurzbericht, 2009.

Brenke, K., Rinne, U., Zimmermann, K.F., 'Kurzarbeit: Nützlich in der Krise, aber nun den Ausstieg einleiten', *DIW-Wochenbericht*, 16/2010, Berlin, 2010, also available online at

http://www.diw.de/documents/publikationen/73/diw_01.c.355423.de/10-16.pdf

Bundesagentur für Arbeit (BA), 'Quartalsbericht über das vierte Quartal und das Geschäftsjahr', 2009a, available online at http://www.arbeitsagentur.de/zentraler-Content/Veroeffentlichungen/Intern/Quartalsbericht-2009-4-Quartal.pdf

Bundesagentur für Arbeit (BA), 'Chancen des Marktes professionell nutzen; Geschäftsbericht 2008', 2009b, available online at http://www.arbeitsagentur.de/zentraler-Content/Veroeffentlichungen/Intern/Geschaeftsbericht-2008.pdf

Bundesagentur für Arbeit (BA), 'Kurzarbeitergeld; Informationen für Arbeitgeber und Betriebsvertretungen', 2010a, available online at

http://www.arbeitsagentur.de/zentraler-Content/Veroeffentlichungen/Merkblatt-Sammlung/MB-08a-Kurzarbeitergeld-AG.pdf

Bundesagentur für Arbeit (BA), 'Kurs halten in stürmischen Zeiten; Geschäftsbericht 2009', 2010b, available online at http://www.arbeitsagentur.de/zentraler-Content/Veroeffentlichungen/Intern/Geschaeftsbericht-2009.pdf

Bundesagentur für Arbeit (BA), 'Sonderbericht: Inanspruchnahme von Kurzarbeitergeld', *Bericht der Statistik der BA*, *Februar 2010*, Nürnberg, 2010c

Bundesgesetzblatt, 'Erste Verordnung zur Änderung der Verordnung über die Bezugsfrist für das Kurzarbeitergeld', Nr. 29, p. 1223, 2009

Bundesministerum der Justiz, Sozialgesetzbuch (SGB) Drittes Buch (III) Fünfter Unterabschnitt – Kurzarbeitergeld, March 1997, available online at

http://www.gesetze-im-internet.de/sgb 3/BJNR059500997.html#BJNR059500997BJNG005000000

Bundesministerium für Arbeit und Soziales (BMAS), 'Qualifizierung während der Kurzarbeit wird gefördert', 2008, available online at http://www.bmas.de/portal/29764/

Bundesministerium für Arbeit und Soziales (BMAS), 'Mit Kurzarbeit die Krise meistern', 2010, available online at http://www.bmas.de/portal/31218/property=pdf/a843_Flyer_kurzarbeit.pdf

Bundesministerium für Arbeit und Soziales (BMASa), 'Arbeitsmarktinstrument mit Tradition', available online at http://www.einsatz-fuer-arbeit.de/sites/generator/32240/property=pdf/kurzarbeit mit tradition.pdf

Bundesministerium für Arbeit und Soziales (BMASb), 'FAQs zu Kurzarbeit und Qualifizierung', available online at http://www.einsatz-fuer-arbeit.de/sites/generator/32232/property=pdf/faq kurzarbeit und qualifizierung.pdf

Bundesministerium für Arbeit und Soziales (BMASc), 'Infos für Arbeitgeber', available online at http://www.einsatz-fuer-arbeit.de/sites/generator/29824/seitengeruest_infos_arbeitgeber.html

Deeke, A., 'Kurzarbeit als Instrument betrieblicher Flexibilität, Ergebnisse aus dem IAB-Betriebspanel 2003', *IAB-Forschungsbericht* 12/2005, 2005

Deeke, A., 'Konjunkturelle Kurzarbeit – Was kann bei vorübergehendem Arbeitsausfall bewirkt werden?', WSI Mitteilungen 8/2009, p. 446-452, 2009a

Deeke, A., 'Kurzarbeit – ein bislang erfolgreiches Instrument zur Abfederung der Krisenfolgen', *IfO Schnelldienst* 17/2009, 62. Jahrgang, p. 9-12, 2009b

Deeke, A., Ohlert, C., 'Qualifizierungsmaßnahmen während Kurzarbeit nach endgültigem Arbeitsausfall', *IAB-Forschungsbericht*, 2009

Der Spiegel, '132 Unternehmen im Visier der Staatsanwälte', 04/01/2010, available online at http://www.spiegel.de/spiegel/print/d-68525261.html

DGB, 'Kurzarbeit und Weiterbildung', Tipps für die betriebliche Praxis, Berlin, 2009a

DGB, 'Neue Regelungen bei Kurzarbeit und Qualifizierung - Das Konjunkturpaket II', *Arbeitsmarkt aktuell 01/2009*, 2009b, available online at http://doku.iab.de/externe/2009/k090921j09.pdf

DGB, 'Stellungnahme des Deutschen Gewerkschaftsbundes (DGB) zum Antrag der Fraktion der SPD' Beschäftigte vor Arbeitslosigkeit schützen – Konditionen für Kurzarbeit verbessern, Berlin, 2010

Eichhorst, W., Marx, P., 'Kurzarbeit: Sinnvoller Konjunkturpuffer oder verlängertes Arbeitslosengeld?', *IZA Standpunkte Nr.* 5, 2009, available online at http://ftp.iza.org/sp5.pdf

Dribbusch, H., European Industrial Relations Observatory (EIRO), 'Working time accounts and short-time work used to maintain employment', Dublin, European Foundation for the Improvement of Living and Working Conditions (Eurofound), 2009a, available online at http://www.euforound.europa.eu/eiro/2009/12/articles/de0912059i.htm

Dribbusch, H., EIRO, 'High costs of short-time working for companies', Dublin, Eurofound, 2009b avaible online at http://www.eurofound.europa.eu/eiro/2009/09/articles/de0909019i.htm

Dribbusch, H., EIRO, 'New allowances for short-time work in bid to offset economic crisis', Dublin, Eurofound, 2009c, available online at http://www.eurofound.europa.eu/eiro/2009/04/articles/de0904019i.htm

European Commission, 'Recovering from the crisis; 27 ways of tackling the employment challenge', Luxembourg, 2009, available online at

http://www.aedh.eu/plugins/fckeditor/userfiles/file/DESC/2009 %20Recovering%20from%20the%20crisis.pdf

European Foundation for the Improvement of Living and Working Conditions (Eurofound), *EMCC case studies: Upskilling in the recession – the ProAct short-time working scheme in Wales (UK)*, Dublin, 2010, available at: http://www.eurofound.europa.eu/publications/htmlfiles/ef1056.htm.

Handelsblatt, 'Neue Milliardenspritze für die Kurzarbeit', 2010, available online at http://www.handelsblatt.com/politik/deutschland/sozialabgabenfreiheit-neue-milliardenspritze-fuer-die-kurzarbeit;2561190

Hans-Böckler-Stiftung, 'Repräsentative Umfrage: Betriebsräte erwarten keine Entlassungswellen in den nächsten Monaten', press release, 19.11.2009, available online at http://www.boeckler.de/320_100087.html

Herzog-Stein, A., Seifert, H., 'Deutsches "Beschäftigungswunder" und flexible Arbeitszeiten', WSI-Diskussionspapier 169, 2010, available online at http://www.boeckler.de/pdf/p wsi diskp 169.pdf

IG Metall, 'Arbeitsplätze und höhere Entgelte gesichert', 2010a,

IG Metall, 'Sichere Jobs und mehr Geld in Niedersachsen', 2010b,

Institut für Arbeitsmarkt- und Berufsforschung (IAB), 'Flexible Arbeitszeiten und Kurzarbeit sicherten im Jahr 2009 mehr als eine Million Jobs', Presseinformation vom 02.02.2010, available online at http://www.iab.de/de/informationsservice/presse/presseinformationen/az09.aspx

Schneider, S., Gräf, B., 'Deutschlands Beschäftigungswunder; Kurzarbeit, flexible Tarifverträge & gesunde Unternehmen, *Deutsche Bank Research*, April 2010, Frankfurt am Main, available online at http://www.dbresearch.de/PROD/DBR MOBILE DE-PROD/PROD00000000000256966.pdf

Schwengler, B., Loibl, V., 'Aufschwung und Krise wirken regional unterschiedlich', *IAB-Kurzbericht 1/2010*, 2010, available online at http://doku.iab.de/kurzber/2010/kb0110.pdf

Stettes, O., EIRO, 'Companies strive to maintain employment in economic crisis', Dublin, Eurofound, 2009d, available online at http://www.eurofound.europa.eu/eiro/2009/10/articles/de0910039i.htm

Hans-Böckler-Stiftung, 'Tarifliche Regelungen zur Kurzarbeit', Wirtschafts- und Sozialwissenschaftliches Institut in der HBSt (WSI) Pressemitteilung, 2009a, available online at http://www.boeckler.de/pdf/pm_ta_2009_02_20.pdf

Hans-Böckler-Stiftung, 'Tarifliche Regelungen zur befristeten Arbeitszeitverkürzung', *Elemente qualitativer Tarifpolitik Nr.* 67, Wirtschafts- und Sozialwissenschaftliches Institut in der HBSt (WSI), 2009b, available online at http://www.boeckler.de/pdf/p_ta_elemente_arbeitszeitverkuerzung_2009.pdf

Hans-Böckler-Stiftung, 'Tarifliche Regelungen zur Kurzarbeit; Aktualisierte Fassung', *Elemente qualitativer Tarifpolitik Nr.* 66, Wirtschafts- und Sozialwissenschaftliches Institut in der HBSt (WSI), 2010, available online at http://www.boeckler.de/pdf/p_ta_elemente_kurzarbeit.pdf