European Network of Public Employment Services

SHORT-TIME WORK SCHEMES IN THE EU

May 2020

Study report

Written by ICON INSTITUTE
Dr Hugh Mosley
May 2020

Social Europe

EUROPEAN COMMISSION

Directorate-General for Employment, Social Affairs and Inclusion
Directorate B — Employment
Unit B1 — Employment Strategy

Contact: Martina Winkler

E-mail: EMPL-PES-SECRETARIAT@ec.europa.eu

European Commission
B-1049 Brussels

2020

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Manuscript completed in March 2020

Luxembourg: Publications Office of the European Union, 2020

PDF ISBN: 978-92-76-18532-1 doi: 10.2767/253169 KE-02-20-316-EN-N

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1.1 Introduction

This report summarises the principal results of an ad hoc study on ‘Mapping short-time work schemes in the EU’. It is a desk study based on 17 national reports prepared by experts from the European Centre of Expertise (ECE), largely in the autumn of 2019, on EU and national sources and on the existing literature on short-time work (STW) schemes. Completed in March 2020, it is inevitably retrospective and does not address the impact of the current health crisis, namely Covid-19, on STW schemes and how PES are responding. Moreover, past experience with STW schemes, which is the focus of this report, may be of only limited applicability to the current exceptional situation in which STW schemes are being used as a massive transfer programme for affected workers. These topics will be the focus of follow-on research in the PES Network. Although this study´s focus is on short-time work in the last decade, it provides a baseline and informational input for subsequent research on short-time work in the Covid-19 crisis.

Therewith, this stocktaking survey provides an overview of: 1) STW schemes and their principal characteristics; 2) comparative data on national levels and trends in uptake and expenditure in EU countries; 3) experience of combining training with short-time work; and 4) the main findings of evaluation research on STW schemes.

Short-time work is a management strategy to adjust labour inputs and costs to a major decline or disruption in business conditions by reducing working time for the existing work force rather than resorting to layoffs. Firms often choose this labour force adjustment strategy even in the absence of public STW programmes, but such schemes provide a strong additional incentive for work-sharing in adjustment situations.

Short-time work can be advantageous for employees, firms and public policy.

- For employees and employee representatives, short-time work is primarily an instrument for protecting employment, maintaining employability (skills), and enhancing job security, albeit with some loss of income.
- For employers short-time work is primarily important as a form of labour force flexibility, especially in the face of temporary declines in labour demand. Short-time work enables the firm to reduce labour inputs faster in a downturn and to increase production more quickly during the following upswing in comparison with cumbersome and costly redundancy procedures and subsequent external recruitment. Also, with short-time work, employers can retain or even enhance skills of their employees during temporary declines.
- The overriding interest of public policy in subsidising short-time work is to substitute this form of burden sharing for open unemployment in adjustment situations and to support firms or industries in economic difficulty.

Most European countries have explicit regulations to promote temporary reductions in working time as an alternative to lay-offs, either through special labour market programmes or as a partial unemployment benefit in their unemployment insurance systems. STW schemes intervene in the personnel policies of firms by offering incentives for short-time working instead of layoffs in adjustment situations.

Short-time work is, however, only one possible alternative strategy to minimise dismissals in labour force adjustment. Especially flexibility in working time or reliance on a buffer of fixed-term and temporary workers are part of the mix, typically in combination short-time work.

1.2 Programme characteristics

There is considerable variety in programme characteristics, which has a significant impact on the performance of these schemes. There are major differences with regard to coverage, eligibility conditions for firms and workers and the generosity (level and duration) of benefits paid. Moreover, the institutional frameworks of the national schemes differ markedly with respect to their regulatory framework, financing, procedures and administrative responsibility. Based on the information available, these features are summarised in Annex 2.1 'Circumstances Covered, Eligibility and Generosity' and Annex 2.2, 'Institutional Features of EU Short-Time Work Schemes'.

It should be noted that coverage, eligibility and generosity are not static but adjusted flexibly in response to economic conditions, whereas the institutional features are relatively stable over time. This was the case in response to the 2008-2010 recession (Björn and Hertweck 2016) and is happening again in the current economic and health crisis[1]. The information in the following section and in the Annexes is based on the fiches provided by the national experts of the European Centre of Expertise (ECE), the EU LMP Database[2] and national sources.

The remainder of this section discusses patterns and differences in EU STW schemes based on the ECE fiches, the EU LMP Database, OECD and national sources as reported in Annexes 2.1 and 2.2. It should be noted that the Annexes and the discussion below represents only a schematic summary of very complex regulatory frameworks.

Circumstances covered, eligibility and generosity (see Annex 2.1)

- The **main circumstances** covered are temporary economic, especially cyclical difficulties, seasonal short-time work – especially in the construction industry, and structural short-time work in enterprises and sectors in decline. Short-time work in temporary difficult economic circumstances corresponds to the original rationale for short-time work whereas short-time work for structural reasons, where continued employment is unlikely, is problematical. Short-time work for temporary economic reasons is a common feature, whereas STW programmes for seasonal and structural reasons are not found in all countries.

  No evidence was found for the use of macro-level indicators such as GDP or unemployment rates to trigger schemes. In practice, however, this takes place: some countries (BG and SE) have standby schemes that are only activated in a crisis situation. During the last recession, most countries responded to the downturn by broadening the eligibility conditions, extending the maximum duration, increasing incentives for firms, or some combination of these measures. Other countries introduced STW schemes for the first time (BG, CZ, HU, LT, LV NL, PL and SI) (Arpaia et al. 2010:30-33; Björn and Hertweck 2016).

- The applicable **eligibility conditions** further restrict access to the schemes for both firms and employees. Conditions for firms relate most frequently to the minimum and maximum reduction in working time and the percentage of employees affected, and in some case economic sector and firm size. In most cases all employees

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[1] Currently in anticipation of the economic impact of the Corvid-19, Germany has relaxed eligibility conditions and increased the STW subsidy for employers. As of April 2020, firms are eligible if at least 10% of employees are affected (previously 1/3) and the employer no longer has to pay social security contributions on the benefit amount (previously partially paid by the employer).

[2] Labour Market Policy database: https://ec.europa.eu/social/main.jsp?catId=1143&intPageId=3227&langId=en.

covered by social security are covered, sometimes with exceptions for those on fixed-term contracts, temporary workers, or for employees recently hired.

- The **level of benefits** varies considerably for employees but is in most cases similar to or identical with the rate of reimbursement for unemployment benefit, sometimes with a maximum or a minimum related to the average or minimum hourly wage. The costs to employers for 'hours not worked' varies. Whereas in some countries all costs are borne by the STW scheme, in others the employer must bear part or all of the costs for the benefit and/or social insurance contributions (e.g. AT, DE and IT) for workers on short-time, as well as the wage costs for hours worked.
- The **duration** of the benefit likewise varies considerably. In most countries it depends on the economic situation of the firm, which after an initial application for a shorter period can apply for extensions for up to one or even two years in some cases (e.g. AT, DE and IT), although in other countries 6 to 12 months is the maximum period (e.g. DK, FR, LU and NL). In several others the benefit duration depends on the individual entitlement to unemployment insurance (IE, ES and FI).

Institutional features (see Annex 2.2)

- STW schemes can be distinguished by **organisational type**: stand-alone schemes, schemes integrated into the unemployment benefit system and schemes organised as ALMPs. In general, stand-alone schemes are permanent, they have their own specific regulatory framework regarding, eligibility, level and duration of benefits, they are firm rather than individual oriented, and they play an important role in national labour market policy (e.g. AT, DE, IT, LU and PT). Other schemes (BE, DK, ES, FI, HU, IE and NL) are largely integrated in the unemployment benefit system and play a minor role in LMP, with the exception of Belgium. Smaller schemes in BG, HR and SK that are managed by the PES and financed through general government revenues are more akin to ALMPs and are in part classified as such in the LMP database. Similarly, the stand-by schemes in BG and SE, which are only activated in a crisis, are more rightly classified as ALMPs, as is the (only intermittently active) scheme in SK. These categories are ideal types and serve here only to provide a general orientation.
- **Financing** of the short-time benefit is in most cases through the unemployment insurance system, in part supported by government subsidies (FR and IE). In countries with ALMP-like or ad hoc crisis schemes, financing is by the general government (BG, HR, SE and SK). In Luxembourg, the scheme is fully financed from the government budget. The Italian schemes are financed through separate funds financed by employer contributions and government subsidies.
- **Role of PES** in **activation** and **administration.** In most cases activation of the schemes entails prior notification and application to either the PES or to the responsible Ministry. Consultation with employee representatives is often mandatory. Either the PES or the responsible ministry is the responsible administration. The actual payment of the benefit is either by the employer, who is then reimbursed through the scheme, or paid directly to the worker through the unemployment benefit system.

  The PES is exclusively responsible for administration in three countries with active STW schemes (AT, DE and IE)[3]. It is also the responsible agency in three others with schemes that are activated only in crisis periods (BG, HR and SK). In others,

[3] In Luxembourg, the PES is only responsible for bad weather benefits in construction.

the primary responsibility lies with the Labour Ministry (FR) or social insurance institution (BE, HU, IT, LU, NL and PT), the regional government or other public authorities (DK, ES and FI) or the tax authorities (SE). In some of these cases the PES must be notified (BE and SK) or is responsible for paying benefits (ES central PES).

Although the formal role of the PES in administration is clear, there is a lack of evaluations that address implementation issues systematically. More information on PES experience in cooperation with employers and on lessons learned from implementation would require interviews with responsible PES officials in countries where the PES plays a central role, which was beyond the scope of this study[4].

1.3 Comparative uptake of short-time work schemes

In order to construct a data set with comparable participation statistics for as many countries as possible standardised data from the EU Labour Market Policy Database is used, specifically, the available data on 'partial unemployment benefits' (cat. 8.2) in the LMP database. This is defined as 'benefits compensating for the loss of wage or salary due to formal STW arrangements, and/or intermittent work schedules, irrespective of their cause (business recession or slow-down, breakdown of equipment, climatic conditions, accidents and so on), and where the employer/employee relationship continues.' Participation data for two countries with small or intermittent STW schemes (IE and SK), not available in the LMP database, were extracted from the ECE fiches. Although not strictly comparable, they are included for the sake of a more complete coverage[5].

The time series data for the average stock of participants for the entire 2008-2017 period in Table 4 shows the highly cyclical pattern of short-time work use given the predominance of short-time work for economic reasons. Participation peaks during the economic crisis at the beginning of the period for most countries in 2009 (for Italy in 2010) and for the EU as a whole, and it subsides thereafter during the course of the following recovery. Among the major users of short-time work, the cyclical pattern is strongest in Austria and Germany, where short-time work amounts to less than 10% of the peak value in 2009, whereas in Italy and Belgium use of short-time work remains persistently high even in the course of the strong recovery (47% and 40% of the 2009 level respectively). This suggests that in the latter countries short-time work is also frequently used not only in firms in temporary economic difficulties but also often used in situations of structural adjustment.

There is a great deal of cross-national variation in the level of utilisation of short-time work, even among countries having stand-alone programmes (see Table 1). In the 2008-2010 financial crisis the uptake of short-time work was highest in Belgium, Italy and Germany, where it affected 5.6%, 3.29% and 3.17% of all employees and 16.99%, 9.95% and 12.06% of employees in the goods-producing sector respectively on average. The percentage of employees affected will be considerably higher than the average annual stock, depending on the average duration of phases of short-time work.

[4] The discussion of training uptake in 1.5 below provides some insight into implementation issues from the perspective of employers.

[5] The data are for the total number of beneficiaries in the year, rather than the annual average number of participants. These data overstate average stock in the year by a factor of 3 to 4, depending on the average duration of short-time work.

Table 1. Average take-up of short-time work, 2009

	Percentage of all employees	Percentage of employees in goods-producing sector
Austria	0.53	3.41
Belgium	5.6	16.99
Czech Republic	1.44	4.59
Finland	1.67	2.69
France	0.83	3.61
Germany	3.17	12.06
Ireland	1.03	1.34
Italy	3.29	9.95
Netherlands	0.75	5.01

Source: OECD Employment Outlook 2010, Table 1-A6.2 and A6.3, pp. 28-29.

The uptake of STW schemes depends not only on the economic situation but also on the scheme's characteristics and the employment system: 1) the eligibility conditions for firms and for individuals, the level and duration of benefits. The more generous the conditions are for firms, the more likely firms are to make use of short-time work instead of dismissals; 2) the stringency of employment protection regulations, which makes the use of redundancies (i.e. layoffs) too expensive and too slow as an instrument for short-term labour force adjustment; 3) the availability of functionally equivalent adjustment strategies through flexibility in working time (e.g. working time accounts) and temporary employment.

<u>Circumstances covered</u>

There are three major reasons: temporary economic downturn, bad weather benefits in construction and, in some countries, structural short-time work in firms and industries facing mass redundancies. Summary data for all types of short-time work is used in this comparison in order to construct a data series with the broadest possible comparable coverage[6]. Quantitatively, the most important types of short-time work covered are short-time work for economic reasons and bad weather benefits, largely in the construction industry, which together account in most countries for the most use of short-time work. These two reasons accounted for 95% of participants in Belgium in 2019, for example (see Table 2).

Table 2. Participants in short-time work by reason, Belgium, 2019 annual average stock

Reason	Annual average stock	%
Economic reasons	72,292	56%
Bad weather	49,779	39%
Technical interruption	7	0%
Force majeure	2,296	2%

[6] On the basis of the data in the LMP database, it is possible to make this distinction only for a few countries.

Reason	Annual average stock	%
Strike/lock-out	49	0%
Yearly holiday closure	1,774	1%
Not specified	1,434	1%
Crisis interruption (clerks)	1,244	1%
Terror threat	0	0%

Source: ECE fiche, Belgium.

Note on data sources for participants and comparability issues

National data on participation in STW schemes reported in the ECE are based on national conventions and are not comparable across the Member States. Typical national categories are some combination of the following: stock and/or flow data for individuals, the number of beneficiaries, the number of subsidised workers (beneficiaries), the number of participating firms, the number of firms applying and the number of hours compensated. The data on participants reported in the ECE fiches, which is drawn selectively from national data sources, is thus not comparable.

Even within the LMP database the available data on participation varies. Although the LMP questionnaire attempts to gather data on stock, entrants and exits, not all countries reporting are able to report all items. Therefore the most widely reported definition of participation is used in this report: the annual average stock of participants, usually calculated as an average of the stock at the end of each month (Table 4). As the table shows, no data on short-time work is available for four Member States (DK, HU, NL and SE). This is either because the STW scheme is fully integrated in the unemployment system or because of incompatible data categories so no estimate of average stock was possible, or the level of participation is low, or both. Also included are countries (BG and SE) with inactive schemes in place that can be activated on short notice, if needed.

1.4 Expenditure and financing

Expenditure

For this report we have relied primarily on the EU Labour Market Policy database to construct a longer time series of comparable national expenditure for STW measures in the Member States. Like the participation data reported above, the data were extracted based on category cat. 8.2 ('partial unemployment benefits') in the LMP database. This is defined as 'benefits compensating for the loss of wage or salary due to formal short-time working arrangements, and/or intermittent work schedules, irrespective of their cause (business recession or slow-down, breakdown of equipment, climatic conditions, accidents and so on), and where the employer/employee relationship continues'[7]. Expenditure data for two countries with small or intermittent expenditures (Bulgaria and Slovakia) is taken from the ECE fiches because no data were available from the LMP database.

Data for the Member States with STW programmes or special regulations in unemployment insurance are reported in Table 5 in millions of euro per annum. Since expenditure data that distinguishes between different types of short-time work is only available for some

[7] Labour market policy statistics Methodology 2018.

countries, summary data for all types of short-time work is used in order to construct a data series with the broadest possible comparable coverage. As with the participation data discussed above, the most important types of short-time work covered are short-time work for economic reasons and bad weather benefits, largely in the construction industry, which together account in most countries for more than 95% of the beneficiaries (see Table 2 above).

Expenditure for short-time work is highly cyclical given the predominance of short-time work for economic reasons. Expenditure for countries with significant STW schemes peaked in the immediate aftermath of the 2008/2009 recession and subsided in the course of the following recovery. All reported expenditure for these schemes in the EU peaked at €12.3 billion in 2009. Italy has by far the highest level of expenditure for short-time work, accounting for more than half of all expenditure except for the peak recession year 2009. Noteworthy again is that expenditure data are not available for four countries (DK, HU, NL and SE) because their schemes are financially fully integrated in the unemployment insurance systems, and apparently not quantitatively significant. As noted above, Sweden and Bulgaria have inactive STW schemes that can be activated on short-notice if needed.

The relative importance of STW schemes in national labour market policy is documented in Table 6, which shows national expenditure for short-time work as a percentage of all labour market policy expenditure[8]. Over the 10-year period observed average expenditure for short-time work as a percentage of all labour market policy expenditure was highest in Italy (18.4%), Belgium (6%), Luxemburg (5.5%), Germany (2.9%) and Spain (1.1%) in that order, and on average less than 1% in all others for which data are available.

Financing

In almost all cases STW schemes are not financed through separate dedicated funds but are integrated in the broader financial arrangements for funding unemployment benefits or social insurance in its entirety (AT, BE, DE, DK, ES, FI, FR, HU, IE and PT). There is thus, as a rule, no separate ‘fund’ for STW schemes, as most ECE reports note. This is so much the case that, as noted above, four countries (DK, HU, IE and NL) that have such programmes do not even report STW expenditures separately.

In other countries with more ad hoc and intermittent schemes (BG, SK and SE), STW schemes are financed directly from the government budget, as is also the case in Luxemburg (see Annex 2.2). Several countries (CZ, LT and SI) have support schemes for short-time workers financed through ALMP that are not reported as partial unemployment benefits in the LMP database and not dealt with here.

Expenditure for STW schemes does not in general appear to be a significant financial burden since they only constitute a very small fraction of labour market policy expenditure (see Table 6) in most countries, except for a crisis period in those countries where it is heavily used (BE, DE, IT and LU). Moreover, expenditure for these measures is not additional but an alternative to payments for full unemployment benefits that would have otherwise been incurred.

Italy is an exception to these general observations. The principal STW schemes are legally organised as separate funds within the national insurance system (INPS) and their respective balances are publicly reported accordingly. The very high level of expenditure for the public STW schemes and mounting deficits in the funds led to reforms that have restricted eligibility for firms and increased their contribution to costs since 2015. These

[8] Category 1-9 in the LMP database.

changes, together with improved labour market conditions, have resulted overall budget surpluses in funds in 2017 and 2018[9].

In Italy, there are also supplementary STW benefit regulations based on sectoral level collective agreements in many countries that provide additional benefits, or comparable benefits in for workers not covered by the public schemes, for example, the Bilateral Solidarity Funds.

1.5 Training and upskilling during short-time work

Combining training with short-time work is an appealing strategy for using periods of slack work productively but experience with public policy to promote training during periods of short-time work has been disappointing. Training and upskilling are usually not a focus during a crisis period and uptake of training is generally estimated to be low. Still, STW schemes enable firms to retain existing skills and firm-specific skills of workers are not devalued by loss of employment.

Training provisions in short-time work scheme regulations

Participation in training during periods of short-time working, either provided by the employer or third parties, is not mandated in any of the schemes but it is an option in many countries (AT, BE, DE, DK, ES, FR, IT, LU and PT)[10]. Moreover, STW schemes in six countries (AT, FR, HR and LU and PT) offer financial incentives for firms to offer or for employees to participate in training during periods of short-time work (see Table 3).

In the Croatian scheme, which is an ALMP measure rather than a typical STW scheme, all training costs are financed by the PES. Other training-related provisions either call for consultations between management and workers' representatives in case of prolonged work sharing (DK); or they may mandate training in case of repeated use of the scheme (FR); or they require workers to participate if the employer offers training (PT). The Spanish (ES) scheme even *requires* that training is offered to affected workers, although there is no evidence that this is enforced[11].

Table 3. Training in short-time work scheme regulations

Member State	Training option	Training financial incentives	Other training provisions
AT	Optional with financial incentives	If short-time work is combined with upskilling, the employer receives an additional payment of 15%.	Mandatory consultation with PES about upskilling measures or other alternatives.
BE	Optional		
BG	No information		
DE	Optional	None, PES can offer training, and during crisis recipients were often asked to undertake training.	

[9] See ECE Fiche for Italy, especially Figures 1 & 2. Data source is INPS annual reports.

[10] Based on information from the ECE fiches and other sources.

[11] ECE fiches, Spain.

Member State	Training option	Training financial incentives	Other training provisions
DK	Optional		In application for prolonged work sharing (>3 months) management and employee representatives must have consulted on the possibilities for adult vocational training.
ES	Optional		Firm should promote training of affected workers but no evidence available on compliance with this provision.
FI	No information		
FR	Optional with financial incentives	If the employee participates in training during non-worked hours, he/she receives 100% of net hourly wage (normally 70% of gross wage.	If the firm has already used short-time work in the last 36 months, additional conditions and commitments must be defined by the administration, in concertation with employer, which can include training arrangements.
HR	Optional with financial incentives	All training costs paid.	
HU	No information		
IE	No information		
IT	Optional		
LU	Optional with financial incentives in cases of cyclical short-time work	If worker participates in continuous vocational training, the company pays at least 90% of normal wages during short-time work.	
NL	No information		
PT	Optional with financial incentives	A 30% higher wage compensation payment.	Workers receiving STW benefits are required to attend any training actions provided for in the plan drafted by the employer and may be denied benefits if they fail to comply.
SE	No information		
SK	No information		

Source: ECE fiches, Eurostat LMP database and national sources.

National training frameworks for workers on short-time

More detailed information on training options for workers on short-time was collected from national experts in five EU countries in which there is a training option for short-time workers, four of which have, or have had, financial incentives for training (BE, DE, ES, FR and PT; see Annex 2.3).

The employer is the central actor, together with employee representatives, not only in deciding to introduce short-time work but also in initiating training. It is therefore useful to discuss the national training frameworks summarised in Annex 2.3 from the point of view of their compatibility with the firms' perception of their training needs[12]. It can be assumed that the employers' incentive to train staff is greater when the company has the option of organising the training, either internally or through external providers, and when it can decide with broad discretion on the content and type of training, select with discretion the employees to be trained, and receive a subsidy for the training. A review of these features in training frameworks suggests that they are not optimised to support employers' training needs, which may be a partial explanation of low uptake of public incentives for training workers working on short-time.

Among the cases reported, only Spain, France and Portugal allow or support training provided or organised by the employer as an option, whereas Germany and Belgium foresee support only for externally provided training. It is usually the employer alone that decides on the content of the training (ES and FR)[13] or agrees the content with the employee or employee representatives (DE and PT). Only in Belgium is it the employee alone who decides.

In all countries except Germany there are no restrictions on the type of training an employer may choose as long as it is work-related. In Germany, strictly work-place related skills training is excluded; training must have a more general skills content. Moreover, it has to be carried out outside the workplace and have a duration of at least 180 hours.

Furthermore, only in Germany is PES approval of the training on an individual basis required. In Portugal only the training plan agreed with employee representatives requires approval. In Belgium, Spain and France no PES approval is ordinarily required.

Germany is also the only country that excludes broad categories of workers from participation in PES-supported training[14], further limiting an employer's discretion in developing training plans. In the other countries surveyed all workers on short-time benefit are eligible for training.

The financing of the training varies greatly, and it is not possible to assess the relative attractiveness of public financial support in the countries surveyed. Among the cases examined, only Portugal provides a (small) subsidy for employer-driven training. In Germany approved training is fully or partially financed through the individual training voucher. In Spain, companies pay regularly into a training fund that is used to finance training needs; if the fund is exhausted, the employer bears the excess costs. In France, employer training plans are financed by the employer, with some possibility of subsidies from sectoral training funds. Similarly, in Germany, individual training is financed by the state through individual training accounts.

The uptake of training by short-time workers is generally estimated to be low[15]. The OECD has estimated that in most EU countries no more than 10% of workers on short-time took part in training at the height of the last recession – though Austria probably had a somewhat higher rate (Hijzen and Venn 2011)[16]. As the expert responses shown in

[12] An alternative perspective would be the adaptability of the training framework for employees to improve their employability even outside their current employment.

[13] In France it is done as part of a company training plan.

[14] Workers who have completed vocational training, education or PES-financed training within the last four years.

[15] No comparative data are available, and national data, even on publicly supported training, is not readily available.

[16] The basis for their estimate is unclear; it apparently also includes unsubsidised training provided by employers. See also the discussion below on training uptake in the 2008-2010 recession.

Annex 2.3 indicate, there is little reliable data on the incidence of training during short-time work[17].

The incentives for training that some STW schemes offer employers, e.g. higher subsidies for wage or training costs (see Tables 6 and Annex 2.3), do not appear to be sufficient to substantially affect training participation. One reason is that public subsidies for training that exist are, as discussed above, in part not optimally aligned with the training interests of employers. Employers facing an economic crisis may also be reluctant to invest in training for workers whose future employment is uncertain. Moreover, the financial costs of training, even when partially subsidised, impose an additional burden on employers already facing economic difficulties. Requiring training would likely depress the uptake of the schemes by increasing the costs of participation to employers.

There are also important practical difficulties in increasing the use of training in adjustment situations. Workers are not always motivated to take part, especially when the circumstances are temporary, and firms may have little incentive to train workers whose future employment is in doubt. Small and medium-sized enterprises in particular often have limited capacity to provide training. Even for larger firms, uncertainty about when the employee may have to return to work makes planning difficult. In many countries, the public training system itself may be fragmented and unable to respond to the specific training needs of enterprises.

In practice training has had a low priority in STW schemes because their primary goals are to stabilise employment and facilitate rapid adjustment while avoiding open unemployment. STW schemes already make an important contribution to skills development in that workers in affected firms, even with reduced hours, retain existing skills and their firm-specific skills are not devalued by loss of employment (Arpaia et al. 2010:32; Hijzen and Venn 2011:11).

Linking training with structural short-time work, i.e. in situations in which a return of the workforce to the previous level of employment is unlikely, is beset by special problems. Enterprises are primarily interested in training employees they want to keep. For older employees structural short-time work is frequently a form of pre-early retirement so there is little interest in (re-)training. For less senior workers facing probable loss of employment, training (or other active measures) is indispensable but it is difficult to see why it should take place during prolonged short-time work rather than as part of regular ALMP measures.

Uptake of training for short-time worker in the 2008-2010 recession

The 2008-20010 economic recession was the most recent major test (until Covid-19) for EU STW schemes. There is a correspondingly relatively large literature on this experience, including some reference to training provision. Member States reacted to the labour market crisis by extending the eligibility conditions (e.g. maximum and minimum permissible reductions in weekly working hours, firms and sectors that are eligible, employees covered) and the duration of short-time work benefits. Moreover, many new temporary measures were introduced in existing schemes. Financial incentives for training on short-time were included in almost all new temporary measures (AT, BE, DE, FR, IE, LU and PT) as well as in countries where new schemes were set up (BG, CZ, HU, LT, LV, NL, PL and SI). In some

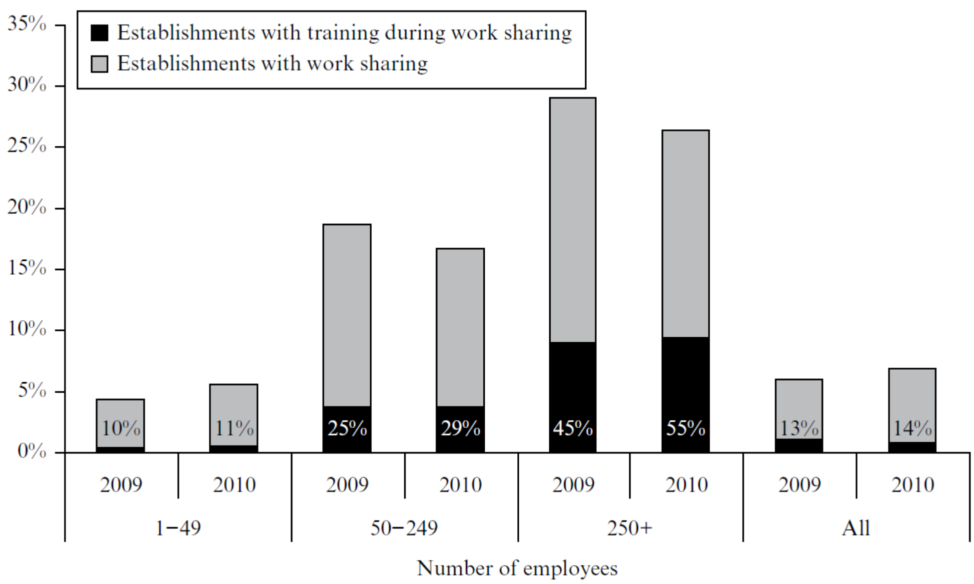
[17] The lack of reliable data is largely due to the complexity of training provision and training financing for short-time workers. The training may be provided by the employer, with or without a public subsidy. Alternatively, it can be provided or subsidised by the PES, other public training institutions, or the employee (see 1.5 and Table 3). It is also not possible to link Eurostat survey data on training to participation in STW schemes. While there is a great deal of literature on continuing training and lifelong learning and considerable literature on short-time work, the intersection between the two has received only peripheral attention.

countries training was made compulsory in order to be eligible for STW subsidies or income support (CZ, HU, NL and SI), while elsewhere it remained an option (Arpaia et al. 2010:29).

Despite these new incentives, the take-up of training remained relatively low where it was not made compulsory (Arpaia et al. 2010:30-32; Hijzen and Venn 2011)[18]. The OECD report estimates that in this recession period 10% of short-time workers participated in training in Belgium, Denmark, Finland, Italy, Germany and Switzerland and 10-25% in Austria (Hijzen and Venn 2011:11). Among possible explanations for the low participation rates are (1) the perception of employers and employees that the crisis is not related to the firm or its staff, so that human capital investments may not be the appropriate response (Arpaia et al. 2010:32) and (2) the fact that training often cannot easily be organised, especially under crisis conditions (Hijzen and Venn 2011:11).

A study of short-time work in Germany during the economic crisis showed that larger establishments were much more likely both to use short-time work and to report some use of training in combination with work sharing (Bellmann et al. 2013; see Figure 1), but the actual number of workers with financial support from the PES in training was relatively small[19]. Despite the emphasis on training in short-time work in public policy at the time, only 17% of the PES budget for training in combination with work sharing was used by firms. The authors surmise that establishments may be reluctant to invest in further training when their returns on investment are uncertain, especially in a recession. In practical terms the necessary training programmes and personnel are not available on short notice (Bellmann et al. 2013:47).

Figure 1. Percentage of German establishments with short-time work and with training during work sharing, 2009 and 2010.



Source: IAB Establishment Panel 2009–2010; authors' calculations.

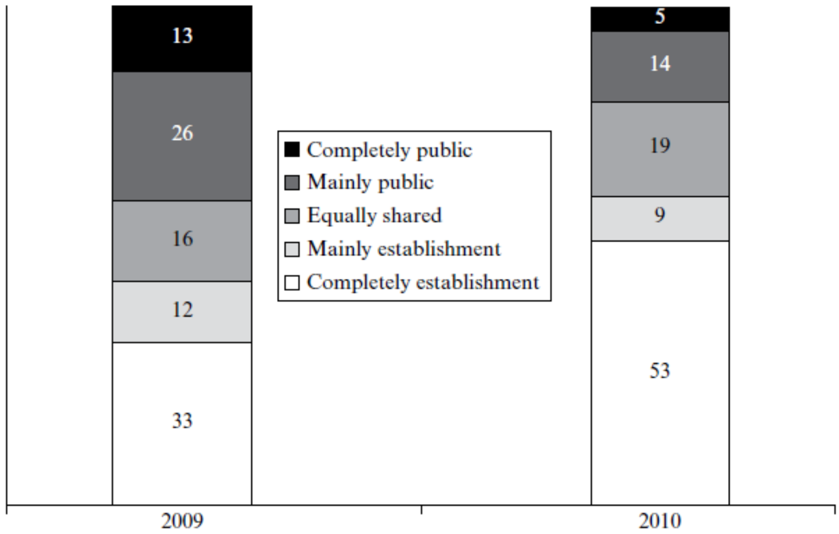
Source: Bellmann et al. 2013: 46

[18] See Arpaia et al. 2010:29-33 for an overview of these developments. This section refers to the past recession period. Currently training during short-time work is nowhere compulsory, based on the information available.

[19] 147,871 and 71,595 entrants respectively in 2009 and 2010, by contrast the average annual stock of participants in short-time work was 1,117,530 and 474,235 in these years.

Public financial subsidies give firms an additional incentive to provide training to employees working short-time but they do so in their own interest even without public support. German establishment data from the last recession indicates that company-provided training for short-time workers was largely financed by the affected firms (see Figure 3). Moreover, firms providing training were mainly those that normally invested in the human capital of their employees, which suggests that the public subsidies provided little additional impulse for additional continuing training (Bellmann et al. 2013: 48).

Figure 2. Financing of training during periods of work sharing (in percentages)



Source: IAB Establishment Panel 2009–2010.

Source: Bellmann et al. 2013: 48.

1.6 Evaluation of short-time work schemes and lessons learned

STW programmes are a long-established instrument of labour market policy in Europe and were introduced in the USA and Canada since the late 1970s. Nevertheless, there have been few programme evaluations. Academic studies have largely been based on expert interviews, selective case studies, and analysis of aggregate programme data. Evaluations of short-time work are – like the uptake of the schemes themselves – highly cyclical, peaking in post-crisis periods.

In the past, uptake of STW schemes across Europe has exhibited clear patterns.

- Cyclical: the uptake of short-time work is highly cyclical due to the predominance of economic reasons for invoking short-time work, for which the business cycle is the most important determinant.
- Sectoral: the use of short-time work in adjustment situations is highly concentrated in the industrial sector and, with few exceptions, relatively rare in the in the service sector. The skill level of the workforce and the importance of firm-specific skills play a role here. Firms in the service sector are apparently able to rely to a greater extent on other adjustment strategies such as natural fluctuation and forms of nonstandard employment.

- Establishment size: larger firms are much more likely to use short-time working as an adjustment strategy than are smaller firms. Smaller firms rely more heavily on external mobility. Moreover, they frequently face less restrictions in doing so[20].

There are several different evaluation issues related to STW schemes: 1) their labour market impact; 2) their impact on individual participants; 3) their impact on employment stability in enterprises. This section highlights some exemplary findings with respect to their labour market impact and their impact on employment stability in affected enterprises, with particular reference to Germany in the last recession. STW schemes are generally regarded as effective in stabilising employment in a temporary crisis through flexibility in working hours as an alternative to redundancies (Abraham and Houseman 1994; Arpaia et al. 2010; Cahuc 2019; Lydon et al. 2019). These findings are largely based on cross-national econometric studies that compare the impact of declines in economic output on employment and working hours in countries with and without STW schemes. For example, in the first and classic study of this sort Abraham and Houseman (1994) compared aggregate adjustment patterns in employment and hours worked using quarterly time-series data for Belgium, Germany, France and the US. In contrast to the first three countries, the US has no (national) STW scheme. In all countries the 2008 crisis and its aftermath led to a significant decline in demand and reduction in working hours, but the pattern was different. Whereas the adjustment in employment in manufacturing was slower in the European countries, the overall adjustment of hours worked was faster. These aggregate findings suggest that STW schemes not only protected employment but also made a significant contribution to the speed of working hours adjustment in the manufacturing sector. Similar studies for subsequent periods, and using different estimation procedures, have tended to confirm this overall pattern of differences in adjustment patterns between countries with and without STW schemes (e.g. Hijzen and Venn 2011; see also Cahuc 2019 for a recent review of studies).

Despite this generally positive assessment of the role of short-time work in stabilising employment, the evaluation literature regards prolonged use of short-time work in situations of structural adjustment as economically inefficient because it hinders necessary structural change and prolongs individual adjustment (e.g. Eichhorst and Marx 2009). Hijzen and Martin (2013) conclude that while the schemes had a significant positive impact on employment, 'the same estimates also suggest that the continued use of short-time work during the recovery exerted a negative influence over the job-content of the recovery,' although it may have reduced the social costs of the crisis (displacement). In their view, timing is crucial in STW schemes: 'in order to limit the use of short-time work to economic downturns, its use has to be very responsive to changes in economic conditions, both negative and positive.' The authors suggest, for example, that timing can be improved by requiring firms to participate (more) in the costs, limiting the maximum duration, or requiring workers to search for a job while on short-time work.

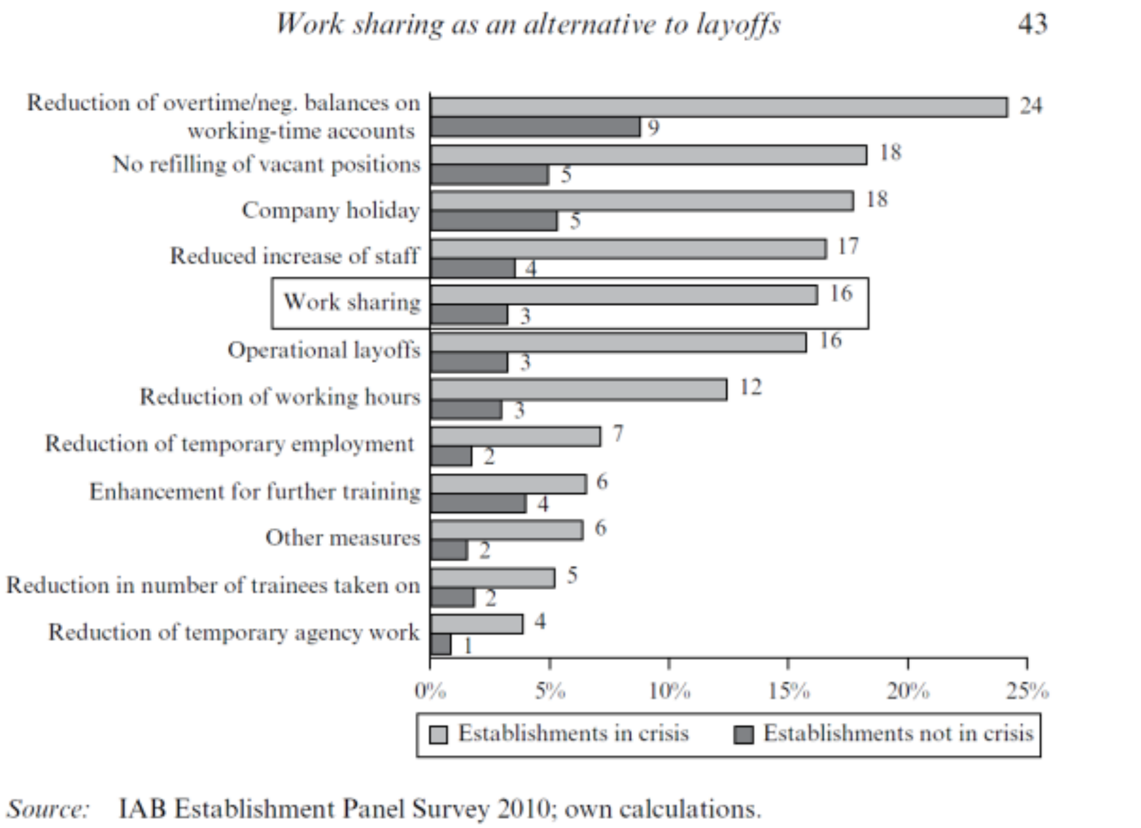
Analyses of short-time work based on establishment data compliment but provide a more differentiated perspective than evaluations based on aggregate data. The employer is the central actor in adjustment situations and STW schemes aim to influence employer behaviour. Establishment level surveys show importantly that in adjustment situations, firms have a range of options for adjusting labour input to changing level of demand. The uptake of STW schemes in labour force adjustment depends on the availability of alternative strategies. For example, the statutory reductions in standard working hours in France (a 35-hour week) led to a decline in the use of *chômage partiel* as employers used

[20] For example, employment protection regulations are typically more stringent for larger firms, requirements for social plans, special procedures for collective redundancies or coverage of unfair dismissal legislation frequently have thresholds depending on the size of the firm.

the reduction in working time to negotiate greater flexibility in the volume of hours worked (Calavrezo et al. 2009)[21]. Similarly, companies in Germany that had a high proportion of employees with non-standard contracts (e.g. temporary, fixed-term, freelancer) resorted less to short-time work (Crimmann and Wießner 2009).

Figure 3 illustrates the variety of labour force adjustment measures used by German establishments in response to the last economic recession in 2010. Interestingly, STW schemes are important but they are not the most frequently named strategy by establishments in crisis. Other forms of working time flexibility are equally or more important (reductions in overtime and reducing balances in working time accounts). The second most frequently mentioned strategy is natural attrition, i.e. reducing hiring and not filling vacancies[22].

Figure 3. Labour force adjustment strategies of German firms in the recession, 2010



Source: Bellmann et al. 2013: 43.

During the last recession, Germany was particularly successful in cushioning the impact of the economic downturn on employment. A great deal of recent literature on the impact of short-time work on employment examined the German case using data at the establishment level. In contrast to the evaluations based on aggregate data discussed above, with establishment data it is possible to statistically compare user and non-user firms in order to estimate the impact of short-time work on employment at the

[21] In the aftermath of these changes, short-time work increasingly became a measure for firms with structural problems; users had a higher frequency of redundancies than did other similar firms.

[22] These data refer to all establishments in Germany with at least one employee. If the analysis were restricted to the industrial sector where short-time work is concentrated, the relative proportion of firms using it would be greater.

establishment level. While the success of the German employment system in cushioning the impact of the recession on employment is clear, the findings on the impact of the STW scheme on employment in establishments using it are conflicting. While some studies (Boeri and Brücker 2011; Bellmann and Gerner 2011) found that short-time work had a positive impact on job preservation in user-firms, Kruppe and Scholz (2014) concluded that there was no significant difference in employment reduction in comparison with establishments not using the scheme. This does not mean that short-time work was not important in the recession for the workers concerned but that 'establishments without short-time work use other mechanisms to hoard labour' (Kruppe and Scholz 2014:23; see also Figure 3).

The authors suggest that the difference in findings in comparison with the previous establishment studies may be due to the fact that the earlier studies relate only to employment change between June 2008 and June 2009, whereas their study covered a two-year period up until June 2010. Previously, Burda and Hunt (2011) had also concluded that working time accounts were a functional equivalent for short-time work during the 2008-2009 recession period. Kruppe and Scholz noted that their findings refer to employment at the establishment level, and it may well be the case that short-time work did indeed prevent individual unemployment of covered workers.

These results, or more precisely, the differences in these results, point again to the importance of the time horizon in evaluating STW schemes. Short-time work was originally conceived as an instrument to support firms in temporary economic difficulties and their employees. In this case there are strong arguments for use of the scheme from the perspective of economic efficiency. However, short-time work is not infrequently used in situations of structural adjustment, for which special STW schemes exist in many countries (e.g. Germany and Italy). When firms or their current employment levels are not economically viable, STW schemes may only serve to delay necessary adjustment processes for enterprises and individuals.

Clearly, the uptake of short-time work in the current Covid-19 crisis differs markedly from these historical patterns. As part of the emergency packages launched in many Member States, the scope of STW schemes and similar measures has increased significantly during the first phase of the current Covid-19 crisis. In many Member States a large share of the work force is already being supported by these schemes during the lockdown period.

1.7 Conclusions

Most European countries have STW schemes to promote temporary reductions in working time as an alternative to lay-offs. The role of the PES in the administration of STW schemes varies considerably across the Member States. The PES is exclusively responsible for administration in only three countries with active STW schemes (AT, DE and IE). In others, the primary responsibility lies with social insurance institutions or other public authorities. The existing largely econometric literature provides little information on the actual experience of PES, or other responsible institutions, in implementing STW schemes. Further research on PES implementation issues would be valuable.

Expenditure for STW schemes has not been a significant financial burden in the past, except in crisis years in countries where short-time work is heavily used. Moreover, expenditure for these measures is not additional but an alternative to payments for unemployment benefits that would have otherwise been incurred. So far, the European Social Fund has supported STW schemes in four Member States (IT, LT, RO, SK). The current economic crisis, in worst case scenarios, can be expected to put severe strain on both income support systems. The European Social Fund also supports the implementation of STW schemes in the context of the current Covid-19 crisis.

Policies to promote training during periods of short-time work have had only limited success. For employers facing an economic downturn training is not a priority concern and uptake of training is generally estimated to be low. There are, moreover, practical difficulties in carrying out training in adjustment situations when the circumstances are temporary and of uncertain duration. STW schemes do enable firms to retain existing skills and firm-specific skills of workers are not devalued by loss of employment.

Evaluations of STW schemes generally conclude that they are effective in stabilising employment in an economic downturn. However, prolonged periods of short-time work are regarded as being economically inefficient in situations of structural adjustment. When firms or their current employment levels are not economically viable, STW schemes may only serve to delay necessary adjustment processes for enterprises and individuals.

Whether a firm's economic difficulties are temporary is a decision that has to be regularly made by PES or other responsible agencies. In an economic crisis, the answer is often uncertain even for the firm. In practice, STW schemes have a dual function, facilitating economically efficient labour force adjustment in enterprises and social protection for affected workers. Balancing these two considerations is ultimately a political decision.

STW schemes will clearly play a major role in many countries in the Covid-19 crisis. At this early stage any projections are inevitably speculative. A plausible scenario would be to expect two principal phases in the use of short-time work:

- *the pandemic phase* and lockdown of much economic activity in which STW schemes are used in many countries as a massive transfer and stabilisation programme for affected workers and firms. This has little to do with its classical function as a cyclical buffer for firms in the manufacturing sector. The lockdown affects all sectors and firms of all sizes, especially the service sector. PES face an unprecedented rush on their services either for firms applying for short-time work, where they are responsible for STW schemes, or for unemployment benefits. They also have the other problems of large service sector firms trying to continue functioning in the pandemic phase (overload of digital services, PES staff working from home or personal protective equipment for customer contact).
- *the post-lockdown recovery phase* of uncertain duration. This is new territory that is difficult to foresee but certainly, STW schemes will continue to play an important part, especially in countries where there has been strong reliance on them in the past. Because short-time work maintains employment relationships with the experienced workforce and accordingly their skills, it can greatly accelerate the recovery process. Both the pandemic and lockdown as well as the post-lockdown recovery phase will differ in duration and severity across EU countries, depending on national circumstances and policies, and not run parallel. In both phases, PES play a crucial role.

During the current pandemic phase, crisis management has priority in PES. Initial monitoring of developments and the exchange of information and ideas among PES are, however, valuable during the crisis and feed into further research activities. PES are already exchanging information in the framework of PES Network activities. During the recovery phase, as mutual learning activities resume on a broader scale, monitoring and exchange of information on strategies in the Network during the crisis, as well as identification of good practice should be intensified. This survey of past experience with STW schemes, especially the experience of the 2008-2010 recession, shows patterns and issues that might inform EU and PES Network discussion on short-time work in the current crisis, in particular, its potential contribution to stabilization of employment and economic recovery, but also the risks of use of short-time work in structural adjustment for economic efficiency.

In recent months, EU Member States have launched a large number of initiatives to stave off the negative economic and labour market impacts of the health crisis. With the Corona Response Investment Initiative (CRII), a new instrument for temporary Support to mitigate Unemployment Risks in an Emergency (SURE) has been designed. Instruments provide strategic and direct support across Member States, in particular, addressing the public health emergency. SURE protects jobs and workers affected by the pandemic, with targeted support to small and medium sized enterprises. Amongst others, measures include support to Member States' STW schemes. Therewith, the European Commission is financially supporting Member States to mitigate effects of the crisis.

A follow-up study will examine the measures implemented by Public Employment Services in response to the current crisis and will highlight how they differ from the historical use of STW schemes presented in this study.

1.8 References

Abraham, K. and Houseman, S. (1994). 'Does Employment Protection Inhibit Labour Market Flexibility? Lessons from Germany, France, and Belgium'. In: R. Blank (ed.) - Social Protection versus Economic Flexibility: Is There a Trade-Off? Chicago: University of Chicago Press.

Arpaia, A.; Curci, N.; Meyermans, E.; Peschner, J. and Pierini, F. (2010). Short-time working arrangements as response to cyclical fluctuations. In: European Economy - Occasional Papers, No. 64, Brussels: Publications Office of the European Union.

Bellmann, L.; Crimmann, A.; Gerner, H.-D. and Wießner, F. (2013). 'Work sharing as an alternative to layoffs: Lessons from the German experience during the crisis.' in Jon C. Messenger and Naj Ghosheh (eds.) Work Sharing during the Great Recession, Edward Elgar, pp. 24-71.

Bellmann, L. and H-D Gerner (2011): 'Reversed roles? Wage and employment effects of the current crisis'. In: Immervoll, Herwig; Peichl, Andreas; Tatsiramos, Kon- stantinos (Eds.) Who Loses in the Downturn? Economic Crisis, Employment and Income distribution, Vol. 32 of Research in Labour Economics: pp. 181- 206.

Boeri, T. and Brücker, H. (2011). 'Short-time work benefits revisited: some lessons from the Great Recession'. In: Economic Policy, Vol. 26, No. 68, pp. 697- 765.

Björn, B. and Hertweck, M. S. (2016). 'The extension of short-time work schemes during the Great Recession: A story of success?'. University of Konstanz Working Paper Series 2016-05.

Burda, M. C. and Hunt, J. (2011). 'What Explains the German Labour Market Miracle in the Great Recession?' In: Brookings Papers on Economic Activity, Vol. 1 (Spring), pp.273-335.

Cahuc, P. (2019). 'Short-time work compensation schemes and employment'. IZA World of Labour. May, pages 1-11.

Calavrezo, O.; Duhautois, R. and Walkowiak, E. (2009). The Short- Time Compensation Program in France: An Efficient Measure against Redundancies? In: Centre d'Etudes de l'emploi.

Crimmann, A. and Wießner, F. (2009). 'Wirtschafts- und Finanzkrise: Verschnaufpause dank Kurzarbeit, Institut für Arbeitsmarkt- und Berufsforschung, IAB Kurzbericht 14/2009.

Eichhorst, W. and Marx, P. (2009). 'Kurzarbeit: Sinnvoller Konjunkturpuffer oder verlängertes Arbeitslosengeld?', Institute for the Study of Labor, IZA Standpunkte Nr. 5, April 2009.

Hijzen, A. and Martin, S. (2013). 'The Role of Short-Time Work Schemes during the Global Financial Crisis and Early Recovery: A Cross-Country Analysis.' IZA DP No. 7291, March 2013.

Hijzen, A. and Venn, D. (2011). The role of short-time work schemes during the 2008-09 recession. OECD Social, Employment and Migration Working Papers no. 115. OECD Publishing.

Kruppe, T. and Scholz, T. (2014). Labour hoarding in Germany: Employment effects of short-time work during the crises, IAB-Discussion Paper, No. 17/2014.

Lydon, R.; Mathä, T. Y. and Millard, S. (2019). 'Short-time work in the Great Recession: firm-level evidence from 20 EU countries'. IZA Journal of Labor Policy 8:2.

Mosley, H. and Kruppe, T. (1996). 'Employment Stabilization through Short-time Work'. In: G. Schmid, C. Buechtemann, J. O'Reilly and K. Schömann (eds.) International Handbook of Labour Market Policy and Evaluation, Evaluation, Aldershot: Elgar, pp. 594-619.

Annex 1. Statistical figures

Table 4. Participants in short-time work schemes, 2008 -2017

Member State	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2017 as % of 2009
AT	3268	34767	14848	2879	3716	3989	3544	3110	3440	3209	0.0923
BE	138530	210865	173069	137121	161304	219514	136001	122735	114740	98843	0.46875
BG	0	4871	1609	0	0	0	0	0	0	0	0
DE	90684	1117530	474235	133798	99742	110730	79737	74944	115862	101260	0.09061
DK	:	:	:	:	:	:	:	:	:	:	-
EL	:	:	2443	3709	3452	2149	1419	1215	1447	:	-
ES	3323	13270	11874	16230	25565	29842	17795	10476	7320	4662	0.35132
FI	505	2298	933	837	1065	1294	1814	1819	1402	857	0.37293
FR	42000	227000	86000	36000	62000	70000	61000	53439	51098	45513	0.2005
HR	:	:	:	:	115	374	309	364	598	670	-
HU	:	:	:	:	:	:	:	:	:	:	-
IE*	2833	15561	15242	11205	7351	4768	1980	1033	644	474	0.03046
IT	71709	180233	220999	218022	242090	256474	203998	144580	88590	72315	0.40123
LU	2900	10919	9412	2371	6590	6934	1246	2272	2458	2605	0.23857
NL	:	:	:	:	:	:	:	:	:	:	-
PT	344	5145	1623	892	2451	2133	1160	1205	1676	1019	0.19806
SE	:	:	:	:	:	:	:	:	:	:	-
SK*	:	:	:	:	:	118	0	126	0	178	-
EU total reported	356096	1827604	1012287	563064	615441	707945	509694	416954	388677	330935	0.18108

Source: LMP database, category 8.2. ('Partial unemployment benefits') unless otherwise stated. Some values in LMP data are based in part on estimates in reporting national data: LU (2008-14), AT (2008-11), FR (2008-2014) and EL (2008 -2017). The estimates by national authorities are necessary to adapt national data categories to the definitions used in the LMP database questionnaire.

Note: *Participant data for IE and SK are reported for completeness but are not comparable: extracted from the ECE fiches, they report the number of beneficiaries in the year rather than the annual average number of participants. These data overstate average stock in the year by a factor of three to four. No stock data available for DK.

Table 5. Expenditure for short-time work schemes, € millions

Member State	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
AT	29.6	146.3	92.9	28.5	39.8	43.8	41.6	37.7	48.4	45.3
BE	450.5	1066.6	902.7	610.4	768.9	790.9	582.2	475.9	444.5	381.7
BG	:	3.0	1.3	:	:	:	:	:	:	:
DE	553.9	5166.5	3836.9	1326.5	828.6	1018.6	613.4	708.7	710.9	737.8
DK	:	:	:	:	:	:	:	:	:	:
EI	0.0	:	:	15.5	20.0	17.1	10.6	6.2	5.9	7.4
ES	62.7	570.0	453.1	442.2	718.4	717.8	407.0	222.1	175.2	158.8
FI	3.0	17.5	11.7	10.2	9.8	16.3	19.9	21.3	19.8	12.1
FR	14.7	319.1	282.2	66.6	103.3	185.8	212.4	203.4	173.5	154.6
HR	0.0	0.3	0.7	1.9	2.7	4.7	6.4	:	:	:
HU	:	:	:	:	:	:	:	:	:	:
IE	:	:	:	:	:	:	:	:	:	:
IT	1484.8	4959.1	5795.8	4913.5	6147.6	6791.2	6112.0	4668.4	3720.8	3195.2
LU	6.9	74.9	46.6	16.7	41.6	43.8	21.8	19.5	18.0	18.4
NL	:	:	:	:	:	:	:	:	:	:
PT	1.7	16.7	5.6	4.0	10.4	8.1	:	4.3	5.2	3.9
SE	:	:	:	:	:	:	:	:	:	:
SK*	:	:	:	:	:	0.0	0.0	0.0	0.0	0.0
EU (all reported)	2,607.8	12,339.9	11,429.3	7,436.0	8,691.1	9,638.2	8,027.0	6,367.3	5,322.3	4,715.2

Source: LMP database: expenditure for 'partial unemployment' (cat. 8.2). Some values based on estimates in converting national data categories to the definitions in LMP database. For Bulgaria and Slovakia, the source is the respective ECE fiches, Slovakia = < €100,000.

Table 6. Expenditure for short-time work in national labour market policy (expenditure for short-time work as a % of all LMPs)

Member State	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Average 2008-2017	Ratio 2009 to Average
AT	0.6%	2.3%	1.4%	0.5%	0.6%	0.6%	0.6%	0.5%	0.6%	0.6%	0.82%	2.76
BE	4.8%	10.0%	8.5%	5.8%	7.2%	7.2%	5.4%	4.8%	4.6%	3.8%	6.21%	1.61
BG	0.0%	1.4%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.20%	6.95
DE	1.1%	8.6%	6.8%	2.8%	1.9%	2.2%	1.3%	1.5%	1.6%	1.6%	2.94%	2.91
DK	:	:	:	:	:	:	:	:	:	:	-	-
EI	0.0%	:	:	:	1.1%	1.1%	0.7%	0.5%	0.5%	0.6%	0.76%	-
ES	0.2%	1.4%	1.1%	1.1%	1.8%	2.0%	1.3%	0.8%	0.7%	0.6%	1.11%	1.30
FI	0.1%	0.4%	0.2%	0.2%	0.2%	0.3%	0.3%	0.4%	0.3%	0.2%	0.27%	1.39
FR	0.0%	0.6%	0.5%	0.1%	0.2%	0.3%	0.3%	0.3%	0.3%	0.2%	0.28%	2.06
HR	:	:	:	:	1.0%	1.5%	2.4%	0.0%	0.0%	0.0%	0.81%	0.00
HU	:	:	:	:	:	:	:	:	:	:	-	-
IE	:	:	:	:	:	:	:	:	:	:	-	:
IT	8.3%	19.4%	21.8%	19.1%	20.4%	22.4%	20.3%	16.2%	:	:	18.48%	1.05
LU	1.9%	15.3%	9.2%	3.3%	7.2%	6.8%	3.4%	3.0%	2.5%	2.5%	5.50%	2.77
NL	:	:	:	:	:	:	:	:	:	:	-	-
PT	0.1%	0.5%	0.1%	0.1%	0.3%	0.2%	N/A	0.1%	0.2%	0.1%	0.19%	2.39
SE	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%	-
SK	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%	-

Source: LMP database: Expenditure for 'partial unemployment' (cat. 8.2) as percentage of all LMP (cats. 1-9).

Note: Some values in LMP data are based in part on estimates in reporting national data: LU (2008-14), AT (2008-11), FR (2008-2014) and EL (2008-2017). The estimates by national authorities are necessary to adapt national data categories to the definitions used in the LMP database questionnaire.

Annex 2. Programme characteristics of short-time work schemes

Annex 2.1. Circumstances Covered, Eligibility and Generosity

	Main circumstances covered	Eligibility conditions	Level of benefits	Duration of benefit/subsidy
AT	Economic reasons due to decline in demand or disruption of deliveries, force majeure	1. Employers who provide short-time working support or qualification support for employees during 10% to 90% reduction in working time. 2. Agreement with social partners on conditions, duration etc.	Worker's working time reduction multiplied by flat rate equal to costs PES would incur in event of unemployment.	Initially 6 months; can be extended a further 6 months if eligibility conditions unchanged. Maximum duration 24 months.
BE	Economic reasons due to decline in demand or disruption of deliveries, bad weather, force majeure	1. Only manual workers eligible. 2.Eligiblity for unemployment insurance benefit (minimum number of working days during a fixed period.)	In principle 60% but ceilings apply and may vary based on collective agreement.	Limited to 4 continuous weeks in case of layoff, and to 3 to 12 months in case of partial reduction in working time, depending on the number of days worked. There should be at least one week of work between suspension periods. Alternation of work and suspension periods can continue as long as the economic reasons persist.
BG	Economic reasons	Firms: 1. Selected sectors in industry and commerce (NACE (rev2) B to J). 2. Affecting 6% of employs and lasting at least two months. Application is competitive by financial criteria and share of workers on short-time, industry etc.	Employee: maximum €61 per month (50% of statutory minimum wage at time) for employees wring 50% of normal working time.	2009 = three months; 2010 = four months.
DE	Economic downturn, seasonal short-time work in construction, displaced workers in firms undergoing restructuring	1. All employees covered by social security, with few exceptions. 2. Wage losses of at least 10% affect at least one third of employees	Employee receives 60% of net pay loss as wage subsidy (67% if child in household).	Business cycle scheme up to 12 months; with possibility of extension to 24 months. Transfer short-time work maximum 12 months; seasonal scheme only in winter.
DK	Reduced volume of work shared be the same number of employees	All employees eligible for unemployment insurance benefit. Four option for reducing working time by days per week or alternating weeks of work.	90% of previous earnings up to a ceiling (€2,500 in 2019).	Maximum 13 weeks (4 months). Possibility of extension up to 26 weeks.
ES	Restructuring, downturn, force majeure	1. Firms: decline in sales or revenue over two consecutive quarters or changes in production process, work organization or in demand for firm's product and services and temporary reduction of working time 10% to 70% on a daily, weekly, monthly or yearly basis. 2. Individuals: eligibility for unemployment benefits.	Unemployment benefit proportionate to working time reduction First 180 days 70% gross base salary, thereafter 50%.	Duration depends on workers entitlement to unemployment benefit, which varies based on time previously worked.

	Main circumstances covered	Eligibility conditions	Level of benefits	Duration of benefit/subsidy
FI	Restructuring, Downturn, force majeure	Individual: only workers with permanent contracts, or those with fixed-term contracts hired as substitutes. Entitlement to unemployment benefit.	Unemployment benefit proportionate to the reduction in working time.	Based on individual entitlement.
FR	Downturn, force majeure, restructuring	Firms: reduction in the usual number of hours worked or a temporary closure.	Workers receive 70% of hourly gross wages for hours not worked, subject to a legal minimum equal to the net hourly minimum wage.	Short-time benefit is limited to 1000 hours in the usual case but only in most case, 100 hours when the scheme is used for company modernization and restructuring.
HR	Downturn, restructuring	Workers in firms facing a temporary downturn that create a programme for job preservation; older workers 50+ in firms with difficulties who are unable to fulfil job requirements; workers in certain manufacturing sectors aged 54 or without secondary education or vocational training.	Maximum of 40% of gross wages lost up to the minimum wage (c. €400). In selected industries up to 50% plus contributions.	Up to maximum of 24 months or €200,000 over 3 years.
HU	Downturn	1. Firms in temporary difficulty that have given notice of mass layoffs affecting at least 25 workers. 2. Workers must have been employed for at least six months.	Up to 100% of the wage costs for the temporary reduction; capped at 150% of the minimum wage per employee.	Maximum 6 months.
IE	Temporary downturn	Worker on short-time can claim unemployment benefit if they work at least one day in week but not work more than three days per week. Short-time work must be repetitive in a clear pattern.	Standard unemployment benefit for days not worked, currently c. €40 per day for single person, and higher depending on family status.	Up to 12 months depending on previous covered employment.
IT	Downturn, force majeure, seasonal causes, restructuring	Depends on regulation. 1. Employees: in general, all employees excluding managers. 2: Firms: (in Spain) CIGO covers companies in industry sector experiencing temporary difficulties due to economic downturn; CIGS is available to companies with >15 employees (or >50 employees in commercial sector) in critical situations (crisis or restructuring). CIGD is available to companies that cannot use CIGO because they are excluded from its scope or have exhausted the benefit period.	80% of wages for hours not worked.	Varies depending on applicable regulation. Ordinarily (CIGO) 13 weeks, extendable to 52. In firms undergoing restructuring up to for 24 months within 5 years (CIGS).
LU	Downturn, bad weather, restructuring, force majeure	All workers in firms under applicable circumstances, including apprentices eligible and no minimum seniority requirement.	Depends on type of short-time work: usually 80% of average gross hourly wage is foregone.	1,022 hours of compensation per year, 350 for weather related short-time work.

	Main circumstances covered	Eligibility conditions	Level of benefits	Duration of benefit/subsidy
NL	Downturn	1. Firms: temporary reduction in working time; Employer expects at least 20% less work for period of minimum 2 and maximum 24 weeks. Employees: loss of at least 5 weekly working hours and must have worked at least 26 weeks in the prior 36 weeks.	75% of the hourly wage with a maximum of EUR 20.33 per hour/per employee.	Maximum 24 weeks after waiting period of two weeks.
PT	Downturn, restructuring, force majeure,	Temporary reduction of working time or a suspension of employment contracts for a certain period.	Workers receive 2/3 of normal gross wages, or the legal minimum wage, whichever is higher for time not worked.	Not more than six months or, in the event of a disaster or another event which has severely affected the normal activity of the company, one year. May be extended for a period of six months.
SE	Downturn	1. Firms: companies in private sector affected by working time reduction (in firms not covered by collective agreement on short-time work in which at least 70% of work force must be affected). 2. Workers: must have been employed in firms for at least three months prior to initiation of short-time work.	Employee receives 80% to 88% of previous wage for time not worked, depending on percentage reduction in working time.	Up to 12 months with possibility of extension for an additional 12 months.
SK	Downturn	Employers: must have retained jobs for at least three months prior to application; reasons for short-time work must be specified in a written agreement with employee representatives; working time reduction of at least 6% and not more than 40% of usual hours; , employees must be paid at least 60% of their average wage for time not worked.	Employer reimbursed for 50% of the wage compensation provided to the employee for time not worked, maximum 50% the average wage.	Payments for up to 60 days over 12 months, proportionately less for shorter periods.

Source: ECE fiches, LMP Database (Qualitative Reports) and national sources.

Annex 2.2. Institutional Features of Short-Time Work Schemes

	Name (original)	Name (EN)	Type	Status of scheme	Financing	Procedure for activation	Responsible administration	Role of PES
AT	Kurzarbeits-beihilfe	Short-time working allowance	Stand-alone	Permanent	Through unemployment insurance funds	Mandatory consultation with PES about upskilling measures or other alternatives.	PES	Responsible administration
BE	Chômage temporaire pour raisons économiques	Temporary unemployment for economic reasons	Unemployment benefit system	Permanent	Through unemployment benefit system.	Activation requires seven days advance notice to works' council, trade union delegation, workers concerned and national or regional PES.	National Employment Office	Must be notified at least seven days in advance
BG		Payment of compensations to workers in industry and services working short-time.	ALMP	Inactive (used only in crisis)	General budget	Employer application to PES. Payment goes to workers. Individual consent by each employee required.	PES	Oversees process, rules on applications.
DE	Kurzarbeit	Short-time work	Stand-alone	Permanent	Through unemployment insurance funds. Employer pays benefit and is reimbursed by PES.	Firms have to apply STW scheme benefits at local PES within three months from reducing working hours.	PES	PES checks eligibility for STW benefits based on evidence of reasons and temporary nature of working time reduction.
DK	Arbejdsfordelin g	Work-sharing	Unemployment benefit system	Permanent	Through unemployment insurance system.	Prior notification of local PES. If to be prolonged from 13 up to 26 weeks, company must apply to the Regional Labour Market Council.	PES, unemployment insurance funds	Must be notified
ES	Suspensión del contrato o reducción de la jornada.	Suspension of the labour contract or reduction of the working day	Unemployment benefit system	Permanent	Through unemployment insurance system. The central PES pays the unemployment benefits/subsidy.	Employer consults with employee representatives about intention with documentation, informs regional government), which informs central PES.	Regional government	Central PES is responsible for paying short-time benefits.
FI	Lomauttaminen	Layoffs	Unemployment benefit system	Permanent	Through unemployment insurance system.	Individual application for unemployment benefit on first day of layoff.	Public authorities (?)	?

	Name (original)	Name (EN)	Type	Status of scheme	Financing	Procedure for activation	Responsible administration	Role of PES
FR	Chömage partiel	Partial unemployment	Stand-alone	Permanent	General budget, unemployment insurance.	Firm applies to Labour Ministry for authorisation.	Ministry of Labour, through regional and departmental services.	?
HR	Potpora za ocuvanje radnih mjesta	Aid for job preservation	ALMP	Permanent	General budget	Employer application to PES.	PES	Evaluates and approves application
HU	Azonnal Cselekszünk Program	'We Act Immediately Programme'	ALMP?	Permanent	?	The subsidy is available via a competitive application process managed by a public body, called the National Employment Foundation (NEF, affiliated to the Finance Ministry).	National Employment Foundation (NEF, affiliated to the Finance Ministry)	?
IE	Structured short-time work	Structured short-time work	Unemployment benefit system	Permanent	Natural insurance fund and general budget	Individual benefit application at Intreo Centres (PES) of Dept. of Employment Affairs and Social Protection.	Dept. of Employment Affairs and Social Protection	Processes benefit applications
IT	Cassa Integrazione Guadagni	Wage Compensation Fund	Stand-alone	Permanent	Employer contributions, General budget	Employers applies to INPS within the time period specified in the applicable regulation.	National Social Security Institute (INPS)	Eligible for PES services
LU	Chömage partiel pour problems économique conjoncturels[23]	Partial unemployment benefit for cyclical economic problems	Stand-alone	Permanent	Government reimburses the employer up to a maximum of 250% of the social minimum wage.	Depends on type of short-time work. In most cases applications are submitted to Conjuncture Committee, tripartite committee in Economics Ministry. Applications for bad weather benefits submitted to PES.	Ministry of Labour and Economic Ministry	Only in case of bad weather benefits

[23] Separate regulations for other circumstances.

	Name (original)	Name (EN)	Type	Status of scheme	Financing	Procedure for activation	Responsible administration	Role of PES
NL	Werktijdverkorting, WTV (WTV)	Working Time Reduction	Unemployment benefit system	Permanent	Unemployment insurance agency (UWV)	Employer application to Ministry of Social Affairs and Employment (SZW). Employer applies for unemployment benefits for his employees at the Employee Insurance Agency (UWV). Permit granted for a maximum period of six weeks which can be extended three times.	Employee Insurance Agency (UWV).	No
PT	Suspensão ou redução temporaria da prestação de trabalho	Suspension or temporary reduction of employment	Stand-alone	Permanent	70% of the STW benefit is paid by the social security administration (ISS) and 30% by the employer.	Notification to and negotiations with employee representatives. Company communicates decision to employee reps and social ministry (ISS).	Social security administration (ISS)	No
SE	Korttidsarbete	Short-time work	Stand-alone	Inactive (used only in crisis)	Government subsidy for STW benefit paid by employer that increases with the magnitude of the reduction in working time.	The government decides if the conditions (deep or imminent deep recession) are fulfilled for activating the STW support.	The Swedish Tax Authority	?
SK	Príspevok na podporu udržania pracovných miest - §50k	Contribution to support retention of employment	ALMP	Permanent	General budget	Application to the PES together with agreement with employee representatives and a plan to deal with operational problems and expected duration of short-time work.	PES	Must be notified at least seven days in advance

Source: ECE fiches, LMP Database Qualitative Reports and national sources.

Annex 2.3. Overview of Training Frameworks for Short-Time Workers in 5 EU Member States

	BE	DE	ES	FR	PT
Training option?	Optional	Optional	Optional	Optional with financial incentives	Optional with financial incentives
Training financial incentives?		Not currently. During the financial crisis PES paid 100% of social insurance contributions for periods of reduced working time.	From 2012 to 2013 employers' social security contributions were reduced by 80% (normally 50%) for short-time workers if the company promoted training measures to reduce the impact on employees.	If the employee participates in training during non-worked hours, he/she receives 100% of net hourly wage (normally 70% of gross wage). This entails higher costs for employers since the amount of the subsidy remains unchanged.	A 30% higher wage compensation payment
Other training provisions			Firm should promote training of affected workers but no evidence available on compliance with this provision.	If the firm has already used short-time work in the last 36 months, additional conditions and commitments must be defined by the administration, in concertation with employer, which can include training arrangements.	Workers receiving STW benefits are required to attend any training actions foreseen in the plan drafted by the employer and may be denied benefits if they fail to comply.
Training eligibility/ priorities?	All workers eligible	No specific group is given priority, but workers who have completed initial vocational education and training, tertiary education or PES financed training within the last four years are *not* eligible.	All short-time workers are eligible	All short-time workers are eligible	All workers eligible
Who decides training content?	Employee	Employers and employees decide jointly on the content, type and length of training. Employees than choose from the offer provided by training providers. The online training platform KURSNET, managed by the PES, or accredited training providers provide information on available training.	Employer	It depends on the training scheme that is used (company training plan, or individual training schemes -CPF).	Employer elaborates training plan, consults employee and/or employee representatives, plan must be approved by national PES.
Limits on type of training?	No	1. Training that cannot be limited to work-place related skills adaptation is excluded. 2.The training measure needs to be implemented outside the company and involve more than 160 hours.	Training must be related to the economic activity of the company. The content can be general (foreign language or ICT) or specific to the company	No limits	No: there is a very broad definition of professional training that does not set effective limits to the type of training.

	BE	DE	ES	FR	PT
Who provides the training?	PES and other training providers	Public and private training providers certified by an accrediting institution.	The employer can organise the training internally or outsource it, as long as the training provider is duly authorised.	Employer or other training providers	Employer, PES, other training providers
PES or other approval required?	No	Either the employer or the employee can apply for financial support for a training measure. The PES will then decide and give the employee a training voucher (Bildungsgutschein), which can be used at an accredited training provider.	No	No but if the company has already been using short-time work in the last three years, the PES must be consulted, and training measures may be agreed.	Yes: the training plan needs to be approved by the national PES (IEFP)
Who pays the costs of the training?	?	The PES pays part or all the cost of training (training voucher).	Companies and employees pay an amount to a training fund every month, and companies are entitled to this amount in the form of rebates in employers' social security contributions. If the cost of training is higher than this amount, then the company has to cover the remaining part itself.	In the normal short-time work regime it depends on the training scheme that is used: 1. Employer for employer's training plan, with some potential subsidies by training funds like Fonds Paritaire de Sécurisation des Parcours Professionnels - FPSPP. 2. State for individual training account. There are also specific measures providing a State financing for training in the case of reduced activity (FNE Formation, National Employment Fund training), but they do not belong to the standard 'partial activity' framework, they are an alternative.	Employer and national PES: The employer pays the costs of the training; the national PES pays a subsidy in equal share to the employer and the employee (30% of minimum wage for time not worked - currently €438,81 per month).
Uptake of training option?	Uptake of training during short-time is very limited.	No detailed information on time spent in training measures is available.	Not readily available information	There are no published statistics about actual participation. According to the CVTS-4 survey among firms using short-time work in 2010, 24% declared that they combined STW and training measures.	No data available on uptake. Duration of training should not exceed 50% of the normal working time.

	BE	DE	ES	FR	PT
Assessment and lessons learned?	After the financial crisis and the subsequent surge in short-time compensation, efforts were initiated to boost training for short-time workers but apparently never implemented.	During the last global economic crisis, the take up of short-time work was very high and additional financing for training during short-time work was made available. However, take-up of continuous training was quite low: only 5% of short-time workers participated in training in 2009.	Rebates in employers' social security contributions have apparently not been effective in incentivising training. Alternatively, training could be made compulsory for firms or workers could be given a greater incentive to participate, for example, by making entitlement to short-term benefits in part conditional on participation in training or increasing the benefit for those who do.	There has been a progressive extension of training possibilities for short-time workers. Training workers while maintaining their labour contracts in the case of reduced activity is clearly seen as an alternative to unemployment. Financial incentives have been developed: on the workers' side through higher compensation; on the firms' side through financing of training costs (by training funds and by the French State for the current crisis).	During the 2009-2014 crisis, training for workers on short-time was an important instrument to increase workers' employability and companies' competitiveness. In its most recent legislation on exceptional measures facilitating STW arrangements, the Portuguese government has explicitly maintained the possibility of training.

Source: ECE questionnaire and national sources.

Note: Information refers to status pre- Covid-19 crisis. Regulations for short-time work, including training, are changing rapidly in the current crisis period.

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