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Labor Market Insurance Policies in the Twenty-First Century

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Abstract

The COVID-19 crisis was a stress test for unemployment insurance schemes as it involved a sudden and unexpected shutdown of a very large set of activities. This forced countries to introduce, often from scratch, income support schemes for workers under new forms of employment and for the self-employed. There was also a considerable expansion of short-time work schemes. As we move past this crisis, labor markets are likely to be characterized by substantial labor reallocation, and major innovations in labor market policy will be required to smooth consumption of workers involved in this reallocation. We survey the large body of research on schemes complementary to unemployment insurance to reduce the costs of reallocation. We focus on short-time work, partial unemployment insurance, and wage insurance and compare their properties to those of standard unemployment benefits. Next we present the main empirical results on the effects of wage insurance, partial unemployment insurance, and short-time work. In the final section we discuss directions for further research.

1. INTRODUCTION

The reallocation of jobs is a huge process in all countries. In advanced economies, about 15% of jobs are destroyed every year and about the same proportion is created. The reallocation of jobs is accompanied by an even more important reallocation of manpower across jobs. This phenomenon is an essential ingredient of productivity growth. It is linked to globalization and technological progress, which create new products and new business models that are likely to foster growth and improve well-being for all. However, this structural change also has social costs. It is well established that job loss can have significant detrimental effects on the earnings of individuals for decades, especially for long-tenured workers who are dislocated. This is observed in the United States, where earning inequalities are drastic and the welfare state is limited, but also in European countries, where the social safety net is tighter and earnings inequalities are less pronounced (Sullivan & von Wachter 2009, Davis & von Wachter 2011, Bertheau et al. 2022). Technological progress changes the nature of jobs, too. With the automation of tasks and the spread of online platforms, the new economy reshapes workplaces, inducing a substantial rise in the incidence of such alternative work arrangements as temporary work, part-time work, self-employment, and the new kinds of work emerging in the online gig economy (Katz & Krueger 2019). These changes offer a host of opportunities for more employee-friendly options, such as flexible schedules and working from home, which can favor the entry of persons, in particular women with young children, who might have experienced barriers to entering the traditional workforce (Mas & Pallais 2017); but they also raise concerns about job quality and stability.

The COVID-19 pandemic has accelerated this process. On the one hand, it has forced a huge increase in remote working blurring the border between dependent employment and self-employment and changing the location of work well beyond the lockdown periods. On the other hand, it has also induced a major reallocation of workers across jobs, and further reallocation is expected to occur in the years to come. The recreational and hospitality sectors have been particularly affected by this increased reallocation (Aaronson et al. 2021, David 2021) that, unlike in previous recessions, occurred not only within sectors, but also across sectors (Barrero et al. 2021). This phenomenon is likely to be amplified by the green transition (IMF 2022).

Unemployment insurance (UI) plays a key role in providing growing numbers of individuals with a degree of support in maintaining a flow of income while transitioning between jobs. By allowing liquidity-constrained workers to smooth consumption when they lose their jobs and by providing resources to help them look for jobs and acquire new skills, UI can improve the well-being of workers and facilitate their reallocation toward more productive jobs. However, standard UI requires rather demanding entitlement conditions in terms of length of contribution periods and imposes a strong separation between employment and nonemployment spells. In a labor market in which workers enter and exit unemployment at high frequencies and many jobs are part-time or involve a few hours per week, as in gig activities, standard unemployment benefits would underinsure workers and leave entire segments of the workforce without any shelter (Harris & Krueger 2015).

In this article we survey the large body of (mostly applied) research on schemes reducing the costs of reallocation complementary to UI. Our attention is on the three main schemes adapted and used more intensively during the health crisis: short-time work (STW; preventing layoffs by subsidizing hours reductions), partial UI (enabling workers to combine unemployment benefits with low income jobs), and wage insurance (WI; offering a temporary wage subsidy to workers changing jobs). Designing effective schemes of these types is not an easy task because there are important selection and moral hazard issues, as in all insurance systems.

One needs to know in detail how systems work in practice and how people behave in order to understand systemic impacts and thus be in a position to evaluate the effectiveness of policies.

This article reviews how part-time unemployment benefits, STW, and WI operate in different OECD countries and what is known about their impact from both a theoretical and an empirical perspective. The article is organized as follows. Section 2 is devoted to STW, Section 3 to part-time unemployment benefits, and Section 4 to WI. Section 5 offers concluding comments on how these schemes can cope with the new challenges imposed by the health crisis.

2. SHORT-TIME WORK

2.1. Short-Time Work Regulations in OECD Countries

STW is a public program intended to preserve jobs in firms experiencing temporarily low revenues by providing income support to employees whose hours of work are reduced. STW schemes provide additional funds so that employees can reduce their hours of work without a proportional reduction in their take-home pay. In general, the employees earn less than they do when they work usual hours but more than they would receive in unemployment benefits. The cost of supplementing the employee's income is typically shared by the employer and the state.

The Great Recession at first, and the pandemic later on, induced most OECD countries to introduce, often from scratch, schemes of this sort or to expand the scope of existing ones (OECD 2020). STW is indeed designed to prevent large-scale job losses when firms are facing temporary adverse shocks, just as those experienced during the lockdown measures taken by most OECD countries in 2020. A few countries (Greece, Latvia, Slovenia, and the United Kingdom) opted for introducing a furlough scheme instead.

STW schemes differ from temporary layoffs or furlough schemes (mandatory and unpaid leaves of absence), widely used in the United States also during the pandemic,[1] in that they do not necessarily require the worker to reduce working hours to zero. In other words, they operate to a large extent on the intensive margins by encouraging employers to adjust hours of work rather than discontinuing, even temporarily, the employment relationship. Moreover, there is a much stronger commitment to preserve the job in a STW than in a furlough scheme.[2]

At the same time, STW entitlement conditions concern firms rather than workers, and typically subsidies are anticipated by employers and then repaid by the social security administration. As the pandemic hit the small business sector much more than during previous recessions, STW had to be extended to many small firms that were not initially eligible for it. This required transforming STW into a kind of credit line quickly usable by small businesses, as self-employed workers with dependent employees dramatically needed liquidity to cover their payroll while facing a free fall of their revenues during the lockdown. While temporary loans to firms could in principle be preferable to STW in dealing with liquidity constraints, they generally required longer procedures for disbursement than STW.

2.1.1. The design of short-time work schemes. The design and regulation of STW schemes vary greatly across countries (Cahuc & Carcillo 2011, Hijzen & Venn 2011). Firms are usually required to meet a number of eligibility criteria to enter into STW arrangements. These criteria include evidence of slowdown in their economic activity in terms of some reduction in production or sales, the existence of collective agreements which allow take-up of STW, and consultation with

[1] Half of the US states had STW schemes in place even before the pandemic. The United States also had a sort of STW scheme for small firms, notably the Paycheck Protection Program providing small firms with loans to cover labor costs (Autor et al. 2022). However, the allocation of these resources was difficult and take-up rates were relatively low.

[2] Borland & Hunt (2021) estimate that around one-third of temporary layoffs were actually recalled during the pandemic in Australia. Torrence & Rejda (1987) estimate that the costs of retraining workers involved in temporary layoffs may well exceed the costs of STW.

employees or individual agreements. While some countries offer STW to all workers irrespective of their employment status (Denmark, Finland, Ireland, Spain, United Kingdom), in most countries workers qualify for STW only if they have a minimum contribution record. This prevents many workers with fixed-term contracts or part-time workers with few working hours from being eligible for STW. In the course of the Great Recession and in the pandemic, these eligibility criteria were relaxed for workers with atypical contracts in many countries.

STW is often conditional on actions to be taken by firms or employees. These include the commitment not to dismiss employees for a certain period after STW compensation comes to an end, job search requirements, the design of a recovery plan, and training of employees.

Working-time reductions can be either total or partial, depending on the size of the economic slowdown. In several countries, including Germany, STW involves fixed cost per worker for employers (e.g., in terms of social security contributions to be paid independently of the number of hours worked). This reduces the incentive to use STW as a sort of subsidized furlough scheme, down to 100% hour reductions.

A maximum duration of compensation prevails in all countries, notably because STW must be temporary by nature. In most countries, income falls progressively as hours fall further below their usual level. In a majority of countries, employers bear a share of the total cost of compensation for each reduced hour. This is a way to incentivize firms and employees not to abuse the system.

2.1.2. The coverage of short-time work. In normal years the fraction of the labor force using STW is low in most OECD countries. This low coverage in normal years is associated with a low share of public expenditure, which is well below 1% of GDP in most countries. The take-up increases dramatically during recessions. From involving less (often much less) than 1% of the workforce in all OECD countries in 2018, by April 2020 these schemes involved about 20% of workers in the OECD area, with peaks of 50% in countries such as New Zealand.

The dispersion of take-up rates across countries in normal years is clearly related to differences in STW schemes (Cahuc & Carcillo 2011, Hijzen & Venn 2011). The take-up is positively correlated with the permissible reductions in weekly working hours that can be compensated, with the maximum duration of the scheme, and with the share of labor cost of hours reductions that is subsidized. Surprisingly, take-up rates do not appear to be related to such stringent requirements as the employers' commitment to not dismiss employees for a certain period after the end of STW compensation, job search requirements, the design of a recovery plan, or the training of employees. It might be that these conditions do not play an important role because their enforcement is difficult.

STW schemes also tend to be more developed in countries with stricter employment protection rules, as measured by the OECD employment protection indicator (Boeri & Bruecker 2011, Cahuc & Carcillo 2011, Hijzen & Venn 2011, Lydon et al. 2019). This positive relation between STW and job protection reflects a trade-off in regulations affecting internal (employment adjustment within the firm) and external (ease of dismissals) flexibility. Countries that favor internal flexibility combine stringent employment protection regulations and generous STW, while external flexibility is associated with weak employment protection and no or very little STW use. At first sight, internal flexibility might seem preferable, insofar as it reduces job destruction during recessions, preventing inefficient layoffs. However, internal flexibility also has disadvantages. First, internal flexibility does not benefit all workers. It is clearly beneficial to workers in permanent jobs, but it can be detrimental to outsiders whose access to employment can be more difficult if STW reduces job turnover. This disadvantage is particularly relevant in strongly segmented labor markets. Second, STW may dampen the reallocation of workers toward more productive jobs, a consideration that is particularly important in the aftermath of the pandemic.

2.1.3. Involvement of small business and liquidity constraints. As mentioned above, several countries during the pandemic have considerably broadened entitlement conditions, enabling more workers and firms to have access to STW. The major extension has been toward small businesses in the service sector. Unlike previous recessions that hit particularly hard large exporting manufacturing plants, the pandemic has been very tough with small employers—for example, in the retail trade, tourism, and entertainment sectors.

This extension poses a number of problems to the design of STW. Traditionally STW operate as a sort of ex-post compensation to firms: Employers get the authorization to draw from the STW fund based on a check of the entitlement conditions. Once the authorization is provided, the employer advances the payments to the workers involved and gets a refund ex-post from social security. This mechanism allows firms to achieve maximum flexibility in carrying out hour reductions. They do not have to pre-commit to involving a given number of workers in STW and to a predefined structure of hour reduction; they will just report ex-post to the social security administration the number of workers involved and the extent of the hour reduction.

There are at least two problems in extending this design to small businesses. First, small employers are likely to be liquidity constrained and hence not in a position to anticipate the subsidy to the workers. Second, controls from the social security administration are not possible when reductions are declared only ex-post. This may increase moral hazard problems, as employers can use STW as a wage subsidy without implementing any hour reduction. It is precisely to discourage moral hazard that it can be desirable to introduce experience rating, that is, to force employers making use of STW to pay higher contributions to the fund the more they draw from it. However, experience rating may make the scheme too costly for liquidity-constrained small employers genuinely restructuring their activities if increases in contributions are not sufficiently postponed.

2.2. The Theory of Short-Time Work

The rationale for STW is that firms may dismiss workers inefficiently (from a social welfare perspective) when their revenue drops. From this perspective, it can be appropriate to use STW to allow firms facing temporary drops in their activity to retain their employees. However, STW may also induce inefficient reductions in hours worked and may prevent the reallocation of labor toward more productive firms.

2.2.1. Reducing layoffs. The introduction of STW arrangements is often seen as a means to avoid drastic layoffs (FitzRoy & Hart 1985, Burdett & Wright 1989). In the presence of fixed costs per worker, savings on labor costs can be better achieved by acting on the extensive margin (Boeri & van Ours 2021). However, layoffs generate large negative externalities, and employers have limited incentives to take into account the social costs of their dismissal decisions. The fiscal externalities of layoffs are numerous and sizeable: They include the unemployment benefits, the social transfers paid to unemployed workers, and the drop in taxes and social contributions induced by the removal of jobs. To these costs we may add the increase in health expenditure and the rise in criminality induced by unemployment (Fougère et al. 2009).

Experience-rating systems, whereby employers' social contributions depend on the induced social costs of their firing decisions, can be used to reduce excess layoffs (Feldstein 1976, Blanchard & Tirole 2007, Cahuc & Zylberberg 2008). These inefficient layoffs can be completely eliminated when each firm fully covers the induced social cost of its firing decisions. However, there are limits to experience rating. Notably, many firms may face financial constraints that prevent them from keeping their employees. This is a particularly serious issue for small businesses. Moreover, evidence on employment adjustment during the Great Recession in the United States shows

that highly leveraged firms experienced larger employment losses in response to declines in local demand (Giroud & Mueller 2017). These highly leveraged firms were not less productive; nevertheless, their high leverage reduced their capacity to raise additional short- and long-term debt in response to a decline in local demand. As a consequence, they experienced more layoffs and were more likely to close down. In these circumstances, STW arrangements may not avoid inefficient job destructions due to capital market imperfections (Burdett & Wright 1989, Braun & Bruegemann 2017).

STW may also be an effective means to subsidize employment, compared to wage or hiring subsidies, because it can directly target firms with jobs at risk of being destroyed, and even the most fragile jobs within those firms. Other policies have no such possibility. Insofar as it is more profitable for firms to reduce the working hours of temporarily low-productive workers, STW induces firms to retain low-productivity jobs much more precisely than wage or hiring subsidies. Hence, STW can help sustain employment in recessions at a small cost relative to other policies providing financial support to firms (Cahuc et al. 2021, Giupponi et al. 2022).

It has also been argued that STW is more equitable because it is a work-sharing scheme distributing the adjustment burden over a large number of workers who reduce their hours of work rather than dismissing some workers outright (Abraham & Houseman 1994, Walsh et al. 1997, Vroman & Brusentsev 2009). This is particularly true when STW is implemented in the context of solidarity agreements aimed at preventing layoffs.

2.2.2. Limits to short-time work. Although STW can be useful to avoid inefficient job destructions, it also has some disadvantages.

First, STW distorts downward the number of hours worked per employee. Thus, STW may be used to reduce the hours of work of workers who would have not been dismissed in the absence of the STW, inducing inefficient reductions in hours worked. This can be particularly important if STW is strongly subsidized and hence there are strong incentives to use STW when the firm's activity slows down. Firms facing seasonal activity fluctuation can frequently use STW (Cahuc & Nevoux 2017) benefiting from cross-subsidies that reduce aggregate production. To limit these cross-subsidies, it is desirable to rely on experience-rating systems, provided that these additional costs can be faced gradually by firms. Experience rating would then allow firms facing short-term financial constraints to sustain employment without inducing cross-subsidies that reduce aggregate production.

Second, STW may dampen the reallocation of jobs. Inasmuch as STW causes fewer workers to be released into the unemployment pool from incumbent firms, new firms find it costlier to hire labor. In this context, STW may prevent labor from flowing toward the most productive firms and hence generate adverse effects on global production (Cooper et al. 2017).

Third, as STW mostly benefits permanent workers, it may accentuate the labor market segmentation between stable and unstable jobs. The complementarity between STW and the stringency of employment protection legislation across OECD countries suggests that this phenomenon is potentially important. Indeed, empirical research finds that several STW schemes saved permanent jobs but had no effects on temporary jobs (Hijzen & Martin 2013, Giupponi et al. 2022).

Fourth, problems in monitoring hour reductions may become more severe in the post-pandemic organization of work. The expansion of remote working, in particular, reduces the importance of statutory working hours and the observability of hours worked. In this context, there is a high risk that STW can be used as a wage subsidy benefiting firms that make the largest use of remote working.

All in all, the relative weight of the advantages and disadvantages of STW depends on the behavior of workers and firms. This is an empirical issue that is covered in the next section.

2.3. The Empirics of Short-Time Work

Empirical evaluations of STW can be classified in two broad categories. The first category relies on country-level or cross-sector-level data, while the second category relies on firm-level data.

2.3.1. Macroeconomic evaluations. Macroeconomic evaluations using cross-country data (Abraham & Houseman 1994, Van Audenrode 1994, Boeri & Bruecker 2011, Cahuc & Carcillo 2011, Hijzen & Venn 2011, Hijzen & Martin 2013, Brey & Hertweck 2020) or cross-state data in the United States (Abraham & Houseman 2014) have generally identified a positive impact of STW on employment. Their conclusions are mostly drawn from a small number of observations, limiting their ability to identify a causal relation between STW and employment.

That being said, it has been found that STW did stabilize employment and reduced unemployment during the 2008–2009 recession (Boeri & Bruecker 2011, Cahuc & Carcillo 2011, Hijzen & Venn 2011). Overall, these evaluations suggest that STW compensation programs had an important impact on preserving permanent jobs during the economic downturn. The largest impacts were in Germany and Japan, where 0.7–0.8% of jobs were saved.

2.3.2. Microeconomic evaluations. The first microeconomic evaluations mostly use firm-level sources in Germany and France. In Germany, all analyses rely on the IAB Establishment Panel, an annual survey with approximately 16,000 firms, representing 1% of all firms and 7% of all employees. Resulting estimates do not provide unambiguous results, mainly because of the inadequacy of data to deal with the selection into STW.[3] This literature runs regressions in which employment growth is explained by STW use and by a set of control variables including the revenue growth of the firm. To avoid bias induced by selection of firms with specific adjustment of employment into STW, the prior experience of firms with the program is used to instrument STW. Using this approach, it is found that each employee on STW saved about 0.35 jobs during the Great Recession in Germany, with a 95% confidence interval equal to [0.04, 0.70].[4] However, this result should be interpreted cautiously, since empirical evidence shows that firms that use STW tend to adjust employment more strongly when output falls compared to firms that do not use STW (Bellmann et al. 2015). This behavior of STW users may result from technical constraints: Firms have more incentives to use STW if features of their production process imply that it is more costly to store production or to find productive activities for incumbent employees when demand drops. At the same time, several studies indicated that STW effectively selects firms hit by negative shocks as measured by revenues or labor productivity (Giupponi & Landais 2018). Hence, instrumenting program use with prior experience does not fully solve the selection issue and is likely to lead to an underestimate of the potential positive impact of STW on employment. This may explain why several contributions using this instrument found no positive effect on employment. Studies using French data face a similar difficulty. Their results tend to show that establishments authorized to use STW are more likely to go bankrupt.[5]

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[3] Boeri & Bruecker (2011), Balleer et al. (2016), and Tilly & Niedermayer (2016) find positive effects of STW on employment. Bellmann & Gerner (2011), Kruppe & Scholz (2014), and Bellmann et al. (2015) find no effects of STW on employment.

[4] This is in line with the findings of Boeri & Bruecker (2011), who used the same identification strategy.

[5] Calavrezo et al. (2010) rely on propensity score matching to deal with the selection issue.

More recent studies find positive employment effects of STW in France and in Italy. Cahuc et al. (2018, 2021) devise a causal identification strategy based on the geography of the program. They find that STW did save jobs in firms faced with large drops in their revenues during the Great Recession, in particular when highly leveraged, but only in these firms. The measured cost per saved job is shown to be very low relative to that of other employment policies, because STW targets jobs at risk of being destroyed. The identification of Giupponi & Landais (2018) relies on the interaction between two sources of variation in eligibility in Italy: sector and firm size. They find large and significant negative effects of STW on hours worked but large and positive effects on headcount employment. Contrary to the findings of Cahuc and colleagues, employment effects disappear when the program stops. Giupponi & Landais also identify the presence of significant negative reallocation effects of STW on employment growth of untreated firms in the same local labor market. Kopp & Siegenthaler (2021) use as control group firms that did not get the authorization to use STW in Switzerland during the Great Recession, and they find that the policy paid for itself.

Christl et al. (2022) investigate the impact of the COVID-19 pandemic on German household income using a micro-level approach. They find the consequences of the crisis to be highly regressive, with a strong impact on the poorest households. However, this effect is nearly entirely offset by automatic stabilizers and discretionary policy measures. STW schemes, and especially the one-off payments for children, are effective in cushioning the income loss of the poor.

All in all, empirical evidence indicates that STW can be effective at saving jobs in recessions. STW has the advantage of limiting the loss of specific human capital following the separation of employees from their firms. However, STW reduces the number of hours of work and limits the reallocation of workers to more productive jobs. The effectiveness of STW depends on the magnitude of each of these phenomena, which is currently insufficiently known empirically (Giupponi et al. 2022). In addition, the effectiveness of STW is highly dependent on employment protection regulations. In environments where wages are downward rigid and labor contract termination is long and costly, corporate downsizing during recessions can significantly increase business failures. STW is then essential to dampen recessionary shocks. On the other hand, when adjustments at the extensive margin are less costly, as is the case in the United States, there may be a lower need to rely on STW for the survival of firms.

3. PARTIAL UNEMPLOYMENT INSURANCE

In a growing number of situations, and even more so after the rise of remote working inherited from the pandemic, the hours worked are less well defined, which reduces the scope of STW. At the same time, the rise in alternative work arrangements predating the COVID-19 crisis has blurred the line between employment and unemployment. Under these conditions, more and more people entitled to unemployment benefits are finding temporary jobs of very short duration. This means that many people are likely to enter and exit unemployment with high frequency. At the limit, unemployed persons may have paid work one day and an entitlement to the dole for the next day. Under these circumstances, what should be the entitlement conditions of an efficient insurance?

To deal with this type of situation, many UI systems use partial unemployment benefits, which enable claimants to keep part of their unemployment benefits while earning low incomes (i.e., lower than the unemployment benefits) from work. In several countries, the unemployment benefits that are not paid to the claimants while they are working create the right to extend the potential duration of unemployment benefits. Partial UI induces unemployed workers to accept part-time jobs, or jobs of short duration, that they might have had to refuse if the unemployment benefits eligibility rules required recipients to have zero labor earnings.

3.1. The Design of Partial Unemployment Insurance in OECD Countries

Partial UI refers to benefits paid to persons working with occasional or part-time (henceforth marginal) jobs who have lost a full-time job or an additional part-time one and are seeking a new job in order to work more hours. This scheme is different from STW, which refers to benefits compensating for the loss of wage or salary due to short-time working arrangements, and/or intermittent work schedules, in which the employer/employee relationship continues. Partial UI exists in many European countries and in North America. It covered about 0.25% of the labor force in OECD countries in 2019.[6] Its design is very heterogeneous across countries.

There is indeed a great diversity of rules concerning the relation between the current earnings of individuals from short- or part-time employment and current unemployment benefits, the implications of current partial unemployment benefits on future unemployment benefits entitlement, and the duration of partial unemployment benefits.

3.1.1. Earnings and partial unemployment benefits. Two types of rules can be distinguished concerning the relation between the earnings of unemployed workers from marginal jobs and partial unemployment benefits.

According to the first type of rules, recipients accepting marginal jobs can earn up to a specific amount (e.g., 165 euros in Germany), called the "earning disregard," without any reduction in benefits during the reference period, which can be the week or the month. Above the disregard, the current benefits are reduced in proportion to the labor earnings. Above this earning level, then, the benefit-reduction rate can be very high, up to 100%, creating traps in short- or part-time activities. There is a disregard of this kind in Australia, Austria, Belgium, Finland, Germany, Luxembourg, New Zealand, the United Kingdom, and most US states (the exception being the state of New York).

According to the second type of rules, unemployment benefits are not discontinued once the individual accepts a job offer but are reduced in proportion to all labor earnings, or hours or days worked, during the reference period. However, there is not a 100% marginal effective tax rate at work in these reductions, at least up to a given threshold. In other words, only a fraction of the incomes earned are deducted from the unemployment benefits, maintaining some incentive to accept marginal jobs. This means that the implicit effective tax rate is lower than 100%; per each euro earned, there is not a one euro reduction in the level of the benefit. The threshold above which the benefit-reduction is 100% is often defined at the level of the monthly or weekly wage before the job displacement. Canada, France, Ireland, Italy, The Netherlands, Norway, Slovenia, Switzerland, and the United States have schemes of this sort.

3.1.2. Implications for unemployment benefits entitlement. In some countries, the savings on benefits that are not paid to claimants for periods in which they work are carried forward and made available to these claimants at the end of the period of benefit entitlement. This is the case in Canada, Finland, France, Israel, Norway, Poland, Sweden, and the United States. In some countries (e.g., Finland, France) all unpaid benefits are carried forward. In other countries, benefits are carried forward only for periods (weeks or months) in which the individual claimed no benefits at all because they had enough work (e.g., Canada). In addition to lengthening the potential duration of the current period of benefit entitlement, the income earned by part-time

[6]This figure is drawn from the OECD data set on "Public expenditure and participant stocks on labour market programmes" (see **https://stats.oecd.org/index.aspx?DataSetCode=LMPEXP**). It is obtained by adding the partial unemployment benefits and the part-time unemployment benefits schemes as defined by the OECD.

unemployed workers allows them to gain eligibility to new periods of benefit entitlement. This is the case in France, for instance, where every day of work while on claim lengthens the current period of benefit entitlement and generates one day of further benefit entitlement once the current period is exhausted, provided that at least 130 days (910 hours) have been worked over the last 24 months.

In other countries (e.g., Germany, Hungary, Portugal), unpaid benefits are not carried forward to the end of the period of benefit entitlement. However, the income earned by partial unemployment benefit recipients does allow them to get eligibility for new periods of benefit entitlement.

3.1.3. Duration of part-time unemployment benefits. Partial UI could induce unemployed workers to remain in marginal jobs instead of striving to access full-time employment. In general, the duration of partial UI is limited by the potential duration of unemployment benefit entitlement. However, as discussed above, this potential duration can be extended by partial unemployment benefits if the benefits that are not paid to claimants for periods in which they work are carried forward to the end of the period of benefit entitlement or, even more so, if the income earned by partial unemployment benefit recipients allows them to start new periods of benefit entitlement.

In order to reduce the possibility that individuals remain entitled to partial unemployment benefits for long periods, several systems limit their potential duration. For instance, in Denmark, the land where such "policy circles" of unemployment benefits were widespread back in the 1990s, the right to supplementary unemployment benefits is limited to 30 weeks within the last 104 weeks.

3.2. The Theory of Partial Unemployment Insurance

Partial unemployment benefits aim at making marginal jobs more attractive for unemployed job seekers, raising employment and production, and reducing the costs of UI. Nevertheless, partial UI can lock workers into marginal jobs, thereby reducing the total number of hours worked.

3.2.1. The potential effects of part-time unemployment insurance. Partial UI encourages job seekers who are looking for stable full-time jobs to accept marginal jobs in the meantime.

Accepting marginal jobs can have several advantages. These jobs can favor access to full-time and more stable jobs if employers use these short spells of employment to screen workers (Farber 1999, Neugart & Storrie 2002, Houseman et al. 2003). Accessing marginal jobs can broaden the job search network and reduce human capital depletion of jobseekers. Finally, while working on marginal jobs, unemployed workers generally pay taxes and get lower unemployment benefits and social transfers, which improves public finances.

Promoting marginal jobs may also have disadvantages. Many people who work on these jobs would like to get full-time and stable jobs. However, when partial UI provides income at levels close to those of stable and full-time jobs for relatively long periods, this may reduce the appeal of full-time and stable employment (Ek & Holmlund 2015). This has many negative effects. It raises income uncertainty, it reduces the incentives to invest in human capital, it worsens career prospects and long-term earning opportunities, it reduces the ability to obtain credit, it makes childcare arrangements more complicated, and it degrades the state of public finances.

3.2.2. The optimal design of partial unemployment insurance. Economic analysis provides limited guidance when it comes to the optimal design of partial UI. The canonical analysis of optimal UI overlooks the choice of the number of hours of work and the possibility of partial unemployment benefits (Baily 1978, Chetty 2006). It assumes that individuals can be in only two states, either full-time unemployed or full-time employed. In this framework, the optimal level of

unemployment benefits increases with risk aversion and decreases with the elasticity of unemployment duration with respect to unemployment benefits. Introducing partial UI in this framework is not an easy task. One needs to account for labor supply at the extensive margin (working or not working) and at the intensive margin (choice of the number of hours worked conditional on working) in a dynamic and stochastic context. This type of problem has been studied by the literature on optimal taxation and optimal insurance. This literature shows that it is essential to coordinate the tax system with UI. It suggests that the optimal level of partial unemployment benefits should depend on the intertemporal elasticity of labor supply and on labor market frictions that limit the adjustment of hours worked (Farhi & Werning 2013, Werquin 2016). Beyond these results, no simple conclusion providing clear guidance to designing optimal partial UI has emerged so far. Much remains to be done on this issue.

From this perspective, the contribution of Le Barbanchon (2016), focusing on partial UI in the United States, is particularly interesting. In the systems analyzed by Le Barbanchon, insurance recipients accepting part-time jobs can earn up to the disregard with no reduction in benefits. For every dollar earned above the disregard, current benefits are reduced on a dollar-per-dollar basis: The static marginal benefit-reduction rate is 100%. However, the reduction in benefits is not lost; it can be paid in a later week. The corresponding benefit transfer delays the potential benefit exhaustion date. Accordingly, forward-looking recipients make decisions based on a dynamic marginal tax rate, which is lower than the static benefit-reduction rate. Le Barbanchon analyzes the consequences of changes in the benefit-reduction rate. He finds that setting the benefit-reduction rate at 80% instead of 100% would be welfare improving. Moreover, he shows that the optimal benefit-reduction rate should vary over the unemployment spell and should depend on the arrival rate of job offers.

3.3. The Empirics of Partial Unemployment Insurance

The main issue addressed by the empirical literature is the impact of partial unemployment benefits on access to nonregular and regular employment. This literature faces important difficulties when it comes to causal effects, insofar as nonobservable characteristics of workers involved in partial UI are likely correlated with the possibilities individuals have to access regular jobs. In particular, it may be that people with identical observable characteristics who access marginal jobs more easily also have easier access to full-time and stable jobs. Therefore, if it turns out that recipients of partial unemployment benefits do find stable and full-time jobs faster than full-time unemployed workers, this does not mean that partial unemployment benefits per se foster accession to stable and full-time employment. The empirical literature has developed different strategies to deal with this issue.

3.3.1. Natural experiments. The seminal contribution of McCall (1996) exploits variations in the design of partial unemployment benefits across US states from 1986 to 1992. In most US states, UI recipients accepting part-time jobs can earn income up to the level of the disregard, with no reduction in benefits. Above the disregard, current benefits are generally reduced on a dollar-per-dollar basis. The disregard varies across states and within states over time. A 10% increase in the disregard is estimated to raise the probability of part-time reemployment for UI recipients from 3.9% to 5.7% in the first three months of unemployment. Moreover, a 10% increase in the disregard is found to reduce expected joblessness durations within a range varying from 0.3% to 0.9%. McCall (1996) finds that the effects of partial unemployment benefits are heterogeneous across demographic groups. An increase in the disregard is found to significantly raise the probability of part-time reemployment for blue-collar youth during the first three months of joblessness. However, no significant impact on the reemployment behavior of white-collar youth is detected.

Le Barbanchon (2016), relying on a similar identification strategy with US data, estimates that partial unemployment benefits do increase labor supply. An additional factor operating in this direction is the possibility to carry forward benefits (Le Barbanchon 2021).

AitBihiOuali et al. (2017) draw on a reform that in France reduced by 20% the threshold number of hours below which persons are entitled to the disregard. Exits to jobs with hours just below the threshold increased after the reform. The elasticity of hours with respect to the earnings from partial UI is about 0.14.

3.3.2. Timing of events. Several studies rely on a timing-of-events approach (Abbring & Van den Berg 2003) to disentangle causal from selection effects of flows into partial unemployment. This approach compares the behaviors of groups of individuals who differ in the timing of the transition from full-time unemployment to partial unemployment, assuming that this timing is random during their unemployment spell. In this setup, individuals who take up partial unemployment benefits earlier in their unemployment spell belong to the treatment group, which is compared to the (control) group of individuals who take up these benefits later in their unemployment spell. Note, however, that this approach makes it possible to identify the effects that working in marginal jobs while on claim has on exits from unemployment, but it does not make it possible to identify the effects of the partial unemployment benefits per se, since the search behavior of individuals who did not start working while on claim may be influenced by the partial unemployment benefits.

Relying on this approach, Kyyrä (2010) found that starting work while on claim speeds up the access to regular employment in Finland. This effect is large and significant: When the applicant takes up a short full-time job that qualifies for partial unemployment benefits, the hazard rate of moving to regular employment increases almost by one-half.

Kyyrä et al. (2013) highlight the importance of the design of partial UI in Denmark. Receiving partial unemployment benefits and working part-time reduce unemployment durations on average. However, the sign and magnitude of the impact of starting work while on claim vary with individual characteristics and with the timing and length of the partial unemployment benefit period. Longer spells of partial UI tend to prolong unemployment duration, in particular for married women, white-collar workers, and manufacturing workers. The effects are much less detrimental for young workers and immigrants with short supplementary benefit periods.

Starting work while on claim is also estimated by Cockx et al. (2013) to foster access to regular employment for young women in Belgium. The survivor rate in unemployment of partially unemployed workers is reduced by 27 percentage points one year after the start of receipt of partial unemployment benefits, compared to that of full-time unemployed workers.[7]

Gerfin et al. (2005) found that starting work while on claim exerts a positive impact on entries into regular employment in Switzerland.[8] The chances that participants in partial unemployment benefits programs will get a regular job 15 months after starting work while on claim are about 7–9 percentage points better than those of nonparticipants. The effects are heterogeneous across workers. Starting work while on claim is ineffective for unemployed persons who can find jobs easily anyway or who are having a short unemployment spell.

[7]Contrary to the finding of Kyyrä et al. (2013) described above, Cockx et al. (2013) do not find that the spell of unemployment benefits affects the transition to regular employment. These results should be interpreted with caution, since many transitions are missing in the data of Cockx and colleagues.

[8]Gerfin et al. (2005) analyze the impact of partial unemployment benefits on the chance of getting a job of duration of at least three months with earnings of at least 90% of those in the previous job.

In France, Fremigacci & Terracol (2013) find a lock-in effect of starting work while on claim when individuals are eligible for partial unemployment benefits and an increased transition rate to regular jobs once unemployed workers are no longer eligible. These effects are significantly less important for low-skilled and low-experience unemployed workers, who face greater difficulties in finding jobs. This suggests that partial UI can create incentives to remain longer in partial unemployment and then seek regular jobs once the opportunity to get partial unemployment benefits is exhausted.

3.3.3. Controlled experiments. O'Leary (1997) and Lee et al. (2021) analyze the consequences of the Washington State Unemployment Insurance Earnings Deduction Experiment, in which for one year, starting in October 1994, the state of Washington conducted a large randomized experiment to investigate the effects of reducing the amount of benefits deducted from claimants who worked while on claim. They find that the tax reduction had no positive effects on labor supply and increased the UI expenditure because it raised the propensity to claim benefits. They conclude that increasing the weekly benefit is more efficient than reducing the tax.

Cahuc et al. (2021) and Altmann et al. (2022) ran large randomized controlled experiments in France and Denmark. They took advantage of the lack of knowledge of job seekers regarding partial UI and provided information about this scheme. In both cases, the information provision had a significant positive impact on the propensity to work while on claim but reduced the unemployment exit rate, showing important lock-in effects into unemployment associated with partial unemployment benefits.

All in all, the empirical literature points to the fact that the adaptation of UI to the development of new forms of employment has to be undertaken cautiously. To limit the substitution of marginal employment for regular employment, the contributions from marginal jobs should balance the partial benefits. Several countries have introduced voluntary schemes for marginal workers to avoid raising contributions for nonstandard workers (OECD 2018). However, the take-up of these voluntary schemes is low and suffers adverse selection issues, insofar as workers with the highest risks of unemployment have more incentives to participate. From this perspective, it is desirable to adjust the eligibility conditions for each type of worker to ensure that their contributions balance their benefits—for instance, by offering a menu of insurance contracts (Barnichon & Zylberberg 2022). This framework presents the advantage to deal with the selection issue and to facilitate transitions between standard and nonstandard employment. It is also important to counsel and monitor partially unemployed workers to help them in finding full-time jobs.

4. WAGE INSURANCE

WI programs, which provide a temporary wage supplement that partially reduces the wage loss experienced by newly reemployed workers, also aim at inducing unemployed workers to accept low-paid jobs. WI differs from partial UI because individuals are no longer recipients of unemployment benefits once they have been reemployed in WI programs. In practice, WI is generally targeted at permanently long-tenured workers who find themselves displaced. For instance, in 2016, President Obama proposed WI as a program for helping all dislocated workers as they recovered from the permanent loss of a job. He argued that if a "hardworking American loses his job—we shouldn't just make sure that he can get UI; we should make sure that program encourages him to retrain for a business that's ready to hire him. If that new job doesn't pay as much, there should be a system of WI in place so that he can still pay his bills."[9]

[9]Barack Obama, State of the Union Address, January 12, 2016, quoted by Wandner (2016).

The case for WI is motivated by the large-scale reallocation that may follow the pandemic (Barrero et al. 2021), notably in the case in which the most affected sectors (leisure and hospitality to start with) should not rapidly recover from the crisis (Basso et al. 2022). It is also motivated by the large wage losses experienced by long-tenured displaced workers when they find a new job (Chan & Stevens 1999), and by the fact that some new job opportunities related to the consequences of the health crisis at the low end of the skill distribution (e.g., disinfection-related jobs) are relatively low paid and exposed to a high epidemiological risk.

4.1. Wage Insurance Regulations

WI provides partial replacement of lost wages to displaced workers who accept pay cuts. WI benefits are temporary and are reserved for workers who face wage losses when they change jobs. Unlike partial UI, WI provides compensation not only for marginal jobs but also for full-time and stable jobs if the remuneration of the new job is lower than that of the previous job.

As shown above, partial UI exists in many countries. A large set of countries also use permanent in-work benefits to incentivize unemployed workers to accept low-paid jobs. Time-limited in-work benefits are scarcer (Van der Linden 2021). Most of them are targeted at unemployed welfare recipients. WI schemes are even more scarce.[10] Their size is generally very small, and they can be part of programs that include other components, especially job search assistance and training.

US Trade Adjustment Assistance (TAA) is a federal transfer program established under the 1962 Trade Expansion Act that provides assistance to workers permanently separated from their jobs due to international trade. The program aimed at coupling trade liberalization with insurance for adversely affected workers. TAA contains several program components. It provides benefits up to $10,000 for workers enrolled in training programs, up to a maximum of three years. Recipients are also entitled to extended UI benefits while training. In the interest of promoting rapid reemployment, and because training may not pay off for older workers, the Trade Act of 2002 established a WI program called the Alternative Trade Adjustment Assistance (ATAA) for older workers. TAA-certified workers aged 50 or older can get ATAA wage subsidies if they obtain full-time jobs that pay no more than $50,000, earn less than they did in their prior jobs, and find employment within 26 weeks of becoming unemployed. The subsidy is equal to 50% of the wage drop for up to two years. It is capped at $10,000. The ATAA program is small: Yearly inflows into the scheme are of fewer than 100,000 workers.[11]

In Japan, the Employment Continuation Benefits for Older Workers program compensates workers from age 60 to 65 whose wage drops by at least 25%. The compensation goes up to 15% of their current wage until they reach age 65. This program is limited in size. About 190,000 workers were enrolled in 2012 (OECD 2015, p. 120).

In Germany, the Remuneration for Older Workers program[12] introduced in 2003 was targeted at workers aged above 50. Workers finding a new job paying less than their previous jobs were eligible for a compensation of 50% of the earnings drop in the first year and 30% in the

[10] Information is gathered from labor market researchers in Austria, Belgium, Denmark, France, Germany, Italy, The Netherlands, Portugal, Spain, Sweden, Switzerland, and the United Kingdom and from the OECD publication series "Back to work," which identifies wage insurance programs in Canada and in the United States only, among nine countries: Australia, Canada, Denmark, Finland, Japan, Korea, New Zealand, Sweden, and the United States.

[11] Schochet et al. (2012) and Wandner (2016) provide extensive surveys of wage insurance in the United States.

[12] The program's name was Entgeltsicherung für ältere Arbeitnehmer (see Steiner 2017, van den Berg et al. 2017).

second year. The compensation was proportional to the number of hours worked. For instance, if 40 hours per week were worked on the previous job and 20 were worked in the new job, the earnings difference was computed using half of the previous earnings. The program was limited in size. It had less than 10,000 participants until 2006 and about 20,000 when it was cancelled in 2011.

In France, since 2011, companies with fewer than 1,000 employees and companies of all sizes engaged in reorganization or liquidation proceedings that dismiss employees for economic reasons must offer them the option of joining the Job Security Contract[13] program. This program sets them on a return-to-work path including support for the professional goals of the individual as well as training and work periods. Workers finding a new job paying less than their previous jobs are eligible to have their drop in earnings fully offset for a period that may not exceed 12 months, and within a maximum amount of up to 50% of their residual rights to UI benefits. Unlike the US, Japanese, and German WI programs, the French job security contract is not reserved for the elderly. Nevertheless, its size remains small. About 80,000 workers were enrolled in 2016, and most of them were involved in training programs.

The Earnings Supplement Project implemented in Canada in 1995–1998 was a demonstration project run in Manitoba, Ontario and in Quebec aimed at testing the effects of a financial incentive designed to stimulate the reemployment of displaced workers and repeat users of UI (Bloom et al. 1999). The program bridged 75% of the earnings loss for up to two years for workers working at least 32 hours per week within 26 weeks of the offer date.

4.2. The Theory of Wage Insurance

WI aims to compensate displaced workers for wage losses with a temporary subsidy. It has pros and cons. Its proponents argue that it improves labor market equity for workers adversely affected by economic restructuring. They also argue that WI would reduce the periods of unemployment and increase employment and earnings. Its opponents question its equity and raise concerns about its negative impact on the career prospects of WI recipients.

4.2.1. Equitable sharing of the gains from jobs reallocation. A substantial body of empirical contributions has shown that long-tenured displaced workers face significant and persistent problems, including unemployment, earning losses, and health problems, which affect not only them but also their children (Oreopoulos et al. 2008, Bertheau et al. 2022). WI can help in solving these problems insofar as it compensates individuals affected by significant persistent negative shocks. By smoothing the social costs of job reallocation, WI can help improve the level of public support for international trade and, more widely, public acceptance of technological changes. This idea was an important motivation for the implementation of WI in the United States at a time of great fear about the adverse impact of international trade on American jobs (LaLonde 2007, Wandner 2016).

Although it is obvious that WI can compensate long-tenured displaced workers, the question is whether these long-tenured workers should benefit from special treatment. Empirical studies show that cross-worker wage differentials are explained by characteristics of workers and firms. The importance of labor market frictions implies that the firm fixed effects explain a significant share of the wage distribution, meaning that workers identically motivated and productive can be paid very differently (Abowd et al. 2018, Song et al. 2019). In this context, lucky workers are matched with successful firms, in which they can win long and satisfying career paths. Less

[13] The program's name is Contrat de sécurisation professionnelle (see Boum Galiana et al. 2016).

lucky workers find jobs in less successful firms. These jobs offer lower wages and are less stable. From this perspective, compensation for the wage losses of long-tenured displaced workers may do no more than help to reproduce and prolong the inequality between those workers who have been lucky at the start of their career and those who have been less lucky. Designing an equitable insurance system requires precise information about the process that governs wage dynamics over the life cycle of all workers and not just those who lose their job after a long career in the same firm. In the current state of knowledge, there is no strong argument on grounds of equity in favor of compensating long-tenured workers specifically for wage losses. Given that job loss for older workers is a one-way street (Boeri & van Ours 2021), a case could be possibly made for targeting WI to displaced workers on the basis of their age until they reach the pensionable age.

A related issue concerns the definition of the conditions under which WI could be provided. For instance, in the United States, only earning losses related to international trade are offset, while those induced by technological shocks are not. This creates differences of treatment that are also difficult to justify on equity grounds. The only justification may be a political one: Workers appear to oppose more trade-related labor market adjustments than restructuring associated to technological change (Di Tella & Rodrik 2020).

4.2.2. Incentives for reemployment. An important argument in favor of WI is that it provides incentives for finding jobs. The literature on optimal UI does suggest that in-work benefits can be desirable (Hopenhayn & Nicolini 1997, 2009) because they supply incentives to look for and to accept job offers. The use of in-work benefits may allow the UI system to set more generous benefits over longer spells in optimal fashion and to improve the welfare of workers.

However, in the real world, the design of in-work benefits in UI systems has to depend on many parameters, which implies that they are difficult to implement. In particular, optimal in-work benefits should be temporary to avoid excessive costs and lock-in effects in subsidized low-productivity jobs. However, if in-work benefits are temporary, workers may have incentives to go back to unemployment once they stop getting them. From this perspective, time-limited in-work benefits are fully justified if they do function as stepping stones toward stable employment. We will see that empirical evidence provides very little support for this assumption. For these reasons, in-work benefits are seldom used in UI systems, and there is no reason to assess the situation of recipients of WI differently from that of other unemployed workers. This means that there are no strong arguments justifying WI in terms of its positive impact on reemployment.

4.2.3. Job quality and career prospects. WI can induce workers to accept low-quality jobs and to remain in these jobs as long as they are getting compensated for their wage loss. Hence, WI can create disincentives to building human capital and looking for better jobs. This is detrimental to the career path of WI recipients and to the overall efficiency of the labor market (Michau 2021). However, these disadvantages may be mitigated by monitoring and training programs provided to WI recipients. Actually, there are complementarities between financial incentives to finding jobs on one hand and training and monitoring programs on the other. In any case, this suggests that WI should not be isolated from other active labor market policies. The French Job Security Contract program, which includes training, job search counseling and monitoring, and compensation for earnings drops, relies on such premises.

By reducing uncertainty in the returns on investment in human capital, WI can also have direct positive effects on human capital accumulation. If access to potentially long-tenured jobs requires employees to make important investments in specific human capital that cannot be valorized in other jobs, there can be room for WI for long-tenured displaced workers. However, insofar as

employees have limited incentives to invest in specific human capital (Becker 1964, Acemoglu & Pischke 1999), the impact of WI in this area is likely to be limited.

All in all, the most solid justification of WI relies on its potential positive impact on the reemployment prospects of older displaced workers. Determining whether compensation for the wage losses of these workers does in fact yield strong incentives to finding jobs is an empirical issue taken up in the next section.

4.3. The Empirics of Wage Insurance

The scarcity of WI programs entails that very few evaluations are available.[14] Nevertheless, they confirm the evaluations of work-related benefit programs, and in particular time-limited work-related benefit programs, which show that they have an impact on employment and earnings that disappears when work-related benefits are no longer paid.

4.3.1. Evaluations of time-limited in-work benefits programs. Several empirical studies have shown that time-limited in-work benefits can promote employment among low-wage workers. Four trials in Canada and in the United States have randomly assigned people either to a program group that was eligible for earnings supplements or to a control group that was not. Their findings are consistent (Michalopoulos 2005, Card & Hyslop 2009). These programs all increased employment, earnings, and income. However, their effects diminished over time. The effects on employment and earnings were larger and more persistent for long-term welfare recipients with limited education and work experience. The combination of time-limited earnings supplements with employment-related services aimed at helping those eligible to find and keep jobs has effects that exceed those from earnings supplements alone (Robins et al. 2008). Evidence from an experimental program for unemployed welfare recipients in the United Kingdom is in line with these findings (Dorsett 2014); the study found that time-limited in-work benefits combined with post-employment services raised employment. Furthermore, positive but nonsignificant effects on employment retention are observed. These results suggest that time-limited in-work benefits have temporary positive employment effects, which vanish when the benefits stop being paid.

4.3.2. Evaluations of wage insurance programs. The Canadian Earnings Supplement Project involved an experimental design (Bloom et al. 1999). Treated workers were offered payments of 75% of their earnings loss for up to two years if they became employed in a nearly full-time job (32 hours per week) within 26 weeks of the offer date. The program was tested on two groups comprising a total of 5,912 individuals in 1995 and 1996. The program had a small positive and short-lived impact on reemployment and negative effects on wages. Almost 50% of treated workers remained in the scheme for the full two years. The program had almost no effect on the amount or duration of unemployment benefits.

The effects of the WI program for older workers in place in Germany during the period 2003–2011 have been evaluated by a field experiment involving an information treatment sending information about the program to 2,328 eligible persons. This treatment is used as an instrument to estimate the effects of the program. Receipt of this information increased the share of individuals informed about the program by around 20 percentage points. A survey shows that more than 70% of workers thought that this program was suited to bring older unemployed individuals back into jobs. Only around 20% answered that in-work benefits stigmatized workers, and around 66% that they were preferable to wage subsidies to employers. Nevertheless, the employment impact of

[14]Schochet et al. (2012) and Hyman (2018) evaluate the impact of TAA in the United States, but their evaluations are not focused on the wage insurance component of this scheme.

in-work benefits was mixed. For workers aged 50–54 and 60–64, receiving the information had no significant effect on employment. There was a small positive impact on employment of individuals aged 55–59. Moreover, there were small negative effects on the earnings of those aged 50–54 (Van den Berg et al. 2017).

Hyman et al. (2021) evaluate the impact of the US TAA program, which included a WI program available to workers aged 50 and over who were laid off in a trade-related displacement. They compare the employment and earnings trajectories of workers exceeding this age threshold with those of slightly younger workers. They find that WI-eligible workers are more likely to be employed in the years just after displacement and that their earnings are higher during this period, but this difference is entirely accounted for by the higher probability of employment. The gaps in employment probability and earnings progressively fade away and cancel out after five years.

All in all, current evaluations do not provide much support for the effectiveness of WI to boost employment. The employment impact of time-limited in-work benefits seems to be smaller for displaced workers than for welfare recipients, perhaps because they have higher reservation wages and need time to revise their expectations about career prospects. It is possible that combining WI with counseling and employment-related services could make WI more effective. Much research is needed before convincing lessons can be drawn in this realm.

5. CONCLUDING REMARKS

Partial UI, STW, and WI have been tried at different scales in several countries and evaluated, to a lesser extent, by economists and social scientists. From our survey of these experiments and evaluations, we can draw the following lessons.

First, partial UI, which exists in many countries, must indeed play a key and increasing role to support the development of new forms of employment. However, the adaptation of UI to the development of new forms of employment that are more unstable and more often part-time has to be undertaken cautiously. To limit the substitution of nonregular employment for regular employment, the contributions of nonstandard workers should balance the benefits they receive. From this perspective, it is desirable to adjust the mandatory requirements and eligibility conditions for standard and nonstandard workers to ensure that their contributions balance their benefits. This framework presents the advantage to deal with selection issues and to facilitate transitions between standard and nonstandard employment.

Second, due to capital market imperfections, STW can be effective at saving jobs in recessions, as it can avoid inefficient job destructions. In any case, it is clear that the scope of STW should be confined to firms facing genuine difficulties as well as time limited in order to avoid reducing hours worked excessively and dampening the reallocation of jobs toward productive firms. It should also be experience rated in order to prevent abusive and repeated use.

Third, to date the rare evaluations we have of the scarce WI systems that do exist provide little support for the two arguments advanced by the proponents of wage insurance in terms of protection of long-tenured workers. Targeting WI on this basis risks benefiting the insiders to the detriment of outsiders. Moreover, empirical evidence suggests that time-limited in-work benefits provided by WI systems have little incentive effects for individuals to find and keep regular jobs. A case could be possibly made for targeting WI to older workers displaced from their previous jobs.

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