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Abstract:
This paper provides a new perspective in classifying ALMPs depending on their main objective, also in light of their relevance and cost-effectiveness during normal times, during a crisis, and during recovery. We distinguish ALMPs that provide incentives for retaining employment, incentives for creating employment, incentives for seeking and keeping a job, incentives for human capital enhancement, and improved labor market matching. We will discuss their direct and indirect effects determining their cost- effectiveness as well as to provide examples which may provide lessons to learn for transition and developing countries. This paper provides a systematic overview of how, why, when and to what extent specific policies are effective.

Keywords: Active labor market programs, short work, subsidies, training, workfare, activation, sanctions, job search assistance, intermediation, counselling, cost- effectiveness

JEL classification: J08, J22, J23, J38, E24

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Active Labor Market Programs

Employment Gain or Fiscal Drain?

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This paper provides a new perspective in classifying ALMPs depending on their main objective, also in light of their relevance and cost-effectiveness during normal times, during a crisis, and during recovery. We distinguish ALMPs that provide incentives for retaining employment, incentives for creating employment, incentives for seeking and keeping a job, incentives for human capital enhancement, and improved labor market matching. We will discuss their direct and indirect effects determining their cost- effectiveness as well as to provide examples which may provide lessons to learn for transition and developing countries. This paper provides a systematic overview of how, why, when and to what extent specific policies are effective.

1 Introduction*

The global economic crisis has had huge impacts on labor markets in industrialized and developing economies. These countries witnessed massive lay-offs as well as reductions in wages and hours worked and thereby, significant increases of unemployment and poverty.[1] Furthermore, as highlighted by the OECD (2010), Cazes et al. (2009) and Koettl et al. (2011), while economic recovery is on its way the job crisis will persist for some time. As experienced in previous crises, employment growth will be lagging behind and not suffice to accommodate the high levels of unemployment. In the OECD alone, the unemployment rate is expected to remain above 8 percent for this year.[2] Moreover, this persistent unemployment rise leads to longer unemployment spells, leading to an increase in long-term unemployment and subsequently to skill attrition, thereby, to detrimental effects on future employment probability,[3] which in turn imply a highlighted risk of increasing structural unemployment.[4]

ALMPs have been heavily advocated by the OECD and are of growing interest and relevance due to increasing unemployment also for transition and developing countries. Governments have been responding to the crisis through active labor market programs (ALMPs) like subsidizing employment and providing training and employment services. Nevertheless, high unemployment will remain a key issue in light of slow employment growth and the danger of a jobless recovery. At the same time, tighter budget constraints and huge deficits highlight the relevance to invest in the most cost-effective ALMPs to support recovery. This paper aims to bridge the gap between understanding cost-effective ALMPs and boosting the post-crisis recovery. At the same time, as pointed out by Cazes et al. (2009) and as witnessed with take-up rates of ALMPs, for example in work sharing arrangements,[5] time lags until policies can be operational need to be taken into account and thus, call for an existing ready-to implement policy strategy, which can be adapted to the respective position in the business cycle and to crises.

This paper provides a new perspective in classifying ALMPs also in light of their relevance and cost-effectiveness during normal times, during a crisis, and during recovery. We will discuss their direct and indirect effects determining their cost- effectiveness and also explicitly address the challenges for design and implementation in balancing these effects and avoiding disincentives. Furthermore, we will provide examples which may provide lessons to learn for transition and developing countries. Instead of comprehensively reviewing existing programs and their evaluations across countries, the focus of this paper is rather to provide a systematic overview of how, why, when and to what extent specific policies are effective and provide examples. In assessing the cost-effectiveness of ALMPs, we follow the two central questions raised by Heckman et al. (1999), whether ALMPs are effective for targeted workers in line with their respective aims and whether they are cost-efficient from a macroeconomic perspective.[6].

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[1] According to the OECD (2010) employment has suffered a cut of 2.1% and the unemployment rate suffered an increase of 50% alone in the OECD, which implies that 17 million persons have entered unemployment.

[2] The OECD (2010) also mentions that including inactive workers willing to work and involuntary part-time workers would double this rate.

[3] See Blanchard (2006).

[4] See OECD (2010).

[5] See OECD (2010).

[6] For example, even in the absence of net employment gains, ALMPs may increase labor market attachment of workers, strengthen outsiders, and make labor markets less persistent.

The development of an ALMP strategy needs to take into account the ever-changing globalization process. As Snower et al. (2009) argue, in the new wave of globalization the broad and substantial reorganization of production and work leads to a geographic decomposition of value chains, a rising importance of personal relationships, and an increasing flexibility, heterogeneity, and versatility of work. The economic prospects of a sector and workers' skills are decoupled from workers' job security. Thereby, globalization creates changing, often unpredictable, constellations of winners and losers within a country and thus, powerful challenges to labor markets in developed as well as in emerging economies. These developments call for governments, while protecting losers, to increasingly shift from passive policies to a policy framework avoiding to creating disincentives to work and train and that is not simply supporting the unskilled in work. Rather it should promote workers' adaptability and provide workers the tools to adjust to and benefit from the globalization process, such that whenever workers happen to be among the losers, they can turn themselves into winners by adapting their skill set to variable, differentiated customer needs.

ALMPs' general aim is to keep and bring workers into employment, increase their productivity and earnings as well as to improve the general functioning of labor markets. Besides these economic aims the implicit social aims of ALMPs of raising participation, inclusion, and cohesion through providing employment incentives for the disadvantaged and improving employment opportunities are often mentioned.[7] In contrast to passive labor market policies, like unemployment insurance and transfers to provide income replacement, active policies redistribute employment incentives to reduce passive support and improve self-sufficiency and adaptability via increasing and enhancing labor supply (for example, by strengthening workers' employment incentives and via training), increasing labor demand (for example, by providing incentives to employees and entrepreneurs), and raising the efficiency of labor market matching (for example, employment services). [8] They can be targeted to various groups like employed or unemployed workers, low-skilled or long-term unemployed workers, to inactive or informal workers, young or old or disabled workers, and even refugees and migrants

Various labor market institutions (like, for example, wage setting institutions, employment protection legislation, tax and transfer system, and so on) can distort labor market incentives for work, job search, and human capital acquisition. They can therefore generate inefficient levels of unemployment and wages—possibly leading to many households "working poor". For example, passive labor market policies—such as tax-financed unemployment benefits—distort work incentives by imposing the cost of unemployment on employed workers. The widespread move in OECD countries from passive to active labor market policies is usually motivated by the need to reduce such distortions.

This paper shows that policies retaining employment as work sharing schemes can be applied in severe recessions for a limited time periods. ALMPs creating employment perform, for example hiring subsidies, much better in cost-effectiveness and desirability – especially in recoveries - by strengthening outsiders' position in the labor market, raising the outflow out of unemployment ultimately reducing labor market persistence reduced. In-work benefits and public works are very cost-inefficient in terms of raising employment, but might be cost-efficient in reducing poverty and inequity. Policies readjusting distorted

[7] For the aims of ALMPs see among others Boone and van Ours (2004), Betcherman et al. (2004), Calmfors (1994), Kuddo (2009) and Martin and Grubb (2001).

[8] ALMPs tackle a large scale of various overlapping labor market challenges like frictional (matching inefficiencies), structural (skill mismatch between labor demand and labor supply), or long-term unemployment, stabilize, facilitate the transitions in business cycles, mitigate the consequences of the economic crisis, and support the recovery. Betcherman et al. (2004) also point out that from a political economy point of view ALMPs can be adopted to signal government's priority on equity issues and reduce potential opposition to restructuring.

employment incentives, such as activation and sanction measures have proven to provide cost-effective results.

While short-run evaluations of ALMPs have not conveyed a consistent message on the cost-effectiveness, new longer-term evaluations clearly indicate cost-effectiveness from a longer-term perspective. The contrast between short-run and longer-run cost-effectiveness is especially highlighted for training programs; evidence shows significantly positive long-run impact. This is especially clear for on-the-job training and those targeted at disadvantaged outsiders. ALMPs, which impact only in the short-run but are highly cost-effective, though not in crises, are policies improving labor market matching.

Discussing evaluation methodologies goes beyond the aim of this paper. For a full assessment of the cost-effectiveness both micro-econometric, which answer the former question, and macro-econometric analyses, which answer the latter, are necessary. Existing reviews and evaluations do not always take into account the full set of effects, including the longer-run effects, which may materialize only many years after the program. All these are, though, essential to determine the cost-efficiency of ALMPs and to understand why some programs work and others not.[9]

The remainder of this paper is structured as follows: in Section 2 we present our new perspective on ALMPs by classifying ALMPs and briefly describing them and the instruments involved. Section 3 will provide an overview of direct and indirect effects of ALMPs. Section 4 discusses the effects and effectiveness of the classified ALMPs based on evaluations of programs and some examples of ALMPs, Section 5 concludes.

2 Categories of ALMPs

We present a new perspective on ALMPs by classifying them depending on their main objective. These five main objectives are to provide:

1. incentives for retaining employment;
2. incentives for creating employment;
3. incentives for seeking and keeping a job;
4. incentives for human capital enhancement;
5. improved labor market matching;

Needless to say that new instruments are continuously developed and often packages of instruments are implemented and thus, such a categorization cannot avoid overlap. Nevertheless, it is useful to distinguish these five categories due to their distinct objectives as well as their different efficiency and relevance in a crisis, its recovery and "normal" times.

Table 1 provides an overview of these five categories of ALMPs, a description of instruments for each category, and target groups and intended effects of the instruments.

First, ALMPs that provide **incentives for retaining** existing **employment** are financial incentives to employers to continue their current employment relationship with workers and thereby aim to decrease outflow from

[9] For a discussion of these approaches, see for example, Heckman et al. (1999) and Lehmann and Kluve (2010).

employment. These measure support employed workers—that is, insiders—and are generally targeted at jobs at risk. Most prominent measures are wage subsidies and reductions in non-wage labor costs—like social security contributions—as well as short work schedules or work sharing, which have been widely used in advanced economies during the crisis.[10] Wage subsidies to retain employment are directed to employers to reduce labor costs—as reductions in social security contributions. Short work schedules or work sharing programs are more complex subsidy programs; they incentivize employers to reduce labor costs along the intensive margin in contrast to the extensive margin while fully or partly reimbursing workers for hours not worked.[11]

These measures are generally adopted for a limited period of time and targeted at specific sectors, high unemployment areas or specific groups or workers. Often the reduced working hours are combined with government subsidized on-the-job training measures during the hours not worked.[12] Thus, ALMPs that provide incentives for retaining employment enable firms to keep workers, which are more difficult to hire and provide (at least temporary) job and income security to employees.[13]

> ALMP providing **incentives for creating** new **employment** are incentives to employers and workers to create new employment and thereby increase inflow into employment.[14] These measures thereby, support labor market outsiders—that is, unemployed, inactive, and informal workers—and is often targeted at specific groups of unemployed workers such as long-term-unemployed and disadvantaged workers with outdated skills. Subsidies are also here the most prominent measures, specifically wage and hiring subsidies (as well as reductions in non-wage labor costs), directed at employers, to provide incentives to employ new workers.[15] In contrast to wage subsidies, which are targeted at specific groups of workers irrespectively whether they are new hires or already employed, hiring subsidies exclusively redistribute incentives to unemployed workers. Benefit transfers are measures which finance hiring subsidies out of workers' passive income support.[16]

But also self-employment or entrepreneurship incentives fall under this category. These measures provide financial incentives (subsidies and grants as well as credits) and advisory services (training, counseling and mentoring) to unemployed workers to start up their own business or microenterprise for a limited period of time. These ALMPs can be targeted at specific groups and usually involve some screening of feasible business plans.[17]

In contrast to the previous two groups, which addressed labor demand, the next group of ALMPs providing **incentives for seeking and keeping a job** primarily addresses labor supply by increasing the payoff from employment for workers.[18]

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[10] See Betcherman et al. (2004), Cazes et al. (2009) and OECD (2010).
[11] A prominent example is the German Kurzarbeit.
[12] See Cazes et al. (2009).
[13] If the work sharing is combined with training it also enables workers to enhance their skills, see Cazes et al. (2009).
[14] See also Calmfors (1994).
[15] See Betcherman et al. (2004), Kluve (2010), Kuddo (2009) and Lehmann and Kluve (2010).
[16] See Snower (1997).
[17] For these measures see Betcherman et al. (2004), Cazes et al. (2009), Kluve (2010), Kuddo (2009) and Martin and Grubb (2001).
[18] Either by directly raising the return from employment or making unemployment more costly.

Table 1: Relevant instruments, target groups, and intended effects of ALMPs

Target Area	Aim	Instruments	Targeted Workers	Intended Effects
Labor Demand	Provide Incentives for retaining employment	Work sharing and short work Wage subsidies	Insiders	Reduce outflow from employment Retain labor market attachment
	Provide Incentives for creating employment	Hiring subsidies Business start-up support	Outsiders	Increase inflow into employment Increase labor market attachment
Labor Supply	Provide incentives for seeking and keeping a job	In-work benefits, subsidies, tax credits	Insiders and Outsiders	Increase inflow into employment by strengthening work incentives Reduce outflow from employment Increase labor market attachment Provide income support
		Public works	Outsiders	Increase inflow into employment by strengthening work incentives Increase labor market attachment Provide income support
		Activation and Workfare Sanctions	Outsiders	Increase inflow into employment by strengthening work incentives
	Provide incentives for human capital enhancement	On-the-job training Classroom training	Outsiders and Insiders	Increase inflow into employment Increase productivity Improve match quality
Labor Market Matching	Improved labor market matching	Job search assistance	Outsiders	Improve job search efficiency Increase inflow into employment
		Employer intermediation services	Outsider and insiders	Improve job search efficiency Improve match quality Increase inflow into employment
		Counseling and monitoring	Outsider	Improve job search efficiency Increase inflow into employment

Note: "Insiders" refers to those who are currently employed, "outsiders" to the unemployed, long-term unemployed, discouraged, informal workers, and inactive.

Source: Authors.

This group comprises various instruments whose primary aim is not always only to provide employment incentives to low-wage, unemployed, discouraged, and inactive workers. These instruments provide incentives to work but at the same time also have an explicit and clear redistributive objective. Important instruments are again financial transfers and subsidies, but specifically paid to the workers as an income supplement in the form of for example in-work benefits.[19]. Also public works, which might seem partly misplaced in this category, pursue an explicit social safety net goal. Kuddo (2009) points out, that public works originated as a direct public job creation instrument to raise labor demand, keep workers attached to the labor market, and counteract human capital depletion, which would place this instrument in the second category. But nowadays, due to a lack of achieving its intended effects and the resulting of cost-ineffectiveness, this instrument has de facto evolved into a safety net following a clear income support and poverty reduction objective for disadvantaged workers.

While public works nowadays do not reflect any active labor market policy component, they are adopted to shift from passive income support to a more active in-work income support. Specifically, public works are increasingly being applied as workfare, namely as an activation instrument, the obligation to perform publicly useful goods or services (labor-intensive works, for example community services, road construction and maintenance, irrigation infrastructure, reforestation, rural development, and so on)[20] as a condition for the receipt of unemployment benefits or social assistance. Also the participation in other ALMPs, for example training or job search assistance has been adopted as a condition for continuing benefit receipt. Thus, these instruments aim together with the often associated sanctions to increase the payoff from employment by making unemployment more costly to incentivize workers to engage in active job search and work. Such measures are part of the rights and obligations package of the unemployed. Ultimately, the activation and sanction instruments' objective is to reduce the disincentives to search for jobs and work created by passive labor market policies.

To raise the employability and productivity of workers, some ALMPs provide incentives for **human capital enhancement** by upgrading workers' skills, which represents the fourth category. These measures are widely used in Europe and either directly provide or finance[21] labor market training and retraining in classrooms covering basic job skills (for example, languages, computer knowledge, and so on) or specific vocational skills (for example, advanced computer or technical skills) as well as on-the job training and training vouchers.[22] Training vouchers can be handed to hiring firms to make the training maximally appropriate to the available jobs. These measures are targeted at unemployed and employed workers and at the same time as well as to labor demand requirements.

Improved labor market matching policies aim at raising the probability, efficiency and quality of labor market matching by supporting job seekers and employers as well as by taking an intermediate and brokerage role to overcome informational deficiencies and bring together vacancies and job seekers.[23] Among the wide range of instruments the main elements are job search assistance and employer intermediation services: the former helps unemployed workers find a job through counseling services (for example on necessary skill sets and so on), access to and provision of information on the labor market

[19] Making work pay initiatives are also examples, see Kluve (2010).
[20] See Betcherman et al. (2004) and Cazes et al. (2009).
[21] This also involves subsidies to trainees.
[22] See Betcherman et al. (2004), Kluve (2010), Kuddo (2009) and Martin and Grubb (2001)
[23] See Lehmann and Kluve (2010).

situation and future trends, support in finding and applying for jobs and managing interviews and so on.[24] The latter identify employers' needs and establish contacts with potential employers. These services are offered either traditionally by public employment services or also by private agencies, whereby the target group of the former is unskilled, long-term unemployed and disadvantaged workers, while the latter prefer more higher-skilled workers.[25] Further measures improving matching on the labor market include career guidance counseling services (for employed and unemployed), job clubs as well as vacancy and job fairs.[26] Often the participation in these measures is also a condition for continuing qualifying for unemployment benefits or combined with sanctions (see category 2), thereby part of the rights and obligations package.[27]

3 Effects of ALMPs

As pointed out the relevant questions in assessing the suitability and effectiveness of these ALMP in line with their respective objectives is whether from a microeconomic perspective they benefit the targeted workers as well as whether they are cost-effective and socially desirable from a macroeconomic viewpoint. To this end, it is crucial not only to evaluate the direct effects on employment, unemployment and earnings. Also partly countervailing indirect and general equilibrium effects on wage bargaining, incentives of targeted and third party employers and workers and so on need to be explicitly evaluated, since they contribute to a net employment effect. Along the same line implications for the government budget and the effects on the composition of and dynamics between labor market states need to be taken into account.[28] On the one hand, negative indirect effects might outweigh the direct employment effect. On the other hand, as Betcherman et al. (2004) point out, a policy generating only a marginal net employment effect might still be desirable by reducing long-term unemployment. Furthermore, beyond mere impact effects, long-run effects of these policies must be taken into account. For example, bringing long-term unemployed workers into subsidized productive work will increase their long-term employment probability even if they are fired once the subsidy is not paid anymore. A large literature has analyzed these effects theoretically adopting among others the labor market model by Layard et al. (1991), for example by Calmfors (1994), Calmfors and Lang (1995) and Calmfors et al. (2001), or the search-and-matching framework á la Mortensen and Pissarides[29], for example by Calmfors (1994), Boone and van Ours (2004) and van der Linden (2005). Also efficiency wage models[30], insider-outsider models[31] as well as incentive-based labor market models[32], for example Brown et al. (2011), have been used. In this respect, the aim of this paper is not to add to this literature but to provide a systematic overview of the relevant effects of ALMPs.[33] Furthermore, we will shed some light into some crucial design features of ALMPs.

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[24] See Cazes et al. (2009) and Kuddo (2009), who provides an extensive overview of the various services to improve labor market matching. See also Martin and Grubb (2001).
[25] See Betcherman et al. (2004) and Kluve (2010).
[26] See Kuddo (2009).
[27] See Kluve (2010).
[28] See also Calmfors (1994) and Martin and Grubb (2004).
[29] See Mortensen and Pissarides (1994) and Pissarides (2000).
[30] See Shapiro and Stiglitz (1984).
[31] See Lindbeck and Snower (1988).
[32] See Brown et al. (2009).
[33] Brown et al. (2011) evaluate subsidies in terms of their approximate welfare efficiency. A policy is approximately welfare efficient when it (1) improves aggregate employment and welfare, (2) does not increase earnings inequality and (3) is self-financing (i.e. it does not require an additional government budgetary allocation).

According to Calmfors (1994), the **direct effects** on employment, unemployment and earnings act via three mechanisms: (i) an improved matching process; (ii) increased and enhanced labor supply; and (iii) increased labor demand. While the line is thin between these direct and the indirect costs, we will first discuss the former and then present the latter.[34]

Improved matching speeds up the inflow into employment, which makes hiring cheaper and results in more vacancies being posted, which is equivalent to higher labor demand. The wage effect of improved matching is ambiguous since it will make it also easier for workers to find jobs, thus it improves their bargaining position and might also activate inactive workers, potentially increasing also labor supply. Furthermore, as Calmfors (1994) points out, with better labor market matching firms will refrain from using wages to attract workers, so the employers' bargaining position is also improved. Besides, if it is more likely for a firm to find a more suitable worker, this will imply a better productivity of the match, which will then lead to higher wages.[35]

Increasing labor supply, for example by raising the incentives of inactive workers to re-enter the labor force, with given demand will put downward pressure on wages and thereby, would also increase employment. Due to the resulting higher labor force—that is, more job seekers—unemployment will increase at the same time.

Enhancing labor supply by making workers more productive increases labor demand for a given wage, and thereby will imply increased employment and wages. Calmfors (1994) though stresses that firms might opt to produce the same work with fewer, but more productive workers.[36] Furthermore, Calmfors et al. (2001) also point to another wage rising effect through a higher reservation wage of the workers.

Increased labor demand, for example by lowering employers' labor costs, will result potentially in a wage increase and higher employment and lower unemployment.

The indirect **deadweight effect** lowers the cost-effectiveness of ALMPs. It refers to the resources of the policy that go to beneficiaries who would have achieved the objective of the policy also in its absence. For example, it reflects the amount of hiring subsidies that are paid for hiring workers who would be hired, even in the absence of the subsidy. It can be minimized by concrete targeting of workers, for example those with the lowest exit rates out of unemployment, but not completely avoided.

The effectiveness of ALMPs can be further undermined by the **creaming effect**, by which only workers with high employment probabilities are selected into the program.[37] This is especially significant if caseworkers assign workers to ALMPs and have an incentive to have a good reemployment rate of participants.[38]

The **displacement effect** in the labor market captures the fact that employment generated by ALMP might displace or crowd our regular employment, which lowers the effectiveness of programs in increasing

[34] The indirect costs will focus, for example, on deadweight, creaming, displacement, substitution, wage, locking-in, stigmatizing, skill-acquisition, asymmetric information, competition, threat, transition, screening, budget and benefit churning effects.
[35] See Calmfors (1994) and Calmfors and Lang (1995).
[36] Calmfors (1994) also points out that the latter effect will only be dominated with elastic labor demand and thus, the effect of a more productive labor supply would be analogous to the effect of technological change on the labor market.
[37] See Lehmann and Kluve (2010).
[38] For recent evidence see for example Rodriguez-Planas and Jacob (2010).

employment.[39] For example, firms hire subsidized workers instead of hiring unsubsidized workers or unsubsidized employed workers are fired and replaced by subsidized workers. In addition, the displacement effect also covers the fact that once the subsidization expires the formerly subsidized worker is fired. Brown et al. (2011) illustrate that the displacement effect can be reduced through effective targeting or tolerated, if this enables long-term unemployed workers to reenter employment, regain work-routine and skills on the job, even if they are fired once the subsidy is no longer paid, since these workers then will be short-term unemployed with an increased employment probability. Often the principle of additionality is imposed in order to significantly reduce displacement effect, i.e. that only additional jobs are subsidized, thereby reducing take-up rates.[40] Furthermore, Martin and Grubb (2001) argue that employment is only fixed in the short run and in the medium run capital will adjust and thereby, the displacement effect is only relevant in the short run. Several authors also mention a displacement in the product market, by which increased output of subsidized firms crowd out output of unsubsidized firms.[41]

Another unintended effect of ALMPs is the **substitution effect**. ALMPs might provide incentives to employers' to substitute one skill-class of workers for another one to do the same jobs due to a change in the relative labor-costs of these two classes of workers. For example, low-wage subsidies might create the incentive for firms to substitute medium-ability workers with low ability workers. In contrast to the other mentioned effects, this effect lacks empirical support in the literature, which shows that substitutability between different skill groups is small.[42]

The **wage-effect** reduces the effectiveness of policies and is defined as the resources of the ALMP that go into wage increases and thereby do not create new employment. For example, a subsidy reduces the firm's labor costs, which increases the bargaining surplus, of which the worker will capture his share.[43]

ALMPs can also have negative effects on job search. While participating in an ALMP workers might have less time or be less inclined to search for a job. The so-called **locking-in effect** (also called retention effect) refers to the lower probability of finding a job of ALMP participants compared to the unemployed who are not in ALMPs.[44] Calmfors (1994) expands the locking-in effect by also including the negative effect on search behavior due to the prospect of participating in an ALMP for example due to its attractiveness, its pay or its lack of required geographical mobility. Martin and Grubb (2001) point out that the locking-in effect is particularly strong if participation is voluntary or if it is necessary to participate to qualify for continued receipt of unemployment benefits. They argue, that training measures and wages above unemployment benefit levels are required to incentivize workers to participate in unconditional, voluntary ALMPs, this though raises workers' utility from participating in ALMP and thus, lowers incentives to search. These effects can be weakened by compulsory participation without additional pay on top of benefits or at a minimum wage, since workers might be able to earn more in regular employment, while some workers with low prospects of regular employment might still prefer the program. The authors though argue that monitoring of the job seeking behavior and job search assistance during ALMP participation as well as avoiding targeting workers who recently became unemployed and thereby, still have high employment probabilities, can limit

[39] For a review of the displacement effects of various labor market programs see Calmfors et al (2001).
[40] See for example Hujer et al. (2002).
[41] See for example Martin and Grubb (2001) and Huyer et al. (2004).
[42] See for example Kremer and Maskin (1996) for cross country evidence.
[43] See Brown et al. (2011).
[44] See Van Ours (2004).

the locking-in effect. Thus, close interaction of other ALMPs with public employment services can weaken this effect.

ALMPs might have negative effects on participants' future employment probabilities due to the participation in the program, if the measure is to tightly targeted at very disadvantaged workers, who might be stigmatized. The **stigmatizing effect** signals low productivity to employers and prevents them from hiring workers participating in such ALMPs.[45]

Skill-acquisition incentives might be negatively affected by ALMPs, the consequences of which only materialize in the medium-run. For example, the **skill-acquisition effect** can be illustrated by low-wage subsidies, which might create disincentives for unskilled workers to gain further human capital, since the subsidy reduces the wage differential between unskilled and skilled work. Thereby, this effect increases the size of unskilled workers, which are the more unemployment prone.[46] Oskamp and Snower (2006) show that positive short-run employment effects can be outweighted by the longer-run implications of the skill-acquisition effect.

In addition, agents might also have incentives to take advantage of the governments' ALMPs. For example subsidies targeted at unskilled workers might provide the incentive to switch from full to a part-time employment in order to cash the subsidy, but limiting the subsidy to full-time positions potentially provides an incentive for firms and workers to collude and cheat the government to qualify for the subsidy due to **asymmetric information**.[47]

While the negative indirect effects can be substantial, ALMPs can also have positive indirect effects:

The so-called **competition effects** highlight ALMPs' role in strengthening outsiders' (unemployed) position relative to insiders' (employed) in the job market, by redistributing incentives to outsiders. The underlying reason in line with the insider-outsider theory is that labor turnover costs, firing costs as well as hiring and training costs for new employees, give insiders market power, which they use to their own advantage, for example to push up their own wages.[48] The competition effect strengthens outsiders' position and thus, exerts a downward pressure on wages in addition to the labor supply effect above, which thus, raises employment.[49] ALMPs that strengthen outsiders' position are for example those that provide incentives for creating employment, human capital enhancement and improved matching.

The prospect of participating in ALMPs might (in contrast to the locking-in effect) generate an ex-ante **threat effect**, which characterizes the increased incentives for unemployed workers to search for a job. This is for example the case for activation policies where the payment of unemployment benefits is conditional on the participation in workfare programs.[50] Increased job search then increases the outflow out of unemployment.

Bringing unemployed workers back into work via ALMPs will increase their employment probabilities by the **transition effect**. This effect is strongest for long-term unemployed workers, who during their

[45] See Calmfors (1994) and Kuddo (2009).
[46] Similarly, upgrading the skills implies workers lose entitlement to the subsidy.
[47] See Brown et al. (2011).
[48] See Lindbeck and Snower (1988).
[49] See Calmfors (1994).
[50] See for example Lalive et al. (2000) and Rosholm and Svarer (2008).

unemployment suffer from skill attrition and loss of work routine.[51] If for example subsidies enable these long-term unemployed workers to transition back into employment, their human capital appreciates, they gather work habits and routine. Once the subsidy expires they are more valuable to the employer than originally, their retention rate is higher than their former hiring rate. Even if they are fired at this point, the former long-term unemployed workers are now short-term unemployed with an increased human capital and higher reemployment probabilities than long-term unemployed workers.[52]

Similarly the **screening effect** or signaling effect of ALMP enables employers to collect information on the productivity of workers. Due to informational asymmetries on workers' productivity long-term unemployment for instance may signal low productivity to firms. ALMPs can indirectly improve the matching on the labor market by enabling firms to experience workers' productivity for example via subsidized employment.[53]

Last but not least, the **budget effects** have to be taken into account when evaluating the cost-effectiveness in line with policy makers' concerns. This though does not only involve the direct costs but also indirect budget effects: i.e. on the one hand ALMPs financed by increased taxes decrease the payoff from employment and thereby, provide disincentives to work and search effort for all workers or the activation of inactive workers raises the labor force and recipients of unemployment support.[54] On the other hand these measures might generate additional tax revenue by bringing people into employment and generate savings in unemployment benefits and social assistance, which can be used to finance these measures—along these lines Brown et al. (2011) for example show that hiring subsidies can be self-financing.[55]

The **design** of ALMPs is crucial for the effectiveness of ALMPs. Focused targeting of measures can reduce negative indirect effects and give rise to positive ones, but has to avoid stigmatizing workers. Calmfors (1994) also discusses at which point in the unemployment spell workers should be targeted, since a later entry reduces deadweight and locking-in effects while at the same time this implies stronger skill attrition and more discouragement on part of the workers due to longer unemployment duration. Along similar lines the author points out the duration of an ALMP must balance its direct effectiveness with the indirect locking-in effects. In addition he also raises the issue of incentive-compatible remuneration of ALMPs: on the one hand higher remuneration will lead to less income loss due to unemployment and incentivize unemployed workers to participate, but on the other hand it will increase workers' fallback option in bargaining and may lead to higher wages and reduce the incentive to search and accept regular employment.

For a holistic approach ALMPs must take into account the interactions, complementarities, and repercussions with other active and passive labor market policies.[56] Kuddo (2009) recommends a combination of stick and carrot to provide incentives to search for and accept jobs by making participation mandatory with the threat of benefit sanctions. But Calmfors et al. (2001) make the case that participation in ALMPs should not be used as an incentive instrument to (re-) qualify for the receipt of unemployment

[51] See Brown et al. (2011). Keane and Wolpin (1997) estimated rates of skill attrition due to unemployment and show that white collar workers lose about 30% if they become long-term unemployed and blue collar workers 10%.
[52] See Brown et al. (2011) for the transition effect which has been proven significant in evaluations of German ALMPs, see for example Jirjahn et al. (2009) and Bernhard et al. (2008).
[53] See Lehmann and Kluve (2010) and Hujer et al. (2006).
[54] See Calmfors (1994).
[55] Brown et al. (2011) also point out that subsidies for workers with high replacement rates, typically low-wage workers, have a higher potential of being self-financing.
[56] See Martin and Grubb (2001). See Coe and Snower (1997) and Orszag and Snower (1998) for policy complementarities.

benefits, since while significantly raising the incentives for participation, this would only be the result of a churning effect and boost program sizes. The **churning effect** refers to the incentive of workers, who only participate in ALMPs in order to gain entitlements for another round of unemployment benefits and have little interest in regular employment.[57]

In the following we will discuss which of these effects are relevant for which category of ALMPs, review evaluations of these policies to determine their effectiveness and assess their suitability as an instrument during an economic crisis, the recovery from it as well as during normal business cycle under consideration of the challenges from the new wave of globalization.

4 Effectiveness, Evaluation and Suitability of various ALMPs[58]

4.1 Incentives for Retaining Employment

ALMPs providing incentives for retaining employment via subsidies to employers or work sharing schemes aim at supporting or increasing labor demand and thereby, at preventing an increase in unemployment due to a fall of economic activity. The OECD (2010) argues that these measures aim at preventing inefficient separations of workers who would have been retained longer-run in the absence of a temporary reduction in demand. Furthermore, the authors attribute to these measures the potential not only to raise efficiency but also equity by more equally distributing the cost of the crisis among the workforce.[59]

Nonetheless deadweight (for example employers enter the program but their workers would have been retained even in the absence of the subsidy) and substitution effects might be very substantial for these measures, since they target all employed workers of a specific skill, industry or area. Calmfors (1994) and Martin and Grubb (2001) review evaluation and summarize that deadweight and substitution effects undo from 70 up to 90 percent of the direct employment effect of wage subsidies.[60] In addition, these instruments provide incentives to collude and cash the government subsidy, for example taking up subsidized working hour reductions when this would be unnecessary to prevent separations. [61]

Wage effects might also significantly weaken wage subsidies' effectiveness, since they are exclusively targeted at insiders, who will bargain for a share of the subsidy. Insiders' position in the labor market will be strengthened relative to outsiders' by these measures, which employed workers may use to put upward pressure on wages, whereby the effectiveness of this policy is weakened. Temporary workers are often discriminated in work sharing schemes, which strengthens also the position of insiders vis-à-vis outsiders and

[57] See Kluve (2010). Sianesi's (2004) empirical evaluation of Swedish labor market programs in the 1990s shows that disincentives due to eligibility for and renewability of unemployment benefits have a significant impact on the effectiveness of the programs.
[58] It must be noted, that previous analyses as well as this one do not consider inequality effects, which though are highly relevant since the potential of rising earnings equality is a common impediment to labor market policies, see Orszag and Snower (1998), Saint Paul (1995 and 1996).
[59] See Boeri and Bruecker (2011) and Cahuc and Cardillo (2011) for a discussion and a review on the rationale for work sharing schemes.
[60] I.e. for every 100 subsidized jobs only 10 are additionally created jobs.
[61] See Boeri and Bruecker (2011).

thereby increase labor market segmentation.[62] Furthermore, these measures make it more difficult for outsiders to enter employment, which reflects a negative competition effect in the labor market as well as displacement of regular new employment since jobs can be preserved which would not have been conserved without the program and even after the economic situation recovers.

Thereby, by locking workers in low-productivity jobs and reducing the outflow from employment these measures also reduce the outflow from unemployment.[63] By creating barriers for creating jobs and the implied wage and competition effects from protecting insiders further reduce outsiders' employment prospects. Ultimately these measures will increase the persistence in the labor market. If these policies are not implemented only for a very limited period, they will have longer lasting negative effects resulting from the reduced outflow out of unemployment, i.e. increasing structural unemployment, increasing long-term unemployment and the resulting skill attrition of unemployed workers as well as workers dropping out of the labor force. An additional longer-term side effect of the subsidies and also the work sharing schemes—if not combined with training measures in the hours not worked—is an increase in unemployment prone labor market groups due to the disincentives for skill acquisition.

Besides, the lowest skilled and productive workers, which are the most likely being laid off in a recession, will be those entering the work sharing scheme,[64] thereby lowering aggregate productivity, and a longer use of these instruments may keep non-competitive jobs and inhibits efficient labor reallocation.[65]

These measures on their own do not imply any threat effect to generate job search incentives unless the reduction in hours is not compensated fully.

Both, wage subsidies in particular but also work sharing schemes imply a significant cost to the government.[66] For example, the three countries making most extensive use of this wage sharing programs, Germany, Italy and Japan, in 2009 spent between 5 and 6 billion Euros, i.e. between 0.1 and 0.3 percent of GDP.[67] These costs might be unsuitable in times of tight budgets and beyond developing countries' governments' budgets[68]. Again design (for example in work sharing schemes: generosity, duration, experience rating, employer co-financing, workers' jobs search requirements) is crucial to balance cost-effectiveness and take-up.[69]

Especially work sharing schemes have played a prominent role in OECD countries' policy reaction to the economic crisis—they have been adopted in over three quarter of the OECD countries[70] and involving up to 5 percent of the workforce. Some countries, for example Germany's Kurzarbeit and France's chômage partiel, already had programs in place and have extended them and eased design features (increasing the implied subsidy and the duration as well as relaxing eligibility and entitlement conditions, see OECD, 2010,

[62] See OECD (2010).
[63] See also the theoretical literature on this reviewed by Boeri and Bruecker (2011).
[64] See Vroman an Brusentsev (2009).
[65] See Boeri and Bruecker (2011).
[66] Cazes et al. (2009) also highlight the risk reduced non-wage labor costs can pose to the viability of social security systems, but this needs to be balanced with the resulting reduced inflow in unemployment and thereby claimants of unemployment benefits
[67] See Boeri and Bruecker (2011) and OECD (2011).
[68] See Cazes et al. (2009).
[69] See Martin and Grubb (2001).
[70] See Cahuc and Cardillo (2011) and OECD (2011).

and Cazes et al., 2009) to simulate take-up, while others have set up new programs.[71] While on average these schemes played an important role in retaining employment, take-up rates and effectiveness have varied significantly between countries, which has been attributed to design features and whether schemes were already in place.[72]

The work of the OECD (2010) and Boeri and Bruecker (2011) as well as empirical research reviewed by Cahuc and Cardillo (2011) suggest that work sharing schemes in the OECD significantly reduced the rise in unemployment, but they also confirm substantial deadweight costs (schemes are used to subsidize working hour reductions, that would have been adopted also in the absence of the scheme) and suggest similar displacement costs.[73] Furthermore, while Hijzen and Venn (2011) support that permanent jobs have been saved through work sharing arrangements, they had no economically or statistically significant effect on saving temporary jobs, thereby strengthening market segmentation and insiders' position. The OECD (2010) also shows that countries with already existing programs (for example France, Germany, Italy and Japan), which have been adapted to increase take-up, have been more effective in retaining employment than countries which have set up a new scheme and attribute also the low take up rate in the latter countries to the time-lag involved in introducing and implementing a new scheme in the wake of a crisis. Several countries combined the work sharing scheme with partly subsidized training measures in the hours not worked, which if not obligatory was taken up only by up to 25 percent of the workers involved in the schemes.[74]

The intensively used German "Kurzarbeit" scheme and its success at keeping unemployment down have been widely praised and generated interest in the relevance of these programs as a tool to combat economic crises. It covered at 1.443.000 workers in May 2009 and is back down to 122.000 in March 2011, which is in the range of the take-up beginning of 2008.[75] According to the OECD (2010) and Boeri and Bruecker (2011) the German scheme has saved approx. 400 000 jobs by the third quarter of 2009[76] and Brenke et al. (2011) point out that unemployment would have doubled its rate since middle 2009 in the absence of the scheme. Boeri and Bruecker (2011) highlight only moderate deadweight costs of this scheme, which the OECD (2010) estimates to be a third of the cost, and suggest this to be a result of its optimized design features (eligibility and entitlement conditions and so on, see Box 1).

Box 1: The German Kurzarbeit scheme:[77]

The German Kurzarbeit scheme was introduced in 1910, extended more or less in today's form it was extended to all sectors and reapplied since the 1960s. The main component of the German Kurzarbeit is the short-time for economic reasons, which is aimed at smoothing adjustments in the cycle.

Its main components are:

Eligibility requirements

[71] See ILO (2009), Hijzen and Venn (2011) and OECD (2011) for a detailed account of countries' work sharing strategies.
[72] See Boeri and Bruecker (2011) and OECD (2010), who show the highest take-up in Belgium, Turkey, Italy, Germany and Luxembourg.
[73] Their estimated job saves are lower than the full-time equivalents.
[74] See OECD (2010).
[75] See Bundesagentur für Arbeit (2011).
[76] Hijzen and Venn (2010) estimate that 0.7% of jobs were retained in Germany.
[77] Based on Boeri and Bruecker (2011), Boyen-Hogrefe and Groll (2010), Bundesagentur für Arbeit (2011), Cazes et al. (2009), Eichhorst et al. (2010) and OECD (2011).

Firms need to prove that they face a deteriorated business situation due to temporary unavoidable factors, that threaten the firms' employment.
Earnings reductions of more than 10 percent must affect at least a third of the workforce of the firm, i.e. at least a third must be affected by short-time work (one-third rule). All other instruments for internal flexibility, for example surplus on working time accounts or overtime reductions, must have been used up. Short-time work is restricted to 6 months.

Working hours' reductions have to be at 10 percent and can go up to 100 percent.

Employers only have to bear the wages for the hours actually worked. But they have to bear 80 percent of the social security contributions also for the hours not worked

The Employment Agency partly reimburses workers via a short-time allowance for the income loss due to the reduction in hours worked. Specifically, workers receive via the employer an hourly wage equivalent to the replacement rate of the unemployment benefit system, i.e. 60 percent of the wage and 67 percent with children.

Starting end of 2008 the German government relaxed rules and eligibility criteria to incentivize take-up by firms, which expire by March 2012:

Extension of maximum duration
The maximum period for short-time work (which was already at 12 months) was increased to 18 months and then mid 2009 to 24 months for firms starting in 2009. Since January 2010 the maximum period for new take-ups was reduced to 18 months and then for new take-ups in 2011 12 months.

Relief from social security contributions
Beginning of 2009 employers only have to pay 50 percent of social insurance contributions for hours not worked in the first 6 months and after this period they are exempted. If workers join training measures in the hours not worked, employers are relieved from the first month on.

Relaxation of eligibility requirements
Furthermore, the eligibility requirements of the one-third rule and having exhausted other measure have been abolished.

Extension of short-time work to temporary workers

Simplification of application procedures

The German scheme is designed for temporary adverse events together with the co-financing by employers (social security contributions) is does not provide incentives for full working hour reductions or adoption for structural reasons and reduces deadweight costs. Consequently during recovery take-up declined to pre-crisis levels.

Benke et al. (2011) though question whether this highly successful German scheme can be copied and pasted into other countries due to the existing institutional framework and the OECD (2010) highlights the neglected role of interactions with other labor market policies or institutional labor market settings (for example centralization of wage bargaining). For example worker and employers in countries running a flexicurity set of labor market policies involving low firing costs and high unemployment benefit replacement rates will have low incentives to take up a work sharing scheme unless it is heavily financed by the public budget.

Nonetheless, Boyen-Hogrefe and Groll (2010) show that the so-called German Job Miracle and the intensive use of adjusting hours can only partly be attributed to the German Kurzarbeit, which had already been in place in previous recessions. More important for the Job Miracle, the authors stress, has been a very distinctive wage moderation in the years before the crisis, which together with an increasing flexibility of working-time arrangements in the last decade incentivized more labor-hoarding compared to previous recessions and countries, and thereby, leaves the Kurzarbeit only a minor role. In addition Fuchs et al. (2010) quantify this role: only about a third of working-time reductions can be attributed to the Kurzarbeit.

Boeri and Bruecker's (2011) results stress that work sharing schemes are only effective in steep downturns and also the OECD (2010) attributes a higher effectiveness to an existing scheme at the onset of the recession. Furthermore, the negative effects of this measure will be smaller in a deep recession, but can rise dramatically in a recovery.[78]

Thus, both authors suggest, that it may be useful, if policy complementarities are taken into account, to have a small scheme with discouraging eligibility conditions and generosity to minimize above mentioned negative effect running in normal times. Such a scheme could then be swiftly scaled up by adapting the requirements and benefits to retain workers in employment in the short-run once temporary severely negative economic circumstances impact.[79] To limit deadweight, displacement and other negative effects in the presence of closely binding government budget constraints after a very limited period of time though the scheme should be tightened back again irrespectively if a recovery takes hold or not.[80] The OECD (2010) though points out the lack of empirical evidence to support such a policy stance.

Cazes et al. (2009) discuss the limited applicability of work sharing measures in developing countries because of the sizeable informal sector, low labor costs and tight budgets. The authors also mention that under a functioning social security system subsidizing the hours not worked might be cheaper than providing unemployment benefits for the laid off workers.

In conclusion, while for the reasons stated above wage subsidies have proven very cost-ineffective and undesirable to incentivize the retention of workers, work sharing arrangements if applied for a very limited period of time at the onset of an severe economic crisis may alleviate the impact of the crisis on employment, when the outflow out of unemployment is likely to drop significantly anyway. This measure enables employers to reduce labor costs and at the same time retain skilled and trained workers and keeps insiders in employment with full or partial conservation of their income. Importantly, these schemes should be combined with training during the hours not worked to support skills development and combined with measures to significantly support outsiders.

Nonetheless, it has to be stressed that the applicability of these very cost-intensive schemes is limited to a short period at the beginning of deep recessions and that and that their appropriate design, the adaptability of existing minimized schemes as well as the fit into existing labor market policies and institutions is crucial. In addition, these schemes do not enhance worker's adaptability. Furthermore, it has to be acknowledged that the cost-effectiveness is limited and beyond that the longer-run implications also have to be taken into account. The very limited useful duration of this policy is also due to the risk of increasing labor market persistence and long-term unemployment by disadvantaging outsiders as well as delaying inevitable labor reallocation, which might also obstruct recovery.

[78] See OECD (2010).
[79] See Boeri and Bruecker (2011) and Martin and Grubb (2001)
[80] See Boeri and Bruecker (2011) and OECD (2011).

4.2 Incentives for Creating Employment

ALMPs providing incentives for creating employment involve mainly financial incentives, i.e. subsidies for employers as well as grants and credits, and also entrepreneurship advisory services to encourage hiring and start-ups in the private sector. While these sets of policies aim to increase the outflow out of unemployment into private sector employment the scale and applicability of subsidies on the one hand and entrepreneurship support on the other hand are different, whereby we will discuss first the effects and evaluations of the former and then the latter.

A wide range of differently targeted and designed wage and hiring subsidies exist, which can—depending on the instrument, their targeting and design - raise employment via direct effects, they increase job matching by incentivizing job search and raise labor demand by subsidizing employer's labor costs.[81] Betcherman et al. (2004) point out that most evaluations of subsidies do not show positive impacts on post program employment or earnings.

As pointed out in the previous section, wage subsidies, which target not only new hires but all employed workers of a specific skill-class, sector or region entail huge indirect effects, esp. deadweight, substitution and displacement, making them cost-ineffective and undesirable due to their long-run implications on skills development[82]. As previously, the indirect effects can be reduced with appropriate targeting. Thereby, aiming at increasing employment creation subsidies in this category should focus on hiring unemployed workers, thus on hiring subsidies, which are more cost-effective[83]. Martin and Grubb (2001) review various evaluations of hiring subsidies in OECD countries and as Sianesi (2008) for Sweden conclude that they are more effective than public training measures or public works, the impact of programs though varies depending on the design.

Hiring subsidies are used to subsidize employers' labor costs and also in order to enhance their cost-effectiveness are targeted at disadvantaged workers, for example long-term unemployed workers. The deadweight effect, which manifests itself if workers are subsidized who would have been employed even in absence of the subsidy, is much smaller for hiring subsidies, since they cover only hirings.[84]

Additionally, while wage subsidies might prove difficult to phase out[85] and entail huge locking-in effects, subsidizing hirings is per se restricted to a limited period after the hiring. This feature also reduces potential substitution effects, namely the incentive of hiring low-skilled workers to do higher-skilled work due to changes in the relative labor costs.

Wage subsidies targeted at low-skill classes may provide disincentives to acquire human capital and by the same argument limited period hiring subsidies minimize this disincentive effect.

Nonetheless, hiring subsidies might entail significant displacement costs since employers might be incentivized to lay off workers to hire subsidized workers or laying off subsidized workers once the hiring

[81] See Calmfors (1994).
[82] See also Cazes et al. (2009).
[83] See OECD (2010).
[84] For example Brown et al. (2011) compare low-wage subsidies and hiring subsidies for long-term unemployed workers and show that the former would affect approx. 14% of the work force and the latter only 5%.
[85] See Cazes et al. (2009).

subsidy expires. Calmfors et al. (2001) review various survey and econometric studies and find sizeable displacement effects for Swedish hiring subsidies around 65-70 percent.

As pointed out, tight targeting (as well as monitoring) can minimize these displacement effects, as highlighted by Martin and Grubb (2001) it can thereby raise net employment impact by 20-30 per cent, but needs to balance still being attractive for employers to take up as well to avoiding a stigmatizing effect.[86]

While as pointed out previously displacement effects operate only in the short-run, they could be tolerated if the transition effect and also the screening effect, which are strong with hiring subsidies and are implicit aims of this ALMP, are sufficiently large:[87] By bringing unemployed workers into a job hiring subsidies enable workers to sustain (short-term unemployed workers) or regain (long-term unemployed workers) their human capital and thereby enhance effective labor supply.[88] For example long-term unemployed worker can reestablish work-routine and recover their skills on the job, whereby once the subsidy payments expire their previous low employment probability is exchanged with a higher retention probability and even if laid off at this point, they have higher reemployment probabilities as short-term unemployed workers than previously.[89] Recent evaluations of different German labor market programs by Jirjahn et al. (2009) and Bernhard et al. (2008) provide evidence on a statistically and economically significant transition effect. [90] To capture the full longer-run implications of this effect, it is though crucial to evaluate its impact on the longer-run development of employment careers, which has not been done—due to a lack of data availability—so far.[91] See Box 2 for a proposal for hiring subsidies explicitly targeting transition effects.

Betcherman et al. (2004) point at evidence of effective programs in which employers effectively use subsidized hirings to screen workers as a substitute to work experience. This second effect potentially offsetting displacement effects, the screening effect, enables employers to gain information on the productivity of workers, whereby it supports labor market matching, and thereby, may be more willing to retain the worker after the program than they would have been willing to hire her without the subsidy.[92]

Microeconometric evidence for Sweden from Sianesi (2008) confirms a higher employment probability of workers who have been involved in a subsidized hiring of 40 percentage points after the program and 10 percentage points after 5 years, averaging to 19 percentage points over 5 years.[93] Also Calmfors et al. (2001) reviewing evaluations find that hiring subsidies have a positive impact on future employability.

Threat effects with hiring subsidies will be only relevant for workers who can find better and regular employment on their own and thus, due to potential participation in the program increase their job search

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[86] Marginal employment subsidies, which apply the additionality principle to hiring subsidies, see OECD (2010), might marginalize employer take-up.
[87] See also Sianesi (2008)-
[88] See Kluve et al. (2008) and Martin and Grubb (2001).
[89] See Betcherman et al. (2004) and Brown et al. (2011). For a proposal to introduce hiring subsidies targeted at long-term unemployed workers in Germany see Brown et al. (2007) and Boss et al. (2009).
[90] Jirjahn et al. (2009) evaluated the "Hamburger Modell," which involved a lump-sum hiring subsidy in a model experiment: Bernhard et al. (2008) provide evidence on the "Eingliederungszuschuss", which is also a limited hiring subsidy.
[91] See Card et al. (2010), who highlight that longer-term evaluations show more significant positive impacts than short-term evaluations.
[92] See Calmfors (1994) and Kluve et al. (2008) as well as Sianesi (2008). In this sense hiring subsidies also are implicit subsidies to hiring and training costs.
[93] The author also finds that hiring subsidies have been the cheapest measure, though not taking into account deadweight and displacement effects as well as indirect budget effects.

and reduce their employment spell—these workers though are not the generally targeted labor market group of these measures.

Hiring subsidies are expected also to entail lower wage effects, since they are targeted at outsiders, who in contrast to insiders are less protected by labor turnover costs and thereby, have a weaker bargaining position, [94] which is confirmed by Stephan's (2010) microeconomic evidence showing that wages of new workers are not affected by hiring subsidies.[95]

A very important feature of ALMPs that provide incentives for creating employment is that they redistribute employment incentives to the disadvantaged outsiders, whereby hiring subsidies increase the competition in the labor market, i.e. strengthening outsiders' position, and put downward pressure on wages and thereby, indirectly increase employment.[96]

Hiring subsidies appear cheapest among the Swedish active labor market measures analyzed by Sianesi (2008), while this does only relate to direct budget effects, Brown et al. (2011) confirm the cost-effectiveness of hiring subsidies in their simulations. The authors show, that by bringing long-term workers back into employment to a certain degree these hiring subsidies can be actually self-financing taking into account the saved unemployment benefits payments and the additionally generated tax revenue (see Example Box 2).

The literature provides mixed recommendations on interactions with other labor market policies: Boss et al. (2009) suggest combining hiring subsidies with instruments for improved job matching to increase hiring elasticities. While Calmfors et al (2001) made the point that participation in ALMPs should not be applied as a condition for benefit receipt due to the churning effect, Betcherman et al. (2004) refer to evidence on the effectiveness of hiring subsidies exactly due to the incentive effect of continued benefit entitlement.

Box 2: A proposal for Hiring Subsidies for long-term unemployed, low-ability workers in Germany

Based on theoretical analysis by Brown et al. (2011), who compare the effectiveness of hiring subsidies and wage subsidies and the favorable evaluations of German hiring subsidies by Jirjahn et al. (2009) and Bernhard et al. (2008) Boss et al. (2009) provide a proposal for the implementation of general hiring subsidies. The design of these hiring subsidies minimizes negative effects, like deadweight, substitution, stigmatizing and so on, as well as maximize transition and screening effects.
The proposal contains the following elements:

Employers who hire unemployed workers receive a hiring subsidy, which reduces their labor costs for a limited period of time from the first day.

The limited duration of the subsidy reduces wage and deadweight effect. The authors propose a duration of 18 months, since the transition and screening effects need time to manifest.

Since Brown et al. (2011) show that hiring subsidies targeted at long-term unemployed workers are most cost-effective subsidies should be paid from the 13th month of unemployment and increase with the duration of unemployment.

Furthermore, the size of the subsidy should decrease with the qualification of the worker. A lower degree of skills implies lower employment probabilities and thus, lower deadweight costs. To quantify the skill level it could be approximated by the last wage discounted for the duration of unemployment.

In the subsequent period of employment the size of the subsidy should decrease, since during employment workers regain skills. The continuous decrease of the subsidy size minimizes displacement costs.

[94] See Brown et al. (2011). By the same argument high labor turnover costs and union coverage imply strong wage effects of wage subsidies.
[95] Brown et al. (2011) point out that low-wage subsidies improve equity by raising the wages of low-ability workers, hiring subsidies improve equity by bringing the long-term unemployed back to work.
[96] See Calmfors (1994)

The subsidy schedule should have a low slope and be continuous with respect to unemployment duration, qualification level and the subsequent duration of employment to avoid notches[97], which may generate disincentives, for example to invest in and prolong unemployment to qualify for a higher subsidy. Adopting a linear continuous schedule as proposed also simplifies the calculation of the subsidy and avoids high administrative costs.

Sanction mechanisms to provide incentives for job acceptance should be adopted.

To avoid creaming effects the subsidies should be paid for any new hiring, which qualifies for the subsidy and thereby, the allocation of subsidies should be not left in the decision of caseworkers.

Along these lines a time profile for hiring subsidies for a wide range of qualifications as well as employment and unemployment durations based on a simple formula can be specified.
This simple instrument can help unemployed workers reenter employment and raise their productivity and earnings. These subsidies could be self-financing due to the saved unemployment benefits payments and the additional tax revenues.
The evaluated hiring subsidies in Germany, while being paid for a limited period and displaying positive employment effects through evidenced transition effects, were lump-sum and independent of the qualification, employment and unemployment durations, whereby they generate disincentives and sizeable deadweight costs as shown by Boockmann et al. (2007). Furthermore, different programs were targeted at different groups of disadvantaged workers and not applied across the board. Thereby, on the one hand they generate a high probability of stigmatizing effects and on the other hand they might be confusing, overlapping with respect to target groups and more administratively cost-intensive.
Brown et al. (2011) show that implementing the proposed self-financing program can create additional 120.000 jobs and reduce the unemployment rate of low-skilled long-term unemployed workers by approx. 10 percent Allocating a government budget of 2 Billion Euros would reduce unemployment by 10 percent and long-term unemployment by 20 percent by generating 400.000 new jobs.

In sum, as Martin and Grubb (2001) point out limited period hiring subsidies to private employers can be indeed cost-effective and have sizeable macroeconomic employment effects, but have to balance negative effects and employment impacts, which calls for sensible targeting of hiring subsidies. To maximize competition, transition and screening effects hiring subsidies should be targeted at the losers in the labor market, for example long-term unemployed workers and inactive workers,[98] and to increase cost-effectiveness subsidy payments should continuously increase with unemployment duration.[99]

Even if the positive employment effects on the one side and significant deadweight and displacement effect on the other side outweigh each other, implying no increase of total employment, hiring subsidies may still be desirable. By redistributing employment incentives to the disadvantaged, strengthening their attachment to the labor market, and thereby reducing long-term unemployment (at the cost of increasing short-term unemployment) they increase labor market flows and reduce labor market persistence and enable a more equitable distribution of unemployment.[100]

Hiring subsidies are also more effective in encouraging workers to adapt their skills, activities and interests to changing labor market conditions in the new wave of globalizations, whereas wage subsidies discourage this behavior. The new wave of globalization calls for an automatic stabilizer, which incentivizes unemployed workers to search for jobs and adapt their skills.[101] Snower et al. (2009) specifically propose a special design of hiring subsidies, namely benefit transfers, which imply channeling passive unemployment income support

[97] See Blinder and Rosen (1985).
[98] See Brown et al. (2011), Calmfors et al. (2001) and Snower et al. (2009). Gerfin et al. (2005) provide evidence of stronger positive effects fo long-term unemployed workers.
[99] See Boss et al. (2009).
[100] See Martin and Grubb (2001) and OECD (2010).
[101] Hiring subsidies as an instrument to support losers from globalization has also been proposed by international leaders in Brown and Snower (2009b).

into hiring (or training) subsidies, which workers can hand to employers to reduce their employment (or training costs).[102]

Hiring subsidies can be a significant countercyclical labor market stabilizer in normal times to avoid increases of long-term unemployment and detachments from the labor market.[103] As shown by the OECD (2010) various OECD countries in response to the crisis have adopted hiring subsidies targeted at disadvantaged parts of the workforce (long-term unemployed, disabled, young and older workers) as well as reductions of non-wage labor costs for hires. While these instruments might be cost-ineffective once an economic crisis hits and labor demand plummets, they are an important device once the recovery is in sight to support it and incentivize the recruitment of disadvantaged workers.[104] Nonetheless in recessions, the equity aspect might be of relevance to avoid disadvantaged workers leaving the labor market and to give them a competitive edge in the search for jobs. Targeting should be tightened once the recovery accelerates to reduce costly negative indirect effects.[105]

Similar policy instruments are apprenticeship internships or trainee replacements. The latter involve subsidies for firms training an employee, which is temporarily replaced by an unemployed worker.[106]

For developing countries, hiring subsidies as cheaper instruments[107] might be a good option, although Cazes et al. (2009) doubt developing countries' capacity in providing the necessary budgetary resources. The authors further lower their applicability in developing countries since they are only relevant for the formal sector, but in contrast Kuddo (2009) argues that they actually raise the incentives for formal employment.

As pointed out above this category of ALMP providing incentives for employment creation encompasses also a generally smaller program in size and applicability of providing incentives for self-employment. This involves financial and advisory support. Besides the direct objective of supporting the outflow of unemployment into self-employment, the indirect desired implication of these programs is that the start-ups create further employment.

While the thin and only microeconometric evidence on such programs is mixed positive or insignificant, recent evidence signals more positive impacts. Reviews by Betcherman et al.(2004), Cazes et al. (2009), Kuddo (2009) and Martin and Grubb (2001) partly signal positive effects on employment probability after the program for male, better educated workers between 30 and 40 years with particular interest in entrepreneurial activities, but mixed evidence on the effect future earnings.[108] Almeida and Galasso (2007) find significant income effects in Argentina only for young and highly educated individuals. Rodriguez-Planas (2010) evaluating a Romanian program shows strong employment effects for low-skilled workers.[109] Carling and Gustafson (1999) present evidence of self-employment grants being more effective than hiring subsidies in Sweden.

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[102] See Snower (1994), (1997) and Orszag and Snower (2003).
[103] See Boss et al. (2009).
[104] See Caez et al. (2009) and ILO (2009).
[105] See OECD (2010).
[106] See Calmfors et al. (2001). See also Example Box 4.
[107] See Sianesi (2008).
[108] See also Calmfors et al. (2001).
[109] Rordriguez-Planas and Jacob (2010) find that the Romanian program improved participants' employment prospects.

Most of the authors point out the usefulness of the instrument, but its restricted applicability to a small fraction of the unemployed workforce of up to 3 percent. Advisory services on their own or combined with financial incentives generally generate better results than only financial incentives.[110] These studies though usually only evaluate the short-term effects of the program, while as pointed out previously it is important to analyze the long-run effects over workers' employment history.

Indirect effects of these instruments have typically not been evaluated.[111] Locking-in effects are of course irrelevant since their aim is that workers put their initiative in the start-up and not search for jobs. General wage effects are not directly relevant for this instrument. Disincentives for skill acquisition could arise through the subsidization but can in principle be excluded by program and monitoring design which generally is combined with advisory and training elements and being self-employed should on the contrary rather provide incentives for skill acquisition to have a thriving start-up.[112]

Deadweight effects, i.e. financially supporting self-employment initiatives, which would have been pursued also in the absence of the program, as well as displacement costs, i.e. crowding out of existing entrepreneurs who are disadvantaged by the program, are though likely to be high for this instrument as well. At the same time increases in the employability of participants through transition and indirectly screening effects are also potentially large. Workers will acquire human capital relevant networks and their initiative to start up their own business is a signal to future employers, whereby if they leave self-employment their employment probability will be higher than before. Again, on the one hand deadweight and displacement costs can be reduced and partly accepted and on the other hand transition and screening effects will be large if in contrast to the evaluation results above self-employment incentives would favor disadvantaged workers in the labor market. Similarly, competition effects, which by the explicit nature of ALMPs incentivizing employment creation and thereby targeting outsiders are strong, will be stronger for this group.

A recent evaluation of two German self-employment subsidies for unemployed from Caliendo and Künn (2010) provides new interesting results in this respect.[113] In their partial equilibrium analysis the authors evaluate the longer-run impacts 5 years after self-employment as well as which groups of unemployed benefit most. Their results show that the programs evaluated lead to significantly higher income for participants after 5 years and a 20 percent higher employment probability than non-participants. Furthermore, interestingly and in contrast to the studies above self-employment subsidies are especially effective for the disadvantaged workers in the labor market, namely young, low-skilled, long-term unemployed and inactive workers.

The authors explain this finding with the low employment prospects for the disadvantaged groups, providing them with incentives for self-employment then has the strongest effect (relative to non-participation).

These results strengthen the suitability and desirability of ALMP providing self-employment incentives to redistribute incentives to the disadvantaged to move from unemployment into self-employment and strengthen their labor market attachment, to promote adaptability to new labor market conditions as well as to support recoveries.

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[110] See Betcherman et al. (2004).
[111] See Betcherman et al. (2004).
[112] See Caliendo and Künn (2010).
[113] The authors point out that a relative high share (17 % in 2004) of resources spent on ALMPs is allocated to self-employment subsidies in Germany.

Summing up, in contrast to ALMPs aiming at generating incentives for employment retention these aiming at employment creation due to their strong transition, screening and competition effects have generally proven to be more cost-effective and suitable to provide labor market losers with incentives to adapt and work especially in recoveries from recessions. This targeting desirable from a social perspective also limits cost-ineffective deadweight effects

4.3 Incentives for Seeking and Keeping a Job

This category groups measures addressing labor supply through increasing the payoff from employment for workers either by directly raising the return from employment or making unemployment more costly. The former measures comprising making work pay schemes and public works though have not the sole objective of increasing employment but also and often prioritized the aim of redistributing income to reduce inequality and in-work poverty.[114] They reflect a shift from passive income support to a more active in-work income support. As well as the latter policies raising the cost of unemployment the ultimate employment objective is to mitigating the disincentives to search and work created by passive labor market policies.

The first set of measures in this category comprises financial transfers in the form wage subsidies to workers, for example in-work benefits, reductions in social security contributions, tax credits and other making work pay schemes paid to low-wage workers or low-income families to raise their income conditional on working. These measures have been especially pioneered and increasing in size in countries like the USA (Earned Income Tax Credit - EITC) and the UK (Working Families Tax Credit - WFTC) and are given credit for positive labor market developments. They have recently entered the debate as acceptable reform instruments compared to tax or benefit reductions especially in Continental European Countries, where high tax and social contribution rates as well as generous unemployment benefits and social assistance create strong disincentives to work.[115]

In contrast to passive labor market policies these measures are conditional on employment and generate incentives for specific disadvantaged labor market actors to increase work at the intensive or extensive margin. The direct effect employment of these measures clearly lies in raising labor supply and labor force participation, increasing transition into employment and activating discouraged workers, who have left the labor force, by generating employment incentives and thereby, improving income and future employment prospects.[116]

As pointed out above, low-wage subsidies, which target all employed workers of a specific skill-class, sector or region entail huge indirect effects, esp. deadweight, substitution and displacement, making them cost-ineffective. In addition they are detrimental to long-run skills development.[117] Specifically, the skill-acquisition and locking-in effects are especially pronounced with this kind of measures. These financial transfers, especially if they are permanent, may create disincentives for unskilled workers to move to a

[114] See among others Immervoll and Pearson (2009), Hotz et al. (2006), Bargain and Orsini (2006a) and Brewer et al. (2006).
[115] See for example Marx et al. (2011), Immervoll and Pearson (2009), Bargain and Orsini (2006a and b).
[116] See Immervoll and Pearson (2009). See for example Gerfin et al. (2005), who analyze hiring subsidies raising workers earnings from temporary low-paid jobs in Switzerland.
[117] See also Cazes et al. (2009).

better job and/or enhance their human capital.[118] Any resulting payoff in wages from better jobs or training is lower since workers will lose entitlement to (part of) the financial transfers.[119] Thus, these measures effectively decrease wage differentials between low-wage work and high-skilled work. Not only will this effect increase the relative number of unskilled workers, who are associated with higher unemployment rates, but it will have significant longer-run effects. On the one hand as shown by Oskamp and Snower (2006) the resulting negative long-run effects outweigh any direct positive employment effect. On the other hand such policies discourage adaptability, which as pointed out is essential in the new wave of globalization, since the nature of the jobs keeps changing. If the skills, activities and interests of the workers do not adjust severe negative effects on future employment prospects will be the consequence.[120]

Immervoll and Pearson (2009) highlight that the negative skill-acquisition effect is also likely to outweigh any positive transition effect, by which the transition into employment counteracts skill attrition and loss of work routine implications of unemployment. The reason is that while the former effect is significant, the latter especially in the lowest-productivity jobs might be more limited.

Further disincentives might arise, for example to reduce working hours or shift from a full-time to a part-time position in order to receive the transfer.[121] In this context the asymmetric information effect could strengthen the influence of these disincentives, namely, if employers and workers collude to cash the transfer for example by falsely claiming lower hourly wages and more working hours.[122]

Due to the huge deadweight costs broad financial transfers entail by targeting all employed workers with specific characteristics these measure as the one targeted at the demand side are not cost-effective.[123] This argument focuses only on the employment objective – from a poverty alleviation perspective this might be desirable. But also for the latter these instruments entail a trade-off between coverage and costs, especially in countries with compressed wage distributions, as shown for Belgium by Marx et al. (2011).

Immervoll and Pearson (2009) point at the countervailing impacts in terms of wage effects on the two objectives of these measures. Employers' bargaining strength will determine which share of the transfer will be captured by them, which implies lower wages.[124] The larger this effect is, the stronger will be the employment effects in the low-skilled sector, but at the same time the lower will be reduction in working poverty. The competition effect reinforces this wage effect.[125]

While these wage effects have direct favorable employment impacts, they give rise to negative displacement and substitution effects. Workers receiving transfers will displace workers not entitled to these transfers. Analyzing the US Unemployment insurance Bonus experiments Davidson and Woodbury (1993) estimate that this amounts to 30-60 percent of the direct employment effect in the target group. A different supply-side displacement aspect has been raised by Lise et al. (2006) due to the unfortunate design of the Canadian SSP: Specifically only workers receiving income assistance, which is paid once unemployment insurance

[118] See Snower et al. (2009), Immervoll and Pearson (2009) and Oskamp and Snower (2006).
[119] Along the same line these measures penalize increased work effort or working hours, see Immervoll and Pearson (2009).
[120] See Snower et al. (2009).
[121] See Brown et al. (2011) and Immervoll and Pearson (2009).
[122] See Brown et al (2011).
[123] See Brown et al. (2011).
[124] Along the same lines, Lise et al. (2006) argue that workers will accept lower wages since and in order to be entitled to the transfer.
[125] See Lise et al. (2006)

benefits are exhausted, are entitled to the transfer. This created implicit disincentives for low-skilled workers not yet covered by income assistance to look for a job.[126] Their reduced reemployment probability counters the increased job-finding rate for those in income assistance, thereby cancelling out any employment effect. Moreover, average unemployment duration with its negative effects on skills increases.[127] The substitution effect, implies that the transfer might create the incentive for firms to substitute medium-ability workers with low ability workers. This effect is though no supported by empirical evidence. [128]

As before effective targeting and design are essential for cost-effectiveness and various approaches can be found, for example permanent or transitional transfers for all or only newly employed (among those only for previously long-term unemployed) low-wage earners or low-income families.[129] The dual objectives make this issue even more complex as the controversy on individual or family-based targeting reflects.[130] While low-wage subsidies are generally individualized schemes conditioned on individual incomes (like the Canadian Self-Sufficiency Project (SSP) or the Belgian Work Bonus), tax credits (like the EITC or WFTC) depend on family size and are means-tested on household income.

Family-based tax credits can be effectively targeted at poor working families. They are particularly effective in achieving both goals labor market participation and poverty alleviation for single workers (according to Brewer et al., 2006, the WFTC increased labor supply of single mothers by around 5.1 percentage points). Nonetheless, at the same time they provide disincentives for married women with working partners.[131] The reason is that earnings by second earners might lead to a loss of entitlement.

In contrast, on the one hand low-wage subsidies as an example for individualized measures not only coverings a wider number of workers, thereby, generally – assuming the same government expenditures - with a lower transfer, they are also less efficient in targeting the poor.[132] Low-wage workers receiving transfers may not necessarily be at the bottom of the household income distribution.[133] On the other hand, while having smaller effects low-wage subsidies do not create disincentives to second earners, but rather improve the employment incentives of both married and single women.[134]

In the US and the UK experiences the success of tax credit measures is reflected not only in the equity goal but also in the fact that the effect on single mothers outweighs that on second earner couples.[135] In contrast, Bargain and Orsini (2006a) who simulated labor supply effects for European countries though show that the overall participation effect for women is negative for an introduction of the WFTC. The authors argue that the differences in the results are due to a wider wage dispersion and lower levels of taxation in the former group of countries.

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[126] Effectively this is a negative threat effect. Lise et al. (2006) call it a delayed exit effect.
[127] Obviously, the tails of unemployment duration became flatter.
[128] See for example Kremer and Maskin (1996) for cross country evidence.
[129] See Marx et al. (2011), Immervoll and Pearson (2009) and Bargain and Orsini (2006a).
[130] See Lise et al. (2004).
[131] See Bargain and Orsini (2006a) and Brewer et al. (2006).
[132] See Marx et al. (2011) and Lise et al. (2006).
[133] See Bargain and Orsini (2006a) and Lise et al. (2006).
[134] See Immervoll and Pearson (2009) and Bargain and Orsini (2006a).
[135] See Brewer et al. (2006) and Hotz et al. (2006).

The interactions with the institutional framework and labor market policies (e.g. minimum wages, unemployment benefits, etc.) are crucial for the effectiveness of this kind of policies, which aim at increasing the pay-off from employment.[136]

To assess the impacts of and the cost-effectiveness of financial transfer to workers as ALMPs the question whether both objectives are relevant arises, which is decisive for the evaluation. The literature and evidence has shown that these financial transfers can be effective in increasing employment and incomes of specific disadvantaged groups, but targeting and design are crucial features.[137] Nonetheless, these instruments are costly and due to various disincentives they create have no (longer-run) positive employment effects. [138] Especially general equilibrium analyses by Lise et al. (2006) and Blundell et al. (2003) have provided evidence for a reversal of the sign of longer-run employment effects and cost-effectiveness compared to partial equilibrium analyses. However, from the perspective of reducing inequality and in-work poverty these instruments are cost-effective redistribution policies. This holds as far as these transfers are permanent, which would though reduce their cost-effectiveness in terms of the employment objective, and if wage or income distributions are not compressed.[139]

The literature and evidence though also raises the question whether a single policy instrument can and should effectively combine redistributive and efficiency aims, since the instruments discussed here have had advantages mainly in one objective or the other.[140] Marx et al. (2011) point at universal child benefits as an efficient policy – without disincentives – to address redistributive aims. To address the employment objective other ALMPs are more cost-effective and a better choice, demand-side policies, for example hiring subsidies, and especially labor-supply policies tackling the root of low-skilled workers' employment problem, namely ALMPs policies enhancing their human capital.[141]

Nonetheless, if applied temporarily in crises within a package of instruments addressing also demand-side incentives financial transfers to unskilled workers can be an effective redistributive instrument to soften income shortfalls.

The second group of instruments in this category is public works. The original aim of these measures is similar to the previous category of directly raising labor demand, indirectly enhancing labor supply by improving employability, reintegrating discouraged workers into the labor market and by avoiding skill attrition, and indirectly improving labor market matching by signaling of workers' productivity out of employment and incentivizing workers' job search efforts.[142]

Public works temporarily increase employment, but may also increase unemployment by providing incentives to discouraged workers to reenter the labor market and increase their income in public works. A strong locking-in effect, lack of job search during participation, is attributed to this instrument.[143] To avoid more general displacements effects, namely crowding out private employment through public

[136] See Immervoll and Pearson (2009).
[137] See for example Immervoll and Pearson (2009).
[138] See Immervoll and Pearson (2009) and Bargain and Orsini (2006a). Blundell (2003)
[139] See Marx et al. (2011) and Immervoll and Pearson (2009).
[140] See for example Bargain and Orsini (2006a).
[141] See Immervoll and Pearson (2009) and Bargain and Orsini (2006a).
[142] See Calmfors (1994) as well as Betcherman et al. (2004), Kluve (2010) and Kuddo (1999).
[143] See Kuddo (2009).

employment,[144] the principle of creating additional jobs in public work schemes focused on low-skilled and labor-intensive publicly useful work.[145]

This feature though eroded the transition effect on human capital and furthermore, instead of acting as a substitute for employment experience in the private sector (screening effect), these public works became self-targeting (also due their threat effect), attracting unemployed workers with lowest employment probabilities and thus, had a stigmatizing effect, signaling low productivity and discouraging employers to hire participants.[146] The role of public employment as a stabilizer during periods of low labor demand was thereby, undermined, temporary public programs beyond short-term participation are ineffective and participation may actually lower employment probability. [147]

The evidence on the ineffectiveness of public works has been widely documented, see for example Betcherman et al. (2004) and Martin and Grubb (2001) for an overview or Card et al. (2010), Kluve (2010) and Rodriguez-Planas and Jacob (2010) for more recent analyses. Furthermore, supporting the lack of usefulness of public works in generating medium- to longer-run effects is supported by Carling and Richardson (2004) as well as Sianesi (2008), who conclude in their evaluations that the closer an ALMP is to regular work the better its effects for the participants.

This evidence clearly questions public employment creation's use as ALMP in light of its significant budgetary costs[148] and is reflected in decreasing use of this instrument. Nonetheless, as advantages of public works schemes provision and improvement of basic local infrastructure as well as its role as income safety-net for the poor are mentioned.[149] This might explain the sizeable resources spent in OECD countries and especially the latter its heavy use in developing countries.[150]

These resources can also be explained by the second aim of public works. Public works can act a temporary safety net during crises in middle income countries targeting the poor and establishing and offering an incentive compatible low wage,[151] if existing safety nets cannot be expanded as swift as these relatively swiftly implementable programs. As employment of last resort especially in low income countries, where safety nets are broadly non-existing public works can establish a self-targeted safety net. These aims of public works though would place it rather as a passive labor market policy than an active and reflect a blending of active and passive objectives.

Experiences though have shown that in middle to high income countries activation policies in interaction with passive labor market policies may provide a role for public works by reducing the payoff from being unemployed. Workfare schemes qualify as ALMP, if the receipt of unemployment benefits or social assistance is conditional on the participation in such a scheme, in the sense that it addresses disincentives of passive labor market policies and activates unemployed workers. This obligation as part of the rights and duties framework of unemployed has been particularly effective in Denmark's flexicurtiy set of policies.

[144] Calmfors (1994) refers to this as fiscal displacement.
[145] See Calmfors (1994) and Martin and Grubb (2001).
[146] See Calmfors (1994), Cazes et al. (2009) and Kuddo (2009).
[147] For reviews of such evidence see Betcherman et al. (2004) and Kuddo (2009).
[148] See Kuddo (2009).
[149] See Betcherman et al. (2004), Cazes et al. (2009), Martin and Grubb (2001) and del Ninno et al. (2009).
[150] See Betcherman et al. (2004) and OECD (2010).
[151] See Cazes et al. (2009).

Denmark introduced ALMPs in its flexicurity scheme of generous unemployment support and low firing costs. The subsequent low unemployment rate of Denmark was attributed to this third feature, especially the introduction of workfare activation requirements in tandem with tightening of eligibility for unemployment support and its duration, which raised job search and work incentives for regular work. [152] See Box 3 for an overview of the Danish reforms.

In their general equilibrium framework Andersen and Svarer (2008) show that beyond the locking-in effect of workfare, workfare also has a threat effect unemployed workers not activated, who raise their search effort in light of potential activation, and a negative wage effect on the employed, since it lowers the fallback position of employed workers, which reduces their wage demands, and in turn increases labor demand. Rosholm and Svarer (2008) provide evidence for a strong and significant threat effect, which reduces unemployment duration by three weeks.

Box 3: The third element of the Danish Flexicurity

The Danish Flexicurity model originally included very flexible labor markets, resulting from low employment protection for all employees, i.e. high external numerical flexibility due to firing costs, and extensive unemployment benefits providing income security to the unemployed—up to a replacement rate of 90 percent for low-skilled workers. The maximum duration of unemployment benefits amounted to 7 years, but the passive eligibility, whereby workers could requalify for unemployment benefits besides by regular work by participating in activation, implied an effectively unlimited duration. After unemployment benefits workers would be eligible for social assistance, which implies an reduction of earning of 20-40 percent, which though seldom occurred.

The low Danish unemployment attributed to flexicurity was mainly a result of various reforms starting in the 1990s, which implied a shift from income security to employment security by strengthening the incentives for the transition back to employment:

Reduction of the maximum duration of unemployment benefits

The maximum duration of benefits was reduced to 4 years

Abolishment of passive eligibility

Workers cannot requalify for being eligible for unemployment benefits by participating in activation measures (training) .

Introduction of activation requirements for eligibility for unemployment benefits and social assistance

Activation occurs before 12 months of unemployment and then every 6 months. For workers below 25 years mandatory activation begins after 6 months of unemployment duration.

While locking-in effects have to be balanced with the direct training effect for the activated, sanctions and activation posed a threat effect for the non-activated and increased search incentives. In addition a positive wage effect on employed workers led to wage moderation.
While Danish activation policies (strong training component) sum up to 1.3 percent of GDP, Andersen and Svarer (2007) argue that the policy shift has increased cost-effectiveness of labor market policies.

Non-participation in ALMP may be sanctioned by for example reducing unemployment benefits. Sanctions represent another instrument targeted at raising distorted search and work incentives, which in contrast has

[152] See Andersen and Svarer (2007), (2008), Brown and Snower (2009a) and Vikström et al. (2010). For a proposal to introduce workfare in Germany see Bonin et al. (2007) and for an evaluation of a German pilot project see Schneider et al. (2010). Similar policy initiatives in other countries, for example the UK, have experienced high increases of disability benefit recipients.

not locking-in effects.[153] Van der Berg et al. (2004) report significant positive effects of sanctions. Lalive et al. (2005) also show significant quantitatively similar threat effects arising from benefit sanctions on the sanctioned and non-sanctioned. Van der Klaauw, and van Ours (2010) show that the outflow from unemployment doubles after sanctions have been imposed. [154]

Calmfors et al. (2001) though recommend avoiding ALMP as income support as well as a means for qualifying for unemployment benefits as adopted in Sweden, since program participation is then a means for benefit churning and program volumes may explode.

In sum, financial transfers to workers and public works do not exclusively target an increase of employment but redistribute income to reduce inequality and in-work poverty. The former are cost-ineffective and due to various disincentives they create have no (longer-run) positive employment effects, but under certain conditions they very well might be cost-effective redistribution policies. They fail especially due to their impicit aim of supporting the unskilled in work without promoting their adaptability. Public works programs resemble more a fiscal drain and can even have negative effects on the employment probability of participants. They effectively do not enhance labor supply and promote adaptability in the labor market. Its temporary use targeting poor families is justified as means to combat poverty by providing a safety net. This though raises the question whether public works should not be considered as rather more passive than active labor market policies.

The combination of public works instruments with activation policies as workfare has provided positive results, especially due to the significant threat effects. Sanctions and activation measures in general have been very successful in restoring search and work incentives from unemployment benefits. Imposing sanctions or activation requirements through participation in job search assistance, training or measures closer to regular jobs (along the results from Carling and Richardson, 2004, and Sianesi, 2008) might be a more cost-effective alternative also in light of the considerable locking-in effect of public works. Bargain and Orsini (2006b) argue that efficient activation instruments could have a greater impact on poverty reduction by bringing workers into employment and be more cost-effective.

4.4 Incentives for Human Capital Enhancement

ALMPs providing incentives for human capital enhancement are widely used and represent the largest share in governments' expenditures on ALMPs and the evaluations show mixed results. A wide array of training and retraining measures are adopted stretching from basic jobs skills to certified specific vocational skills, from targeting disadvantaged workers to across-the-board programs as well as from offering public classroom training to financing on-the-job training.[155] These measures aiming at increasing productivity, employability and earnings of workers, enhance labor supply by adapting and increasing workers' skills and improve job matching by tackling skill mismatches.[156] Boone and van Ours (2004) show theoretically that

[153] See Card et al. (2010). Fredriksson and Holmlund (2006) provide a survey of theoretical and empirical contributions on the effect of sanctions.
[154] For an evaluation of the sanctions in the German welfare policy, see Boockmann et al. (2009).
[155] See Betcherman et al. (2004).
[156] See Calmfors (1994), Kluve (2010) and Lehmann and Kluve (2010).

even if training would not have any impact on the outflow from unemployment, by generating higher quality labor market matches it will reduce the outflow from employment.

Substitution effects are not directly applicable to this measure. Displacement effects may arise if trained workers are hired and therefore existing employees are fired. This though seems only likely if the training content would be superior to on-the-job experience, which should be expected to be the opposite. Reviewed evidence by Calmfors et al. (2001) confirms that labor market training programs do not create significant displacement effects. They might though entail sizeable deadweight costs, if they finance private training of workers, who would have been trained also in absence of this measure or if unemployed workers are trained, who would have been hired also without the training. The high cost of these programs often leads to creaming-effects, since case workers are incentivized to have a high rate of success with respect to the transition into regular employment of the participants after the program and thus, may chose unemployed workers with a higher employment probability, but thereby increase deadweight effects.[157] As with all ALMPs targeting plays a crucial role in enabling cost-effectiveness and detailed rules should minimize caseworkers' leeway.

Training measures involve strong locking-in effects during participation in the training program, its magnitude is directly related to program duration, and evidence reviewed by Calmfors et al. (2001) suggests that the reduced employment probability during participation may even outweigh the positive treatment effect after participation. Lechner et al. (2005) argue that this result driven by the locking-in effect is due to the focus on the short-run effects and that positive effects need one to three years to materialize.[158] Their evidence suggests that all training measure increase long-run employability and earnings.

As previous ALMPs training measures can act as substitutes for work experience (screening effect).[159] To maximize the screening as well as the transition effect based on the available evidence it is important to orientate the training towards current and future skills needs of employers as well as actively involving employers, provide recognized formal qualifications and especially having the training on-the-job.[160]

Especially on-the-job training has proven to be particularly effective in comparison to classroom training[161]— for example Kluve (2010) points out that combining classroom with on-the-job training increases the probability of a positive impact by 30 percent compared with solely classroom training. Reviews by Betcherman et al. (2004), Kuddo (2009) and Martin and Grubb (2001) report that the evidence suggests that tightly targeted training small size programs for unemployed have mostly positive impacts on raising employment probabilities.[162] Rodriguez-Planas and Jacob (2010) confirm positive impacts of training in Romania for workers' reemployment probabilities. Arellano's (2010) evaluation of a Spanish program also suggests a significant shorter duration of unemployment for trained workers. Kluve's (2010) meta study confirms the effectiveness of training measures, but as Sianesi (2008) he ranks training measures below ALMPs providing incentives for employment creation and those improving job matching in terms of effectiveness.

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[157] See Lehmann and Kluve (2010)
[158] The authors analyze the labor market effects of training for the unemployed in the transition of East Germany over 8 years.
[159] See Calmfors (1994).
[160] See Bechterman et al. (2004), Cazes et al. (2009) and Martin and Grubb (2001).
[161] See Carling and Richardson (2004), Kuddo (2009) and Sianesi (2008).
[162] For newer evidence see for example Kluve et al. (2008).

Card et al. (2010), Hotz et al. (2006) as well as Lechner et al. (2005) though point out that the effectiveness of training programs increases significantly in the medium to longer run and that shorter term ranking of policy effectiveness can be overturned, whereby it is crucial to evaluate the long-run implications.[163]

While training measures are expected to increase wages,[164] evaluations show that wages are insignificantly affected. This might be a result of shorter-run evaluation or also be a result of the countervailing competition effect of training, which is expected to be more enduring by increasing outsiders' human capital.[165] It can thereby increase labor market attachment of disadvantaged workers. The evidence reports most favorable results for training measures targeted at long-term unemployed workers.

In the new wave of globalization the link between the economic prospects of a sector and those of workers is breaking. Workers' job security is decoupled from their skills and sectors since their jobs can be outsourced and offshored. Therefore, training policies should not aim at moving workers from insecure jobs in declining sectors to secure jobs in expanding sectors. Lechner et al. (2005) provide results on training assigned by caseworkers misjudging skills and sectoral demands.[166] This aspect highlights the importance of involving employers, focusing at least partly on an on-the-job training component and providing unemployed workers with the appropriate tools to adapt. In line with evidence on the effectiveness of on-the-job training Snower et al. (2009) propose training vouchers financed by passive income support, which unemployed workers can hand to employers to reduce their training costs.

Box 3: Sweden's Trainee Replacements

From 1991 to 1997 one of the main ALMPs in Sweden were Trainee Replacement Schemes, which are a combination of ALMPs providing incentives for employment creation and those enhancing human capital. Employers received a 50 percent subsidized replacement (for a maximum duration of 6 months) for sending an employee into subsidized training.
Thereby, employers have the opportunity to invest in job-specific skills and at the same time screening unemployed workers. The latter gain work experience on the job with the attached transition and screening effects and employed workers can raise their market-relevant skills. This policy improves both insider's and outsider's positions, thereby is not expected to have competition effects. According to Sianesi's (2008) evaluation for Sweden this measure is the second most cost-effective ALMP measure in Sweden after hiring subsidies. Workers participating in this program had 6 percentage points higher employment chances than if they joined labor market training Positive effects have also been provided by Carling and Richardson (2004). Calmfors et al. (2001) calculate sizeable displacement costs of 40 percent.

While being a very costly measure, on-the-job training targeted at long-term unemployed workers seems to be cost-effective. In deep recessions though, when labor demand is lacking not for structural or skill mismatch reasons training measures might only be useful in tandem with work sharing scheme during the hours not worked—taking into account the disadvantages of this measure as highlighted above. The evidence suggests targeting long-term unemployed workers - due to the implied competition, screening and transition effects - might be very cost-effective in supporting recoveries. Nonetheless to keep long-term unemployed attached to the labor market and upgrade their skills these measures might also be relevant in recessions, though with no shorter-term impact.

[163] See Lechner et al. (2005) for other studies coming to the same conclusion.
[164] See Calmfors (1994).
[165] See Calmfors (1994).
[166] Their findings enable the authors also to tentatively explain often evidenced gender differences. They argue that men and women are targeted for different training programs, where in the East Germany case caseworkers misplaced the male unemployed.

4.5 Improved Labor Market Matching

ALMPs improving labor market matching are widely used in OECD countries and are considered the most cost-effective ALMPs, inexpensive and effective in increasing job search and matching efficiency.[167] They can overcome frictional obstacles to employment and alleviate structural imbalances by improving matches and adapting qualifications to employers' needs.[168] Besides incentivizing job search of the unemployed, they can avoid discouragement and support labor market attachment. Often measures to improve job matching are combined with various other ALMPs, especially with sanctions, whereby it is sometimes difficult to distill the effects of this policy alone. Furthermore, evaluations generally focus on job search assistance, which leaves little to say about the other instruments, which though are expected to have comparable effects.[169]

While the wide set of short-term measures increases the outflow out of unemployment and decreases the duration of unemployment, it also increases the reservation wage of the workers and may have an upward pressure on wages.[170] This may be counterbalanced by an increase in labor supply by attracting inactive workers as well as by competition effects.

These measures are mainly targeted at outsiders and thereby, provide competition to insiders and weaken their position. Reviews by Calmfors (1994), Martin and Grubb (2001) and Thomsen (2009) as well as studies for example by Card et al. (2010), Kastoryano and van der Klaauw (2011) and Kluve (2010) provide evidence on significant effects of intensified job search assistance for outsiders on their employment probabilities and sometimes earnings, especially for long-term unemployed workers,[171] where these effects (and transition effects) are more likely to be stronger. Rodriguez-Planas and Jacob (2010) present evidence on an increase of 20 percent in the employment probability due to job search assistance in Romania, reviews by Martin and Grubb show an increased probability of outflow from unemployment between 15 and 30 percent.[172]

While these effects are achievable very swiftly through ALMPs improving job matching in contrast to other ALMPs for example those providing human capital enhancement, their effectiveness is concentrated on the short-run and is not as sustainable.[173]

Displacement effects, whereby job search assistance helps firms find better matches and induces laying off of an employed employee, may exist but can be expected to be small in comparison with other ALMPs[174] and substitution effects, whereby worker of specific skills are easier to hire and substitute workers of different skills, are unlikely to be relevant for these instruments. Nonetheless measures for improving job matching may entail deadweight costs, if they support workers who would have found a job easily also without the support, but this is rarely measured.[175] Similarly creaming effects may worsen the effectiveness due to caseworkers' incentives or the involvement of private agencies, which typically target higher-skilled workers who generally have higher employment probability. At the same time caseworkers may also target

[167] See Betcherman et al. (2004), Dar and Tzannatos (1999) and Martin and Grubb (2001).
[168] See Calmfors (1994) and Betcherman et al. (2004)
[169] See Martin and Grubb (2001).
[170] See Thomsen (2009).
[171] See Calmfors (1994).
[172] The effect of all the instruments to improve labor market matching could accumulate to an increase in the outflow probability of 30-50%, see Martin and grubb (2001).
[173] See Thomsen (2009), who reviews evidence for 9 countries.
[174] See Thomsen (2009).
[175] See Cazes et al. (2009) and Kuddo (2009).

discouraged workers with very low employment probabilities, just to prequalify them for the receipt of unemployment benefits (churning effect).[176]

Nonetheless, evidence by Wunsch (2010) underlines that job search assistance should be targeted at unemployed workers with low hiring probabilities, since these are the ones needing assistance in avoiding becoming long-term unemployed[177], and beyond that at long-term unemployed workers.

Card et al. (2010), Kastoryano and van der Klaauw (2011) and Wunsch (2010) confirm previous results that ALMPs improving job matching should be applied at the beginning of the unemployment spell. Locking-in effects of these programs are also expected to be minimal, if kept of short duration and the aim of supporting job search.[178]

But it has to be mentioned, that since for the effectiveness of these measures monitoring of the search behavior and tests on the willingness to work have been put forward as important elements,[179] very often job search assistance is combined with monitoring and sanctions to increase its effectiveness.[180] This makes it difficult to separate and attribute the positive effects to improved search and matching efficiency or increased search through threat.[181]

From the perspective of the new wave of globalization these instruments improving job matching help workers becoming more versatile and provide them with the tools to gain knowledge on how to adapt through counseling and contact with employers and thereby help displaced workers back into employment.[182]

Example Box 5: A Danish Social Experiment

As usually tools for improved job matching are combined with other ALMPs, their effect is difficult to disentangle. Van Reenen (2003) shows for the British New Deal for Young Unemployed that the extensive job search assistance component is responsible for at least a fifth of the total effect of an increase of 20 percent in the employment probability of young unemployed. Similar effects are evidenced by a Danish social experiment involving an intensification of various elements: job search assistance with monitoring and activation measures. Workers becoming unemployed between November 2005 and March 2006 were randomly grouped into a treatment and a control group.

After-6 weeks of unemployment the unemployed workers participating in the treatment group had to join a two-week job search assistance program.

After this measure these unemployed workers had to have regular weekly meetings with their caseworker to plan job search, discuss progress (monitoring) and receive information on vacancies.

After 4 months of unsuccessful job search they had to participate in an ALMP (ranging from various classroom courses, on the job-vocational training, hiring subsidies to temporary public employment) of a duration of minimum 3 months.

In contrast the control group had only meetings every 3 months and had to join an activation program after 1 year.

[176] See Kluve (2010).
[177] Furthermore, targeting workers with low employment probabilities minimizes deadweight effects.
[178] See Card et al. (2010).
[179] See Martin and Grubb 2001).
[180] See Card et al. (2010).
[181] While for example Meyer (1995) cannot distinguish this, the results of an increased outflow probability from unemployment of 30% by Graversen and van Ours (2008) are mainly result of the threat effect.
[182] See Kuddo (2009).

The evaluation of this social experiment provided evidence on a significant decrease of unemployment duration by 18 percent on average and an increase in the employment probability of 20-40 percent. Increased job search assistance, monitoring and a threat effect contributed to the overall impact.
A subsequent cost-benefit analysis of the experiment revealed a net benefit of € 2000 per new unemployed worker due to the whole combination of measures. The most cost-effective instrument were the intense meetings with a cost of € 23 per week. The job search assistance program was less cost-effective due to its higher costs of € 200 per week per worker

While ALMPs improving labor market matching according to the OECD (2010) have been scaled up considerably during the crisis, Cazes et al. (2009) and Kuddo (2009) point out that in the onset of a crisis, when labor demand is very low, improved job matching will not be very effective, but evidence from Dar and Tzannatos (1999) shows that it is able to strongly support the recovery phase after a deep recession. Thereby, it can reduce the lagging behind of employment growth. Regarding the effectiveness of improved job matching in developing countries, some authors raise informality as well as weak public institutions as barriers. [183]

The literature thus, shows that ALMPs improving labor market matching are very cost-effective measures which can have significant short-run effects and should be targeted at workers with low employment probabilities at the beginning of the unemployment spell and at long-term unemployed workers. This targeting minimizes negative effects and potential churning incentives can be avoided with sanction mechanisms. While these ALMPs are essential for the functioning of the labor market, there are most effective in recoveries.

4.6 Policy Overview

Table 2 summarizes the discussed cost-effectiveness, the positive and negative effects and their usefulness in crisis situations and in the normal business cycle.

[183] See Betcherman et al. (2004), Cazes et al. (2009) and Kuddo (2009).

Table 2: The Effectiveness of ALMPs

ALMP	**Policy**	**Effective Objective**	**Positive Effects**	**Negative Effects**	**Impact in Normal Times**	**Role during Crisis and Recovery**	**Cost-Effectiveness**
Incentives for retaining employment	Work sharing / Short work	Reduce outflow from employment	Temporarily prevent layoffs	Substantial deadweight, substitution and displacement effects. Negative competition, wage effects and no effect on temporary jobs. Locking-In effects, skill acquisition disincentives and retaining low-productivity workers	→Increased LM segmentation → Increase in unemployment prone groups, lower productivity → Inhibits efficient labor reallocations → Reduced outflow from unemployment →Increased LM persistence, long-term unemployment →Skill attrition, lack of adaption	Useful temporarily at beginning of severe recessions Needs to be in place before Might obstruct recovery if not phased out swiftly	**Very costly and potential negative longer-term impacts.** **Only useful for a very limited time for existing schemes at onset of severe recessions**
	Wage subsidies		Continued employment of insiders			Potentially useful temporarily at beginning of severe recessions Might obstruct recovery if not phased out swiftly	**Cost-ineffective and potential negative longer-term impacts.**
Incentives for creating employment		Increase outflow from un-employment	Employment of Outsiders	Substantial deadweight, and displacement effects. Negative competition, wage effects Locking-In effects, skill acquisition disincentives	→Skill attrition, lack of adaption		

ALMP	Policy	Effective Objective	Positive Effects	Negative Effects	Impact in Normal Times	Role during Crisis and Recovery	Cost-Effectiveness
	Hiring subsidies		Very significant transition and screening effects. Competition effects.	Potentially sizeable short-run displacement effects. Limited deadweight and substitution effects, displacement	→Cost-effective countercyclical automatic stabilizer to increase outflow from unemployment → Increase of LM flows, reduction of persistence →Strengthen LM attachment →Promote adaptability	Important stabilizer to support recoveries. Keep LM attachment in recessions.	**Cheapest and most cost-effective measure.** **As automatic stabilizer: target disadvantaged, especially long-term unemployed worker for limited period.**
	Self-employ-ment incentives		Potentially large transition and screening effects. Competition effects.	Potentially high deadweight and displacement effects .	→ increase of LM flows, reduction of persistence →Strengthen LM attachment, reducing LTU →Promote adaptability	Support recoveries.	**Cost-effective, but restricted applicability**
Incentives for seeking a job and working	In-work benefits and subsidies	Create employment incentives, Reduce inequality and in-work poverty	Positive screening, wage and competition effects. Very limited transition effects.	Substantial deadweight, substitution and displacement. Sizeable skill acquisition disincentives and incentives for low-productivity work. Locking-In and asymmetric information effects	→Increased LM persistence, long-term unemployment → increase in unemployment prone groups, lower productivity →skill attrition, lack of adaption	Cost-effective redistributive instrument to soften income shortfalls. Temporary use in crises together with demand side policies	**Cost-ineffective: costly and no long-run positive employment effects.** **Cost-effective redistribution policy in crises, but targeting Issues.**
	public works		No transition effects. Threat effect. Infrastructure provision, Safety-net	Strong stigmatizing and locking-in effects, skill acquisition disincentives	→ Lower employment probabilities →skill attrition, lack of adaption	Temporary safety-net in MICs during crises. Employment of last resort in LICs during crises.	**Cost-ineffective: costly and no long-run positive employment effects.** **Safety-net role in crises**

ALMP	Policy	Effective Objective	Positive Effects	Negative Effects	Impact in Normal Times	Role during Crisis and Recovery	Cost-Effectiveness
	Activation and workfare	Make unemployment more costly	Threat effects and wage effects.	Locking-in effects	→Increase in employment incentives → increase of LM flows, reduction of persistence, shorter unemployment durations	No special role during crises, but can support recovery in tandem with demand side policies.	**Cost-effective policy in shifting towards active income support..**
	Sanctions	Make unemployment more costly	Threat effects and wage effects.		→Increase in employment incentives → Increase of LM flows, reduction of persistence, shorter unemployment durations	No special role during crises, but can support recovery in tandem with demand side policies.	**Cost-effective policy in shifting towards active income support.**
Incentives for human capital formation	on-the-job training	Enhance labor supply by adapting and increasing skills → increase productivity, employability and earnings	Strong screening, competition and transition effects	Sizeable deadweight costs as well as creaming and locking-in effects. Small wage effects.	→Effective in increasing long-run employability and earnings through skill upgrading →Strengthen LM attachment, →Promote adaptability, → Increase of LM flows, shorter unemployment durations.	In recessions to counter disadvantages of work sharing schemes, to strengthen LM attachment, and upgrade skills. Most effective in strengthening recoveries.	**On the job-training targeted at long-term unemployed workers are particularly cost-effective in the long-run!** Important: training focus, involving employers, providing formal qualifications, targeting.
	classroom training		Weak screening, competition and transition effects				
Improved labor market matching	job search assistance	Increase job search and matching efficiency	Competition Effects Threat Effects combined with sanctions	Deadweight and creaming effects potentially strong. Also displacement, wage and churning effects.	→Increase outflow from unemployment, job search incentives, →Strengthen LM attachment, → Increase of LM flows, shorter unemployment durations, →Promote adaptability.	Strong role in supporting the recovery	**Cost-effective policy, essential for LM functioning with short-run impact.** **Search assistance: proven strong impacts on employability, esp. for disadvantaged workers.**
	employer intermediation service						
	Counseling, monitoring						

5. Concluding remarks

This paper has presented a new perspective on how to view ALMPs in light of their primary target, namely retaining employment, creating employment, providing incentives for seeking and keeping a job, enhancing human capital or improving labor market matching. The various effects have been discussed and the challenges for design and implementation in balancing these effects and avoiding disincentive effects have been addressed.

This paper has shown that ALMPs aiming at retaining employment, for example work sharing schemes, should be used only for very short periods and in severe recessions, while a scheme should though exist to speed up take up. More cost-effective and desirable are ALMPs creating employment which redistribute incentives to outsiders in the labor market, whereby their attachment to the labor market is strengthened, the outflow out of unemployment is supported and thereby labor market persistence reduced. These ALMPs are highly effective in supporting recoveries.

In-work benefits and public works are very cost-inefficient in terms of raising employment, but might be cost-efficient in reducing poverty and inequity. While ALMPs usually focus on the former, the latter is the objective of passive labor market policy. The open question for future research is whether these as ALMPs labeled but cost-ineffective policies are better than passive ones. Policies readjusting distorted employment incentives, such as activation and sanction measures have proven to provide cost-effective results.

While generally evaluations of ALMPs tend to deliver mixed results in the short-run, recent studies have shown that longer-term evaluations provide evidence on more positive impacts of policies. ALMPs can be indeed cost-effective from a longer-term perspective (3 to 10 years) and some of them may even be self-financing. These results call for a shift towards long-run evaluations including following workers' employment trajectory to better ascertain the impact of individual policies.

The longer-run cost-effectiveness is especially evidenced for training programs, which long have been regarded as too expensive. They are especially effective the nearer they are to regular jobs and targeting disadvantaged outsiders. These ALMPs can support recoveries but may also be implemented in recessions to minimize the locking-in effect during recoveries. Finally, ALMPs improving labor market matching are highly cost-effective and desirable, but are only effective in the short-run and may not have much impact in recessions.

Nonetheless, it should be realized that ALMPs can only have modest impacts and may even be desirable without any net employment impact.

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