

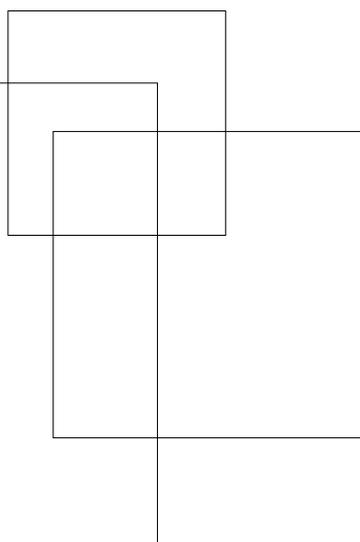


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A review of the effectiveness of Active Labour Market Programmes with a focus on Latin America and the Caribbean

JOCHEN KLUVE |||||



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Research Department Working Paper No. 9

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of Active Labour Market Programmes
with a focus on Latin America and the Caribbean**

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March 2016
International Labour Office

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Abstract

This paper reviews in a systematic way the evidence on impact evaluations of active labour market programmes (ALMP), with a focus on Latin America and the Caribbean (LAC). It thus serves as a background paper for a more comprehensive project that the ILO's Research Department is undertaking to assess the usage of and experience with active labour market programmes in the region. The paper starts with a description of the main types and key mechanisms of ALMP. After summarizing the previous evidence on active programmes in general and for LAC, in particular, the empirical part first uses a sample of ALMP evaluations worldwide – compiled in Card, Kluge and Weber (2015) – to provide meta-analytical estimates of programme effectiveness. The second, novel part of the empirical analysis constructs an additional sample of impact evaluations from LAC and presents results from meta-regressions for this regional sample.

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1. Introduction

Unemployment is one of the most challenging economic and social problems in both developed and developing countries. Figure 1 of the Appendix depicts unemployment rates for selected OECD countries and shows both that the 2008 crisis severely affected these countries and that high unemployment rates were common in many countries also in the decades before. The challenge is exacerbated by the fact that across countries worldwide youth unemployment figures are typically twice the overall unemployment rate.

Figure 2 of the Appendix displays unemployment rates for selected countries in Latin America and the Caribbean (LAC). Whereas the 2008 crisis shows up as a brief and transitory increase only and the general trend in unemployment over the last two decades seems to describe a slow, downward trend, it is evident from the figure that unemployment is a relevant policy issue also in LAC. This is particularly the case against the fact that unemployment figures capture only part of the labour market challenges in contexts of high informality.

Policymakers worldwide therefore struggle to find effective programmes that can help the jobless find jobs and that increase workers' productivity and labour income. Job training and other active labour market programmes (ALMPs) have been promoted as a remedy for cyclical and structural unemployment. ALMPs date back to the early US experience in the 1960s and 1970s, and in Europe to e.g. Sweden since the 1970s, Germany since the 1990s, the European Union's "European Employment Strategy" in the 1990s, and the 1994 OECD Jobs Study (re-emphasized in the 2006 OECD Restated Jobs Strategy). In addition, active labour market programmes have been used in many other countries, in particular in LAC since the 1990s through a series of job training programmes.

This paper focuses on addressing some key policy question accompanying this usage of active programmes: What do we know about whether and which type of "active" programme works? Can something be said about short run vs. long run effects? Do ALMPs work better for some groups? In some places or times?

The following sections try to answer these – and some other – questions to the extent that the existing evidence allows. Section 2 first discusses the types of ALMPs that are used and the main mechanisms through which they intend to influence participants' outcomes. Section 3 reviews the previous knowledge on ALMP effectiveness, discussing the methods to generate this knowledge and the evidence on ALMP in general and for LAC in particular. Section 4 extends this evidence by providing a meta-analysis using two new samples of ALMP evaluations: the first one covers impact evaluations worldwide and is generated within a parallel research project (Card et al. 2015); the second one is a sample of impact evaluations specifically for LAC generated within this research project. Section 5 concludes.

2. Types of active labour market programmes

2.1 General definition and objectives

Active Labour Market Programmes (ALMP) are interventions of labour market policy that the welfare state uses with the intention to "actively" increase the employment probability of jobseekers and hence decrease aggregate unemployment. The main objective of ALMPs is therefore increasing the

individual employment chances of programme participants, i.e. active support for labour market integration (e.g. Auer et al. 2008). Also individual productivity and earnings can be objectives of the intervention. Traditionally, in the US programmes often focus on earnings as key outcome, since ALMP targets the most disadvantaged individuals and aims at poverty alleviation. In Europe employment outcomes have received the most attention; next to finding employment, also job quality and job duration can play a role.¹

Other possible objectives of ALMP include the increased creation of jobs, the improved matching of supply and demand on the labour market, increasing participants' (and social) welfare and lowering government costs. Consumption smoothing through provision of alternative employment options may also be an objective. Overall, however, employment probability plays the central role both as the key programme objective and as the outcome measure most frequently analyzed in programme evaluations. For this reason, the subsequent discussion on ALMP effectiveness considers mainly employment as the measure of programme success, typically assessed empirically as the average employment rate x months after the end of the programme (within the first 12 months called "short-term effect", 12-24 months "medium-term" and ≥ 24 months "long-term", see Card et al. 2010).

ALMP is a complement to passive labour market policies, such as unemployment benefits as earnings replacement. In OECD countries the design of active and passive policies is increasingly inter-linked, essentially following recommendations formulated by the OECD in its "OECD Jobs Strategy" (OECD 1994) and the "Re-stated Jobs Strategy" (OECD 2006). This development is summarized under the heading "activation" (OECD 2007), a strategy aiming at activating jobseekers to look for jobs and take on work within a "mutual obligations" regime.² Key elements of activation are (i) early intervention by the PES in the unemployment spell and high contact density between jobseekers and caseworkers, (ii) regular reporting and monitoring of work availability and job-search actions, (iii) setting-up of back-to-work agreements or individual action plans, (iv) direct referral of unemployed clients to vacant jobs, and (v) referral to ALMPs. In the case of non-compliance of jobseekers with job search requirements, benefit sanctions apply.

2.2 Four types of ALMP – a basic theoretical framework

Active labour market programmes are typically classified into four categories in the literature (OECD 2006, Kluge et al. 2007): (i) Job Search Assistance, (ii) (Labour market) Training, (iii) Private sector employment incentives, and (iv) Public sector employment. Other efforts to categorize these programmes exist (e.g. Auer et al. 2008): sometimes the "subsidy" programmes and the "enterprise start-up" programmes comprising the private sector employment incentive category (see details below) are separated out; and/ or a distinct category for "entrepreneurship" programmes (potentially comprising both a skills training and a financial component) is defined. Often these efforts explicitly focus on capturing the types of programmes implemented in low-middle income countries. This paper uses the parsimonious version of four main categories that has been used mostly in OECD countries;

¹ The outcome "employability" has received increasing attention as one objective of ALMP in recent years. "Employability" roughly describes the individual's potential propensity to find / be placed in a job. It can therefore be one objective of ALMP to decrease individual jobseeker's distance to the labor market. Measuring "employability" empirically is challenging since no standard definition exists and because it typically requires (survey) data on technical, cognitive and non-cognitive skills. From a conceptual perspective, however, it is useful to have a purely supply-side-defined measure of the capacity to find employment (independent of whether employment is actually found or not).

² Note that, while ALMP historically precedes activation, activation logically precedes ALMP.

this categorization also allows describing and expanding the meta-analytical database of Card et al. (2010, 2015) for the empirical analysis (section 4 below).

The four programme types are defined and explained in the following subsections. Together with the definitions of the programme types this section delineates a simple theoretical framework to think about in which way programmes could be expected to work from an *ex ante* perspective.³ Note that this basic framework concentrates on the main aspects and does not constitute a complete economic-theoretical model. For each programme type it will formulate key features, objectives and expected impacts, in order to provide a delineation of the constitutive elements and mechanisms of active labour market programmes. It is important to emphasize that – whereas the design of these programmes originates in OECD countries and the majority of programmes are currently implemented there – the framework is in general applicable to any country.

The objectives and impacts that the framework refers to regard primarily the direct effects, i.e. increasing, for instance, participants' employment chances and earnings. Besides these direct effects, it is often important to take effects on non-treated entities into account. The programme evaluation literature in economics distinguishes several types of potential indirect effects – also called general equilibrium effects – of labour market programmes, of which displacement effects (jobs created by one programme at the expense of other jobs) are the most important. They are also referred to as “crowding out”. Other indirect effects are deadweight effects (the programme subsidizes hiring that would also have occurred in the absence of the programme) and substitution effects (jobs created for a certain category of workers replace jobs for other categories because relative wage costs have changed). For ease of exposition the following discussion of programme types summarizes these distortionary effects as “displacement”.

Other indirect effects exist, such as tax effects (the effects of taxation required to finance the programmes on the behaviour of everyone in society). Also, they need not necessarily be negative: systemic or market-wide changes (for instance, take-up of improved training practices by non-supported enterprises and training institutions) may increase the scale of intervention effects. The main conclusion of this discussion is that impact estimates from an individual-level analysis may provide only incomplete information about the full impact of the intervention (For further discussion see e.g. Heckman et al. 1999).

2.2.1 Job Search Assistance

Job search assistance are programmes with the purpose to raise individual jobseekers' search effort, and in general the efficiency of the search process and the quality of the resulting job matches. Job search assistance programmes come in various sub-types and can comprise several components: (i) job search training, (ii) counselling, (iii) monitoring, (iv) job clubs. Finally, also (v) sanctions, applied in the case in which job search requirements are not complied with, belong to this category, since they also aim at increasing the efficiency of the job search and job match process.

One implication of this programme type is that job search assistance will have only a short run effect unless getting a job changes preferences or future employability. In a best case scenario, job search assistance can therefore have positive but quantitatively small impacts. In the worst case long-term effects may be zero or slightly negative, if the impulse brought about by this programme is not sufficient.

³ A concise version of this framework is also presented in Kluge (2014).

There is some risk of displacement effects, especially in a low-demand market. Also negative stigmatization through placement by the Public Employment Service (PES) is theoretically conceivable. Government costs, though, are typically low for these programmes. Moreover, it has to be emphasized that these programmes may play an important role in a rapidly changing environment to address information failures in the labour market (e.g. asymmetric or lack of information about current and future skills required in the labour market; lack of information about location and existence of job opportunities). Such information failures typically arise in one of two contexts; first, during structural adjustments, e.g. transition periods, or, secondly, during recessions.

2.2.2 (Labour market) training

The second category, training programmes, comprises all programmes aimed at increasing human capital. Training can be seen as the "classic" active labour market policy and constitutes the programme type that is most frequently implemented worldwide. The purpose of raising human capital and attenuating skills mismatch is attained through a set of training components: i) Classroom vocational / technical training, ii) work practice (on-the-job training), iii) Basic skills training (math, language), iv) life skills training (socio-affective, non-cognitive skills), v) Job insertion. The latter component may be combined with other training components, or provided as an intervention per se and then belong to the first ALMP category above. In practice, training programmes may be composed of all components, of just one component, or of any combination of several components. It is currently one key question for researchers working on ALMP effectiveness to understand better the exact interplay and resulting impact between the set of training components.

The implications of this programme type are that training takes time, therefore negative treatment effects on participants' employment probability in the short-run are to be expected (so-called "lock-in effects"). Due to the human capital accumulation, however, the long-run effect will be positive, and likely sizeable. Negative effects will occur if the contents of the training are obsolete or useless. The displacement effect is likely small in the case of training. Government costs for sponsoring training are medium to high.

2.2.3 Private sector incentive programmes

The third type of active intervention, private sector incentive programmes, comprise all interventions aimed at creating incentives that alter employer and/or worker behavior regarding private sector employment. The most prominent programme in this category – in OECD countries especially – is a wage subsidy. The objective of subsidies is to encourage employers to hire new workers or to maintain jobs that would otherwise be broken up. These subsidies can either be direct wage subsidies to employers or financial incentives to workers for a limited period of time. They frequently target long-term unemployed and more disadvantaged individuals.

The second main type of subsidized private sector employment is self-employment assistance: Unemployed individuals who start their own business will receive grants or loans and sometimes also advisory support for a fixed period of time. Cross-cutting entrepreneurship programmes that combine financial support and training have been increasingly used in emerging economies and developing countries, often with a larger emphasis on the training component relative to the grant/loan component (cf., for instance, McKenzie and Woodruff 2014, Fiala 2013). Technical training for self-employment may include business skills (e.g. mentoring or bookkeeping), literacy and life skills.

The main purpose of private sector incentive programmes is to improve the job matching process and increase labour demand. There is also typically some limited human capital accumulation through work practice, and a culturization effect. With respect to ex ante implications, this type of programme

will also only have a positive effect in the short-run, unless the subsidized work changes preferences for work or future employability (the so-called “job ladder effect”, i.e. workers prove their productivity to the firm and remain in employment beyond the duration of the subsidy). The risk of displacement effects is particularly high for these programmes, as it is difficult to completely avoid scenarios in which, for instance, subsidized firms improve their market position relative to non-subsidized firms, or hirings of subsidized workers occur that would have occurred also in the absence of the subsidy. Also government costs are expected to be high.

There may potentially be scope, however, to use a variant of wage subsidies as some type of Short-Term Working Arrangement (STWA) in a restructuring process or a recession: Rather than laying off workers, create a – transitory – incentive for firms to retain workers through a model that allows firms to reduce working hours, and that partly subsidizes the wage on actual hours worked and partly replaces the earnings that workers forego because of the reduction in hours. Such a programme would allow firms to retain human capital in the firm (and potentially re-skill it on-the-job) while going through a difficult phase. This intervention type would essentially be a hybrid of wage subsidy and income support, i.e. of active and passive labour market policy.

2.2.4 Public sector employment

Finally, direct employment programmes in the public sector focus on the direct creation and provision of public works or other activities that produce public goods or services. These measures are typically targeted at the most disadvantaged individuals, pursuing the aim to keep them in contact with the labour market and preclude loss of human capital during a period of unemployment. To some extent they may also increase labour demand. Also, they can serve as a safety net (of last resort). Government costs are typically high.

The implications of this programme type are that direct employment programmes will only have a short run effect (on public employment) unless work changes preferences or future employability. There is also a high risk of displacement effects. Finally, the created jobs are often additionally generated jobs not close to the actual labour market. In light of these implications it is typically difficult to justify public job creation as a policy that increases individual employment probability and leads to net creation of jobs; rather, it often seems to serve as a social policy keeping the most disadvantaged close to the labour market and providing them with an income, and/or to keep aggregate unemployment figures low by providing public jobs instead of purely “passive” income replacement.

2.2.5 Target groups

The majority of ALMPs are general-purpose, i.e. serve a relatively broad target population. Often, however, programmes are designed for specific groups in the labour market, such as disabled jobseekers, the long-term unemployed or elderly workers. The one particular target group most frequently addressed by ALMP are youths. These youth labour market interventions then target “disadvantaged” and “vulnerable” youths. It is thus useful to define who are the youths that fall under these categories. First and foremost, these are all unemployed and out-of-job youths. In OECD countries, typically, they will be receiving some kind of welfare benefits. More generally, the low-skilled and school drop-outs are considered vulnerable. In middle to low income countries disadvantaged youths are those without or with limited access to education and the formal labour market. Finally, ALMP may also target the inactive group of youths who are not in employment, education or training (the so-called NEETs).

2.2.6 Summary of programme types and mechanisms

Table 1 summarizes the main features of the framework presented in the previous subsections.

Table 1. Summary of key features of active labour market programmes

	Job Search Assistance	Training	Private sector incentives	Public employment
	Job search training; counselling; monitoring; job clubs; sanctions	Classroom training; Work practice; Basic skills training; life skills training	Wage subsidies; Self-employment assistance; start-up grants	
Government cost	Low	Medium / high	High	High
Short-run effect	Positive	Negative	Positive	Positive
Long-run effect (best case)	Small positive	Large Positive	Small positive	Zero to small positive
Long-run effect (worst case)	Small negative	Small negative	Negative	Large negative
Displacement	Medium	Low	High	High

Source: Author's elaboration.

3. The evidence so far

This section reviews the evidence on ALMP that has been generated so far. The first two subsections look at the ways in which knowledge on ALMP effectiveness is generated: from individual programme evaluations (section 3.1) and from systematic reviews / meta-analyses (section 3.2). Section 3.3 follows with a brief summary of the general evidence on ALMPs, while section 3.4 looks at the findings available for LAC from previous studies.

3.1 Ways to generate knowledge (i) – Individual programme evaluations

In order to learn about which active labour market policy to use in a given context for a given target group, it is crucial to assess the effectiveness of single, particular interventions. Such a programme evaluation (=effectiveness analysis, impact evaluation) not only informs the programme implementer (i.e. the policy maker) on whether the programme has achieved its objective(s), it also generates implications regarding the potential continuation, re-design, or termination of the programme. Moreover, evaluations of particular programmes typically generate knowledge that can extend to similar programmes in different contexts.

The objective of an impact evaluation is to estimate the causal effect of a programme / intervention / treatment – e.g. a training programme – on the outcome the programme wants to influence – e.g. participants' employment probability. Modern evaluation research uses a counterfactual concept of causality, which in several steps of methodological development over the last decades has taken on the shape in which it is used today (Holland 1986). This causal model defines the causal effect of a treatment as the difference between the factual outcome (“Of the 100 training participants x per cent found a job”) and the counterfactual case (“What percentage of the same 100 training participants would have found a job without the programme?”). Clearly, the counterfactual is a hypothetical construct, it can never be observed in data and must therefore in practice be estimated as rigorously as possible, typically using some control group design. Randomized Controlled Trials (RCTs) are

considered the most robust design. Since such a randomized assignment of the eligible target population into a treatment and control is often not feasible in practice, a set of alternative methods exists that can be broadly classified into quasi-experimental methods (or “selection on unobservables”, i.e. typically some other source of randomization can be identified) and non-experimental methods (“selection on observables”, i.e. methods based on unconfoundedness, see e.g. Imbens and Wooldridge 2012). This is worth mentioning, since many of the empirical methods for causal analysis have been developed explicitly in the case of ALMP evaluations (ibid.).⁴

Looking back at the last two decades, there have been essentially two broad developments regarding the evaluation of ALMP, one in academia and one in politics / among programme implementers. These developments have been parallel to some extent, yet they are closely interconnected.

First, there has been an increasing interest by policy makers and programme implementers in general to evaluate public policies and particular programmes (including pilot interventions) in order to be informed about the effects of these policies. The roots to this development lie in the US, where already in the 1960s and 1970s – when the first active labour market programmes were introduced within the Manpower Development and Training Act (MDTA) and the Comprehensive Employment and Training Act (CETA) – there was a recognition of the fact that the empirical evaluation of these programmes is crucial to inform policy.⁵ This recognition marked the beginning of a general development towards the so-called “evidence-based policy making”.

Clearly, much heterogeneity remains between countries and implementing organizations in the extent to which they perceive evaluations of labour market interventions as indispensable, and in the extent to which they promote the implementation of such evaluations. The general trend, however, has been encouraging. An openness and interest in evidence-based policy making based on programme evaluation can now be seen also in several middle and low income countries. Specifically in the realm of development interventions the recent years have seen a surge in rigorous programme evaluation, often using Randomized Controlled Trials. While substantial heterogeneity in the use of impact evaluation across countries and regions exists, many promising examples have emerged. Also, international institutions promoting and supporting the use of rigorous evaluations specifically in developing countries – such as e.g. 3ie, International Initiative for Impact Evaluation – have contributed strongly to this development.

The second, and parallel, development has been the development of a set of statistical tools by labour economists to adequately evaluate ALMP. This methodological debate has contributed strongly to the advancement of programme evaluation (cf. Heckman et al. 1999, Imbens and Wooldridge 2012). Moreover, the methodological progress has been accompanied and reinforced across countries by the increased creation and availability of large administrative data sets accessible to researchers. Many evaluations of particular programmes also generate new data, e.g. from surveys tailor-made to the specific evaluation.

The two developments taken together – i.e. the increased interest by decision-makers in evaluation results and evidence-based policy making, and the increased capacity of researchers to provide such

⁴ A review of the toolbox of impact evaluation methods is beyond the scope of this paper. Many such reviews exist, ranging e.g. from the more technical overviews (Imbens and Wooldridge 2009) to guides oriented towards program practitioners (e.g. Gertler et al. 2011).

⁵ In the US, the debate on the evaluation of public policies was immediately connected to the methodological debate, i.e. the recognition of the fact that experimental evidence is needed to properly assess program effects and inform policy accordingly, see e.g. Ashenfelter (2014).

evidence – have resulted in a significant body of evidence on the effectiveness of active labour market programmes across (mostly) OECD countries but also worldwide. The subsequent sections show how this knowledge base can be summarized, and what the results are to date.

3.2 Ways to generate knowledge (ii) – Systematic reviews

The multitude of particular impact evaluation studies that have been produced across countries can essentially be surveyed and summarized in two different ways, both subsumed under the heading “Systematic review”. The first way is the traditional literature survey, also called a “narrative review”. In the context of ALMP effectiveness such systematic, narrative assessments have repeatedly been competently done by the OECD; see e.g. Martin and Grubb (2001) and OECD (2007).

The second way to summarize the evidence is a “quantitative review” using a meta-analysis. The knowledge on the effectiveness of active labour market programmes, for instance, has been summarized in the meta-analyses by Greenberg et al. (2003), Kluve (2010) and Card et al. (2010). A systematic quantitative review specifically focusing on developing countries – with somewhat limited analytical potential due to a limited number of available evaluations – is Betcherman et al. (2004).

A meta-analysis is a study in which a set of individual impact evaluations that analyze the same (or similar) research question are collected and assembled in a meta-dataset. The collection of individual studies follows a so-called “protocol” that specifies criteria on the basis of which studies are included in the meta data (or left out). The studies by Kluve (2010) and Card et al. (2010), for instance, only include evaluations of active labour market programmes that estimate programme effects using some variant of a control group design. Once the meta data are assembled following a systematic search identifying relevant studies, they can be analyzed using (typically simple) statistical tools to identify systematic patterns in the data. Section 4 will use such an approach based on two new sample of ALMP evaluations – one worldwide generated within a parallel research project (Card et al. 2015) and one for LAC generated specifically for this project – to produce new, updated evidence on programme effectiveness.

3.3 General findings on ALMP effectiveness

The previous studies analyzing ALMP mentioned above have identified strong systematic patterns of effectiveness by programme type.

- i. Impact evaluations of job search assistance programmes (including sanctions) find that these programmes are often effective. This is particularly the case looking at their short-term impact during the first year after programme participation. Since these are typically relatively low-cost interventions, they also have a higher likelihood of being cost-effective.
- ii. Impact evaluations of wage subsidy programmes also indicate that these seem to be very effective, also in the medium-run (Card et al. 2015, but see (iv.) below).
- iii. At the same time, evaluations of public employment indicate that these programmes are not effective in increasing participants’ employment chances. In fact, they often even seem to cause negative treatment effects, in particular in the longer run, presumably through stigmatization and/or types of public works that cannot even maintain participants’ pre-treatment human capital.
- iv. The questions with wage subsidies are, though, whether a) there are any sustained positive employment effects in the long run, and b) whether distortionary general equilibrium effects (such as substitution, displacement, and deadweight loss, discussed above) can really be ruled

out. To date these issues have not been convincingly addressed in programme evaluation research.⁶ Another issue with wage subsidies is that potential distortions in the labour market become more likely the larger the scale of the intervention. That is, wage subsidies may fit for specific target groups in well-defined contexts (sectors, regions), but may not seem to be good candidates for large-scale public policy.

- v. Programme impacts on average have not become more positive over time. As two meta-analyses show, this seems to be the case both for the US (Greenberg et al. 2003) and for programmes worldwide (Card et al. 2010, with most observations in the data coming from OECD countries). As the US studies are based on randomized controlled trials, this finding likely implies that programmes have in fact not improved over time. For the larger sample of evaluations worldwide, on the other hand, there is the conjecture that programmes indeed have improved over time to some extent – but in the aggregate data this development is neutralized by the fact that early programme evaluations based on limited data and evaluation methods were more likely to produce overly positive results, while more recent evaluations using large data sets and rigorous methods come closer to measuring the “true” programme effect.
- vi. Labour market training programmes are modestly effective, if one looks at the overall picture emerging from all evaluations to date: Training programme evaluations show that short-term impacts are small in size and often not significantly different from zero. However, since skills training is the most popular, most frequently used programme and theoretically also the most promising one – due to the human capital formation component – it is worth looking specifically at the time pattern found in recent research on training, and the evidence on programme sequencing:
- vii. First, there is increasing evidence that training impacts may materialize in the long-run, sometimes even the very long-run (Lechner et al. 2011). In particular, the meta-analysis by Card et al. (2010) finds that medium-run and long-run impacts of ALMP are more positive than the short-run impacts. This finding will be corroborated and strengthened substantially by the evidence depicted in section 4 below, which finds that this timing pattern is particularly pronounced for skills training.
- viii. Second, there is also increasing evidence that the most effective programme sequence for unemployed individuals (in OECD countries) is (i) intensive job-search assistance with counseling and monitoring first, effectuating positive short-term effects, and in a second step (ii) training, effectuating positive medium- to long-run effects due to human capital accumulation (Hotz et al. 2006). This result on the sequencing pattern is again reinforced by the findings presented in section 4.
- ix. One general result of ALMP research is that early intervention is better than late intervention. This general result has two dimensions: First, in OECD countries it means that unemployed jobseekers should be helped with an active intervention as early as possible in the unemployment spell. Second, from a broader perspective it means that policy should focus on interventions at earlier stages in the educational cycle, to avoid that individuals become disadvantaged (young) adults in need of ALMP in the first place. This conclusion can be justified with economic reasoning (early skills formation results in a longer payoff period) and also with the importance of capacity building, including social skills, before adulthood (Urzúa and Puentes 2010).

⁶ There are a few recent papers that explicitly focus on estimating general equilibrium effects, i.e. there are important advances in this research field. Crépon et al. (2013) and Gautier et al. (2014) use experimental data for France and Denmark, respectively, while Martins et al. (2014) implement an RD design. The former two find some evidence of displacement effects, while the latter does not. All three studies look at Job Search Assistance programs.

- x. The effectiveness of comprehensive programme types combining several components (Job Corps in the US, New Deal for the Young People in UK; to some extent also the Jóvenes programmes in LAC, see following subsection) also points to the importance of building integrated structures of skill formation. One aspect in this regard is the institutional relationship between vocational training programmes and the formal education system.
- xi. The evidence on ALMP from OECD countries shows that youths constitute the target group that is particularly difficult to assist effectively. Relative to adult ALMP, youth programmes are significantly less likely to effectuate positive impacts. This persistent finding is notably different from the evidence for other regions, most prominently Latin America and the Caribbean (LAC), where often the youth programmes are more successful (see e.g. Ibarrarán and Rosas 2009 and more discussion below).
- xii. Regarding the reasons for the dismal performance of youth programmes in OECD countries one can only speculate: Formal schooling systems in these countries are typically well developed. The pool of young adults who are (long-term) unemployed consists of individuals with low qualification and low skills, and of school dropouts without a secondary degree. Within a labour force that is, on average, fairly well-skilled and has a large fraction of workers with a tertiary degree, the youths targeted by ALMP are therefore a very disadvantaged group, and may thus be difficult to assist. Across regions, the developed countries have among the strongest linear negative correlation between educational level attained and probability of being unemployed.
- xiii. Another factor that might play a role are two-tier labour markets in which the “insiders” are rather well-protected, making it difficult for “outsiders”, in particularly the young and/or low-skilled, to enter (France and Spain are typically cited as examples). This structural phenomenon may play a role for ALMP effectiveness: If the obstacles generated by labour market institutions are too high, even an effective ALMP may not be enough to help youths across that obstacle. In fact, there is some indication of a systematic relationship between a high degree of employment protection legislation and ineffective youth ALMP, i.e. indeed youth programmes are less likely to work in a labour market with restrictive regulations (Kluve 2012).
- xiv. The few youth programmes that do seem to work are those that are comprehensive in their programme design, and intensive in their implementation. The two most important examples of successful youth programmes in OECD countries are Job Corps in the US (Schochet et al. 2008) and the New Deal for Young People in the UK (NDYP; e.g. van Reenen 2003, Dorsett 2006). While, clearly, both programmes differ in many details, they share the core features of comprehensiveness and high intensity: In each case, the programme components comprise job-search assistance, counseling, training, and placement services.

3.4 Previous evidence for LAC

Moving from the more general ALMP experience to LAC, one interesting finding is that youth programmes seem to be more likely to be effective in countries of LAC than in OECD countries (Ibarrarán and Rosas 2009). It is also worth noting that this finding stands against the background of relatively rigid labour market institutions, as shown by a comparison of the rigidity of employment index in LAC and other main regions (Figure 3 in the Appendix). However, the “true” level of stringency of legislation might be considerably below the one reported in the indicator: due to, for instance, gaps in enforcement and high levels of informality. It is thus difficult to make any clear connection between the positive results for youth training in LAC and contextual labour market regulations.

A review of the effectiveness of training programmes on labour market performance conducted a few years ago by Urzúa and Puentes (2010) for the Inter-American Development Bank (IDB) summarizes the findings of programme evaluations worldwide and other reviews (including Betcherman et al. 2004, Betcherman et al. 2007, Ibararán and Rosas 2009, Kluve 2010). Table 2 presents the evidence that Urzúa and Puentes (2010) draw together for LAC.

Table 2. Ranking and evidence on the impact of labour market training programmes in LAC

Country / Programme name / Execution period	Evaluation	Result
Dominican Republic/Juventud y Empleo/1999	****	(+0)
Colombia/Jóvenes en Acción/2002-2005	****	(+)
Uruguay/ProJoven/1996-1997	****	(+)
Chile/Chile Joven/1995-1997	***	(+)
Argentina/ProEmpleo/1998-2000	***	(+0)
Argentina/Proyecto Joven/1994-1998	**	(+0)
Mexico/Probecat y SICAT/1984-	**	(+0)
Chile/Chile Joven/ Phase I 1991-1995 and Phase II 1996-2002	**	(+)
Peru/ProJoven/1996	**	(+)
Panama/ProCaJoven/2002	**	(+0)
Argentina/Programa Joven/1996-1997	**	(+)
Colombia/Servicio Nacional de Aprendizaje (SENA)/1996-1997	**	0
Mexico/Probecat/1984-1994	**	0
Bolivia/Entra 21 - Alianza Quipus/April 2004-July 2005	**	0
Brasil-São Paulo/Entra 21 - Alianza CEPRO/2003-July 2005	**	0
Brasil-Salvador/Entra 21 - Alianza Instituto de Hospitalidade/2003-July 2006	**	0
Chile/Programa de Formación de Oficios para Jóvenes de Escasos Recursos/1998-2000	**	(-0)
Colombia-Medellin/Entra 21 y Alianza COMFENALCO/Phase I 2002-2005 and Phase II 2005	**	0
Colombia-Cartagena/Entra 21 y Alianza INDUSTRIAL/2002-2005	**	0
Dominican Republic/Entra 21 y Alianza ISA/2003-2006	**	0
El Salvador/Entra 21 y Alianza AGAPE/2003-2005	**	0
Mexico/Entra 21 y Alianza CIPEC/2004-2007	**	0
Honduras/Entra 213 y Alianza COSPEA/2004-2005	**	0
Paraguay/Entra 213 y Alianza CIRD/2003-2005	**	0
Peru/Entra 213 y Alianza ALTERNATIVA/2003-2005	**	0
Uruguay/Opción Joven/1994-1997	**	(+)
Peru/Jóvenes Emprendedores	**	(+0)
Peru/Jóvenes Creadores de Microempresas	**	(+)
Chile/Chile Joven/1991-1995	*	(+)
Brasil/PLANFOR/1996-1998	*	0
Mexico/Probecat/1984-1994	*	0
Honduras/Entra 21 y Alianza CARDEH/2004-2005	*	0
Brasil/Programa Primero Empleo/1999	*	0
Colombia/Proyecto de Servicios Integrados para Jóvenes/2000-2003	*	0

Source: Urzúa and Puentes(2010), "Cuadro 4"

The first column presents the training programme (Country / Programme name / Execution period). The second column classifies the evaluation method used to estimate the programme effect. Four stars **** indicate experimental evaluations with a substantial number of outcome variables considered; three stars *** indicate experimental evaluations with a limited number of outcome variables; two stars ** indicate non-experimental evaluations with a substantial number of outcome variables considered (and including cost-benefit analyses); and one star * indicates non-experimental evaluations with few outcome variables.⁷ The third column presents evaluation results: (+) indicates robust positive effects, (+0) largely positive, (0) not significantly different from zero, (-0) largely negative, (-) negative and robust.

The table covers 38 studies and gives a comprehensive and largely complete overview on the knowledge on the effectiveness of training programmes in LAC (at the time of the review 2010). The review of youth programmes in LAC presented in Puerto (2007) using the Youth Employment Inventory covers a larger number of studies (68 in total), but only 17 evaluations estimate net impacts using some variant of a control group design. While not exclusively focused on youth programmes in compiling the studies, Table 2 shows that the large majority of training programmes implemented in LAC indeed focus on youths. In fact, only 6 of the 38 programme evaluations reviewed do not specifically target youths (Argentina / ProEmpleo, México / probecat (3), Colombia / SENA, Brazil / PLANFOR).

The largest part of the table is thus taken up by the “Jóvenes” programmes that were implemented in a set of countries (Argentina, Chile, Colombia, Dominican Republic, Mexico, Peru, Panama). The Jóvenes programmes have represented the prototypical model of a comprehensive intervention for youths to increase skills and improve employment chances in LAC since 1991. Following the first of its type, “Chile Joven”, the Jóvenes model typically targets disadvantaged young workers of 16-29 years of age. Other targeting criteria are income levels, education, and regional coverage (within countries): Participants are poor youth with low levels of education – high school at most, unemployed, or underemployed (Puerto 2007).

Three main features characterize the Jóvenes model (Ibarrarán and Rosas 2009). First, the financing of the training is separated from the provision of training. The government selects training courses competitively, through a process – a public bidding system – in which private and (in most cases) public firms or training institutions can participate. Second, the nature of the training is demand driven. That is, the government does not set what the content of the training courses should be. Instead, training institutions coordinate courses and internships, balancing the needs of the productive sector (demand) with the skills taught in the programme (supply). Third, the intervention is a “multi-service approach” (Puerto 2007) that, most importantly, combines an initial classroom-training phase with a subsequent internship / work experience phase in firms. The training concerns basic and specific trades, and is complemented by life skills, job search assistance, counseling and information.

⁷ Whereas the table gives a comprehensive and sound overview of training programs in LAC, the methodological characterization using the * indicators does not always provide a clear mapping to the methodological rigor of the evaluation (e.g. because the number of outcomes considered does not give a direct indication of the quality of the study). Typical requirements for a rigorous impact evaluation would be the inclusion of a control group to measure the counterfactual, and some intentional approach to address selection bias. Since these requirements enter into the search protocol that identifies evaluation studies to be included in a meta-analysis (section 4), all studies in Table 2 below Mexico’s Probecat 1984-1994 evaluation would not be included for lack of rigor. Also, regarding the ProJoven evaluation in Uruguay it is not resolved whether this study (Naranjo 2002) actually is based on an RCT as classified in the table.

Employers and participants receive financial incentives such as wage subsidies and daily stipends, respectively, to guarantee participation.

The findings of the Jóvenes evaluations are discussed in detail in Ibararán and Rosas (2009). Table 3 presents a summary overview of the impacts and cost-benefit analyses of six of the Jóvenes programmes (Argentina, Chile, Colombia, Dominican Republic, Peru, and Panama). Across countries the results indicate that the programmes tend to significantly increase individual employment chances, in particular for women. The point estimates range from around 5 to around 20 percentage points relative to the control group. The programmes also seem to effectuate significant earnings gains for the participants, ranging from 10 to around 25 per cent increases. The cost-benefit analyses for four of the programmes indicate that positive net present values can be attained, requiring from about 1 up to 12 years of positive benefits. The latter figure implies that in some instances the implementation of a comprehensive programme of the Jóvenes type can incur substantial costs.

Table 3. Impact and Cost-benefit analysis of the Jóvenes programmes

Country	Increase in employment	Increase in earnings	Cost-benefit analysis
Argentina: Proyecto Joven	10% (women)	10% (monthly wages)	NPV > 0 if 12 years of positive benefits (DR = 5%)
Chile: Chile Joven	21% (individuals younger than 21 years old, women)	26%	—
Colombia: Jóvenes en Acción	5% (women)	18% (men), 35% (women)	IRR = 4.5% (men), 13.5% (women)
Dominican Republic: Juventud y Empleo	Not significant	10%	NPV > 0 if 2 years of positive benefits (DR = inflation)
Peru: ProJoven	6%	18% (hourly)	NPV > 0 if 7 years of positive benefits (DR = 5%) IRR > 4%
Panama: ProCaJoven	10–12% (women and Panama City residents)	Not significant	NPV > 0 if 1 year of positive benefits (IR = DR)

Source: Kluge, Rother and Sanchez Puerta (2012). Details on the individual evaluations are given in Ibararán and Rosas (2009).

Notes: Employment changes are differences in percentage points relative to the control group. Earnings changes are % changes. “—” = not available; DR: discount rate; IR: interest rate; IRR: internal rate of return; NPV = net present value.

In sum, the Jóvenes programmes bring about small positive earnings gains (the data are considered not too reliable for precise estimates) as well as positive employment effects for their participants, where higher gains in employment probability are obtained, in general, among women and younger people. Ibararán and Rosas (2009) emphasize that, conditional on employment, there are large and significant impacts on job quality (measured by getting a formal job, having a contract and/or receiving health insurance as a benefit). This is seen as an important result in a region that is characterized by the low quality of jobs.

The second programme type for which knowledge regarding (youth) ALMP in LAC has been generated is ENTRA 21. The first phase of the programme comprised 35 projects in 18 countries and lasted from 2002 until 2007. ENTRA 21 is financed by the Multilateral Investment Fund (MIF), with the International Youth Foundation (IYF) as co-financing institution and executing agency. The programme targets disadvantaged young people of 16–29 years of age. It consists of a short-term skills training comprising information technology skills and life skills, combined with placement services.

Despite this common framework, the specific intervention types are quite heterogeneous across countries and local implementing partners.

During the first phase ENTRA 21 had nearly 20,000 participants. While there were no rigorous impact evaluations conducted, across countries qualitative evaluations based on tracer studies point to increased employment chances of participants, increased school (re-) enrollment rates, and high levels of satisfaction with the programme on the part of the youths.⁸ The intervention model continues the demand-driven aspect of the Jóvenes programmes, aiming to provide businesses with skilled IT workers. In follow-up surveys businesses also reported high levels of satisfaction with participants, in particular their life skills. During the first phase of ENTRA 21, beneficiaries had on average higher education levels than the participants in the Jóvenes programmes, since they were typically required to hold (or pursue) a secondary degree.

The third type of youth ALMP for which empirical evidence has been produced – besides the Jóvenes and ENTRA 21 programmes – concerns entrepreneurship. The evidence is limited, however, and mainly two programmes from Perú – “Jóvenes Emprendedores” and “Jóvenes Creadores de Microempresas” – are cited and reviewed in the literature (e.g. Puerto 2007, Urzúa and Puentes 2010). The target groups of both programmes were 15-25-year old and 18-30-year old (“Jóvenes Emprendedores”) youths with at least three years of secondary education, and – preferably, but not necessarily – some entrepreneurial experience. Participants received a combination of business skills and practical training, counseling, and a loan or grant. The evaluations found positive impacts on the probability of maintaining a business. This positive effect was more expressed for those participants who already owned a micro-enterprise when starting the programme.

4. Meta-analytical results on ALMP effectiveness

The empirical part of the study adds to the review of prior evidence (section 3) by providing estimates of ALMP effectiveness from a new sample of impact evaluation studies. A large part of this sample was collected as part of a parallel study (Card et al. 2015), and meta-analytical results arising from this sample of ALMP evaluations worldwide will be presented in section 4.1 first. Building on this sample (and applying the inclusion criteria and coding sheet specified therein), this research project aimed at constructing a new meta-analytical data base specifically for Latin America. Empirical results from this sample for LAC are then presented in section 4.2.

The systematic search to compile the database of ALMP evaluations proceeded in the spirit of Card et al. (2010, 2015) and Kluve (2010) and specified as key inclusion criteria:

- i. Microeconomic studies assessing treatment effects at the individual level;
- ii. Empirical academic studies controlling for selection into treatment and control groups;
- iii. Studies evaluating particular programmes (i.e. no pooling of programmes);
- iv. Studies assessing effects relative to non-participation, not relative to other programmes.

⁸ The results reported in Table 2 taken from the Urzúa and Puentes (2010) paper, Cuadro 4, do not seem fully consistent with the individual ENTRA 21 evaluations reported in both the complete overview table “Cuadro A3” in Urzúa and Puentes (2010) and the Youth Employment Inventory. In both of the latter sources ENTRA 21 programs are classified as “basic evaluations” not estimating net impacts, and programs are found to have a positive effect. In Table 2 / Cuadro 4, however, ENTRA 21 evaluations are classified as ** (i.e. non-experimental evaluation with many outcome variables), and program effectiveness as not significantly different from zero (0).

In addition, papers had to be available in an English-language version. In a few cases, studies were excluded during the coding process, if necessary information could not be extracted (e.g. no standard errors provided with the impact estimates). The data base constructed specifically for LAC also allowed for the inclusion of Spanish-language impact studies.

The sampling frame comprises the following sources to identify relevant ALMP impact evaluation studies (following the sampling approach in Card et al. 2010 and 2015): Studies conducted by researchers in the IZA fellow network working on “programme evaluation”; studies by researchers in the NBER’s “labour studies” network; studies contained in relevant cumulative data bases such as 3ie’s “Repository of Published Impact Evaluation Studies” (RIEPS) and relevant review papers (such as Ibararán and Rosas 2009); studies citing Card et al. (2010) or Kluge (2010), as identified by a Google Scholar search.

For the database for LAC, additional sources were used to identify relevant impact evaluations. The first data source were studies that ILO researchers had identified during their process of compiling a compendium of the active labour market policies previously or currently in place in LAC. A second data source were studies contained in the systematic reviews of Sanz (2012) and Vezza (2013). A third data source were studies contained in the online evaluation hub of the Inter-American Development Bank. All additional studies originating from these sources (65 total) were screened for matching the inclusion criteria and, to the extent that these were satisfied, were coded into the database (26 total). The main reasons for not being included were duplicate studies of programmes already coded into the database and interventions that were not related to active labour market policies.

The key data extracted for each impact evaluation study comprise (inter alia): year(s) of programme operation; country; programme type; target group: gender and age; programme duration; pilot vs. operating programme; estimation method; identification strategy; type of covariate adjustment; and sample size. The meta-analysis uses these explanatory factors to correlate with the following measure of estimated programme effects: trinomial outcome, (-1) statistically negative, (0) insignificant (zero), (+1) statistically positive. All programme effects are coded (if available) for the short-term (≤ 12 months post-treatment), medium-term (12-24 months) and long-term (> 24 months). The larger data set of Card et al. (2015) also codes effect sizes for those evaluations that look at the post-treatment employment probability as outcome.

In a second step, these study-level data extracted from the individual paper are combined with other data sources capturing contextual factors: labour market institutions (EPL indices, minimum wages); macro-economic conditions (unemployment rate, GDP growth); aggregate socio-demographic factors (educational variables; population characteristics); ideally, and most importantly, also: ALMP spending (per cent of GDP). These contextual data were collected from economic indicator databases provided by the World Bank and the OECD. Typically, data availability is much better for OECD countries than for non-OECD countries.

The resulting data set is a “stacked” version of the data, in which multiple observations per study are generated if the study contains separate impact estimates for the following: short-, medium, and long-term and programme/participant group (PPS) as defined by different programme types and participant subgroup (age and gender). Overall, the data comprise 526 separate PPS’s from a total of 207 evaluation studies, and a total of 857 separate programme estimates for the 526 programme/participant subgroups. This is a substantial extension from the data used in Card et al. 2010 (199 impact estimates from 97 studies).

Figure 4 in the Appendix gives an overview of the distribution of these impact estimates over time. Note that the numbers reported are sorted by the year in which *the programme evaluated began to operate*, hence the small numbers for 2011 and 2012 (the evaluations for programmes starting since 2011 are mostly still underway). The figure shows a generally upward trend, with some accumulation of evaluations in the early 2000s. The dark shaded part of the bins indicates the number of RCTs and shows a clear increasing trend in the usage of experimental methods: in particular, among the 210 estimates from 2004 and later, 61 per cent are from randomized designs.

Table 4 presents an overview of the programme estimates in the new meta-sample of ALMP evaluations worldwide. As noted above, there a total of 857 different impact estimates for 526 different PPS's (programme-type/participant subgroup combinations) extracted from 207 separate studies. Column 1 of the table presents the characteristics of the overall sample, while columns 2-6 summarize the estimates from five main subgroups of countries: Austria, Germany and Switzerland (the "Germanic" countries), which account for about one quarter of all studies; Denmark, Finland, Norway and Sweden (the "Nordic" countries), which account for another quarter of studies; Australia, Canada, New Zealand, U.K. and U.S. (the "Anglo Saxon" countries), which account for just over 10 per cent of studies; and two non-mutually exclusive groups of lower and middle income countries – "non-OECD" countries (10 per cent of studies), and Latin American and Caribbean (LAC) countries (10 per cent of studies).⁹ Note that the latter comprises the LAC impact evaluation studies identified by the sampling scheme applied in Card et al. (2015), and that the augmented LAC sample used in the region-specific meta-analysis in section 4.2 below is substantially larger.

The second panel of Table 4 shows the classification of programmes into main ALMP categories as defined in section 2.2: training programmes – including classroom and on-the-job training – account for about one half of the programme estimates, with bigger shares in the non-OECD and LAC countries, and a smaller share in the Nordic countries. Job search assistance (JSA) programmes, private subsidy programmes, and sanction/threat programmes each account for about one-sixth of the programme estimates, though again there is variability across country groups, with JSA and sanction/threat programmes being particularly prevalent in the Nordic and Anglo Saxon countries. Subsidized public sector job programmes are relatively rare in all county groups.

The next three panels of the table show the characteristics of the programme participant groups, classified by age group, gender, and "type" of participant. About one-half of the estimates are for mixed age groups and mixed gender groups, but there are also relatively large subsets of estimates that are specific to either younger or older workers, or females or males. The majority of programme estimates are for participants who enter from the regular unemployment insurance (UI) system, though looking at the percentages for the Non-OECD and LAC groups (24 and 0, respectively) this is clearly driven by the OECD countries. Typically these participants are assigned to a programme and required to attend as a condition for continuing benefit eligibility, i.e. the ALMP practice is embedded into the UI system. The remaining estimates are split between programmes that serve the long term unemployed (LTU) and those that serve "disadvantaged" participant groups. In many cases, LTU and disadvantaged participants are recruited from the overall population and enroll voluntarily. Such voluntary programmes are more common in the Anglo Saxon countries and in less developed countries that lack a formal UI system.

⁹ That is, the stratification into these main country groups essentially leaves out evaluations from OECD countries e.g. in Southern or Eastern Europe.

Table 4. Description of sample of programme estimates

	Country of study					
	Full sample	Austria, Germany, Switzerland	Nordic Countries	US, UK, Australia, New Zealand, Canada	Non- OECD	Latin America and Caribbean
	(1)	(2)	(3)	(4)	(5)	(6)
Number of estimates	857	290	212	87	132	72
Number of PPS's	526	163	127	45	86	54
Number of studies	207	52	48	24	33	19
<i>Type of programme (%):</i>						
Training	49	62	17	45	79	97
Job Search Assistance	15	8	26	22	2	0
Private Subsidy	14	17	15	5	11	3
Public Employment	9	9	10	3	6	0
Other	14	5	32	25	2	0
<i>Age of programme group (%):</i>						
Mixed	59	54	61	72	40	25
Youth (<25 years)	21	12	20	15	53	69
Older (≥25 years)	20	33	19	13	8	6
<i>Gender of programme group (%):</i>						
Mixed	54	53	67	43	43	11
Males only	22	24	18	25	23	44
Females only	23	23	16	32	31	44
<i>Type of programme participants (%):</i>						
Registered unemployed	65	86	67	33	24	0
Long-term unemployed	12	8	10	25	7	0
Disadvantaged	23	6	23	41	69	100
<i>Outcome of interest (%):</i>						
Employment status	57	83	31	26	63	54
Earnings	21	8	25	47	36	43
Hazard to new job	12	7	25	3	0	0
Other hazard	6	0	16	2	0	3
Unemployment status	4	2	4	21	1	0
<i>Effect measured at (%):</i>						
Short Term	48	42	54	37	47	57
Medium Term	35	34	31	40	45	42
Long Term	16	23	16	23	8	1
Experimental Design (%)	19	0	39	31	28	26

Source: Card et al. (2015)

The next panel in Table 4 shows the outcome variables used to measure the programme impact and the time horizons of the estimate. The most common outcome – particularly in the Germanic and non-OECD countries – is the probability of employment, while the level of earnings is the most common metric in the Anglo Saxon countries. About one sixth of the programme estimates – but 40 per cent of the estimates from Nordic countries – measure the exit rate from the benefit system, typically focusing on the rate of exit to a new (unsubsidized) job. The category “Other hazard” captures studies that look at exit from unemployment, and in which the destination state is either more broadly defined than employment (e.g. continuing education) or unknown. Finally, a small subset of estimates – mostly from Anglo Saxon countries – focus on the probability of unemployment. About one half of

the estimates are for a short term horizon (<1 year) after programme completion, 35 per cent for a medium term (1-2 years), and 18 per cent for a longer term (more than 2 year after).

The last row of the table shows the fraction of programme estimates that are based on an experimental design. In most of the country groups about 30 per cent of estimates come from randomized controlled trials (RCT's) that have been explicitly designed to measure the effectiveness of the ALMP of interest. An important exception are the Germanic countries, where no experimentally based estimates are yet available, despite being the largest country group in terms of programme estimates in the sample.

4.1 Findings worldwide: A summary of Card, Kluve and Weber (2015)

Table 5 examines the pattern of ALMP impact estimates over time, i.e. the relation between the short, medium and long-term estimates. To verify that the pattern holds for a given programme and participant subgroup – and may not simply be an artefact of heterogeneity across studies – Table 5 analyzes the within-PPS evolution of impact estimates. Specifically, columns 1-3 show the changes in estimated effect size for the subset of studies for which both short and medium term estimates, medium and long term estimates, and short and long term estimates, respectively, are observed. The table shows that estimated effect sizes tend to increase as the time horizon is extended from the short run to the medium run. The average change between the medium and longer runs is slightly negative, but overall the short-run to long-run change is still positive.

Table 5. Transitions in programme impacts for a given programme and participant subgroup

	Change in effect size			Change in sign/significance		
	Short- to medium-term (1)	Short- to long-term (2)	Medium- to long-term (3)	Short- to medium-term (4)	Short- to long-term (5)	Medium- to long-term (6)
All	0.043 (0.020)	0.037 (0.035)	-0.012 (0.007)	0.231 (0.055)	0.250 (0.103)	0.020 (0.052)
<i>Number of studies</i>	105	43	47	225	100	102
By programme type						
Training	0.070 (0.018)	0.087 (0.035)	-0.010 (0.011)	0.314 (0.072)	0.439 (0.085)	0.048 (0.049)
<i>Number of studies</i>	70	28	28	121	41	42
Job search assist.	0.009 (0.019)	-0.005 (0.003)	-0.004 (0.006)	0.265 (0.095)	0.143 (0.167)	-0.111 (0.144)
<i>Number of studies</i>	10	7	7	34	21	18
Private subsidy	-0.055 (0.126)	-0.006 (0.156)	-0.005 (0.031)	0.083 (0.150)	0.167 (0.267)	-0.062 (0.068)
<i>Number of studies</i>	9	2	6	24	12	16
Public sector emp.	-0.007 (0.070)	-0.299 (0.299)	-0.039 (0.039)	0.158 (0.170)	-0.143 (0.494)	-0.143 (0.285)
<i>Number of studies</i>	10	2	2	19	7	7
Other	0.013 (0.035)	-0.048 (0.021)	-0.029 (0.012)	0.000 (0.108)	0.158 (0.182)	0.211 (0.092)
<i>Number of studies</i>	6	4	4	27	19	19

Source: Card et al. (2015)

Comparing across programme types it is clear that the pattern of rising impacts is driven almost entirely by training-based programmes, which show a relatively large gain in effect sizes from the short term to the medium term and only a small decline between the medium and longer runs. The patterns for the other types of programmes suggest relatively constant or declining effect sizes over the post-programme time horizon.

Columns 4-6 examine the within-study changes in sign and significance for a broader set of studies. To do this, Table 5 assigns a value of +1 to PPS estimates that change from insignificant to significantly positive or from significantly negative to insignificant; 1 to estimates that change from significantly positive to insignificant or from insignificant to significantly negative; and 0 to estimates that have the same classification over time. This simple way of summarizing the within-study patterns points to generally similar conclusions as the changes in effect size, though job search assistance programmes show more evidence of a rise in impacts from the short-run to the medium run in column 4 than column 1, and private employment subsidies show a more positive trend in impacts from the short to long run.

Table 6 presents the estimates from a series of regression models for 352 effect size estimates observed for 200 programme/participant subgroups in 83 different studies. The empirical models pool the effect sizes for different post-programme horizons and include dummies indicating whether the programme estimate is for the medium or long term (with short term estimates in the omitted group). The basic model in column 1 includes only these controls and a set of dummies for the type of programme (with training programmes in the omitted category). This basic specification finds that the effect size estimates are larger in the medium and long run, and that public sector employment programmes are associated with smaller effect sizes.

The model in column 2 introduces additional controls for the type of participant (UI recipients versus long term unemployed or disadvantaged), their age and gender, the country group in which the programme was offered, the duration of the programme, and four features of the evaluation: whether it had an experimental design, the square root of the sample size, whether the study was published, and the study's citation percentile relative to all studies in the sample released in the same year. These controls slightly attenuate the growth in effect sizes over longer post-programme horizons but have little effect on the programme type dummies.

Columns 3 and 4 introduce a parallel set of models that allow the time profiles of post-programme impacts to vary with the type of programme. In these specifications the "main effects" for each programme type show the short term impacts relative to training programmes (the omitted type), while the interactions of programme type with medium term and long term dummies show how the impacts evolve relative to the profile for training programmes (which are summarized by the main effects in the first two rows). Three key conclusions emerge from these more flexible specifications. First, as suggested by the patterns in Table 5, the effect sizes for training programmes tend to rise over time while the effects for job search assistance and sanction/threat programmes are nearly constant. Second, public sector employment programmes appear to be relatively ineffective at all time horizons. Third, the profile for private sector incentive programmes is relatively similar to the profile for training programmes.

Table 6. Estimated effect size models

	Dependent variable = estimated effect size			
	(1)	(2)	(3)	(4)
<i>Effect term (omitted = short term)</i>				
Medium term	0.071 (0.027)	0.056 (0.021)	0.101 (0.037)	0.088 (0.025)
Long term	0.131 (0.044)	0.091 (0.038)	0.097 (0.040)	0.099 (0.040)
<i>Programme type (omitted = training)</i>				
Job search assist.	-0.059 (0.027)	-0.012 (0.043)	0.002 (0.026)	0.029 (0.044)
Private subsidy	0.094 (0.068)	0.086 (0.057)	-0.007 (0.091)	0.044 (0.099)
Public sector emp.	-0.120 (0.034)	-0.152 (0.044)	-0.081 (0.055)	-0.084 (0.062)
Other	0.036 (0.071)	0.007 (0.094)	0.139 (0.068)	0.108 (0.098)
<i>Interaction with medium term:</i>				
Job search assist.			-0.098 (0.043)	-0.092 (0.041)
Private subsidy			-0.016 (0.102)	-0.055 (0.104)
Public sector emp.			-0.081 (0.070)	-0.09 (0.073)
Other			-0.133 (0.048)	-0.105 (0.045)
<i>Interaction with long term:</i>				
Job search assist.			-0.115 (0.041)	-0.083 (0.052)
Private subsidy			0.329 (0.142)	0.182 (0.127)
Public sector emp.			-0.030 (0.081)	-0.156 (0.108)
Other			-0.239 (0.073)	-0.273 (0.092)
Additional controls	No	Yes	No	Yes
Number of observations	352	352	352	352
R squared	0.13	0.33	0.21	0.37

Source: Card et al. (2015)

Effect sizes are available for only 40 per cent of the overall sample. Therefore, to supplement the models presented in Table 6, Table 7 displays estimation results from ordered probit (OP) models for sign and significance for the entire sample. The first 4 columns of Table 7 present a series of OP models that are analogous to those in Table 6, and fit to the overall sample of programme estimates. Specifically, the specifications in columns 1 and 3 have no controls other than dummies for medium and long term horizons and the type of ALMP – in the latter case interacting the type of programme with the time horizon dummies. Columns 2 and 4 report expanded specifications with additional control variables. Finally, column 5 of Table 7 repeats the specification from column 4, but fit to the subsample of 352 programme estimates for which there is an effect size estimate.

The OP models yield coefficients that are very highly correlated with the corresponding coefficients from the effect size models, but 4-5 times bigger in magnitude. For example, the correlation of the 14 coefficients from the specification in column 4 of Table 7 with corresponding coefficients from the specification in column 4 of Table 5 is 0.84. Thus, the OP models confirm that the impacts of job search assistance and sanction/threat programmes tend to fade relative to the impacts of training programmes, and that public sector employment programmes are relatively ineffective at all-time horizons.

The OP models also confirm most conclusions about the differential impacts of ALMP's across different participant groups and in different countries. Comparing the coefficients of the additional control variables (omitted here for brevity, but reported in Table 7 in Card et al. 2015), both the effect size models and the sign/significance models show smaller impacts of programmes on young participants and older participants, relative to the impacts on mixed age groups, and larger impacts for long-term unemployed participants. Using the overall sample of programme estimates the OP models also point to a significantly positive relative impact for disadvantaged participants. In contrast, the effect size models (and the OP models fit to the effect size sample) yield an insignificant coefficient, arguably as a consequence of the small number of studies that focus on this group.

One important difference between the effect size models and the OP models concerns the relative impact of ALMP's on female participants. In the effect size models the estimated coefficients for female participants are around 0.11 in magnitude, and statistically significant at conventional levels (with t statistics around 2). In the OP models, by comparison, the corresponding coefficients are relatively small in magnitude, and far from significant. Further investigation reveals that this divergence is driven by the upper tail of effect size estimates for female participants, and in particular by the relatively large effect size estimates for programmes that show a significantly positive effect. This upper tail of effect sizes does not appear to be driven by a few outliers, but instead reflects a systematically higher probability of estimating a large positive effect size when the participant group is limited to females.

A final interesting aspect of the OP models is the pattern of coefficients associated with the choice of dependent variable. These coefficients show that studies modeling the hazard rate of exiting the benefit system or the probability of unemployment are significantly more likely to report positive findings than studies modeling employment (the omitted category) or earnings. Studies that model the hazard to a new job are also somewhat more likely to obtain positive findings. This implies that some caution is warranted in interpreting the short term impact estimates from studies that use outcomes other than employment or earnings.

Table 7. Ordered Probit models for sign/significance of estimated programme impacts

	Dependent variable = ordinal indicator for sign/significance				
	(1)	(2)	(3)	(4)	(5)
<i>Effect term (omitted = short term)</i>					
Medium term	0.372	0.483	0.563	0.639	0.491
	(0.088)	(0.099)	(0.130)	(0.138)	(0.145)
Long term	0.597	0.742	0.901	1.053	1.03
	(0.157)	(0.167)	(0.175)	(0.171)	(0.206)
<i>Programme type (omitted = training)</i>					
Job search assist.	0.274	0.286	0.531	0.532	0.569
	(0.156)	(0.168)	(0.180)	(0.197)	(0.459)
Private subsidy	0.139	0.076	-0.04	-0.132	-0.166
	(0.189)	(0.210)	(0.224)	(0.263)	(0.438)
Public sector emp.	-0.677	-0.758	-0.383	-0.489	-1.399
	(0.219)	(0.228)	(0.276)	(0.279)	(0.496)
Other	-0.11	-0.205	0.318	0.202	1.148
	(0.172)	(0.184)	(0.206)	(0.236)	(0.653)
<i>Interaction with medium term:</i>					
Job search assist.			-0.289	-0.283	-0.004
			(0.235)	(0.249)	(0.343)
Private subsidy			0.138	0.226	0.353
			(0.289)	(0.311)	(0.486)
Public sector emp.			-0.645	-0.573	0.051
			(0.285)	(0.288)	(0.477)
Other			-0.764	-0.705	-0.662
			(0.226)	(0.245)	(0.278)
<i>Interaction with long term:</i>					
Job search assist.			-1.017	-1.022	-0.832
			(0.313)	(0.294)	(0.313)
Private subsidy			0.611	0.58	1.274
			(0.375)	(0.387)	(0.798)
Public sector emp.			-0.643	-0.675	0.131
			(0.490)	(0.497)	(0.832)
Other			-0.999	-1.021	-1.638
			(0.353)	(0.375)	(0.430)
<i>Additional controls</i>					
	No	Yes	No	Yes	Yes
Number of observations	857	857	857	857	352
Log likelihood	-801	-765	-786	-752	-283

Source: Card et al. (2015)

4.2 A new sample of ALMP evaluations for LAC

4.2.1 Sample description

Following the sampling procedure detailed at the beginning of section 4, this paper started with the 18 evaluation studies for LAC included in the Card et al. (2015) database, and added 26 impact evaluation studies for ALMP in LAC identified through a number of sources (the ILO research department, the IDB's evaluation hub, previous meta-analyses for LAC, see above). The final stacked version of the LAC meta data contains 152 impact estimates from a total of 44 studies (the complete list of these studies is given in the appendix). 91 of the estimates are for short-term impacts, and 61 are for medium-term impacts.¹⁰

Figure 5 of the Appendix presents the distribution of countries in the data, separately for the short- and medium-run estimates. The figure shows that the majority of estimates come from Peru, with an essentially equal number of short- and medium-run estimates, mostly originating from several evaluations of the “Projovent” programme. Corresponding to the respective size of the country in the region, Argentina, Chile and Colombia are those countries that are also represented in the data with a relatively large number of estimates. This is not the case, however, for Brazil and Mexico, both of which enter with a rather small number of programme evaluation estimates. The Dominican Republic also has several impact estimates, all originating from different evaluations of the “Juventud y Empleo” programme. The programme stands out because of the experimental design used for assessing impacts of several cohorts of training participants. The remaining countries in the data are Bolivia, El Salvador, Nicaragua, Panama, and Uruguay.

Figures 6 and 7 in the Appendix show the distribution of programme starting times contained in the LAC meta data. It can be seen that there is a peak of impact estimates from the mid- to late-1990s, reflecting the evaluations of the original “Jóvenes” programmes. Over the last decade, the number of estimates remains rather constant, and no increase in evaluation efforts can be deduced from these figures.

Table 8 presents summary statistics for the LAC meta sample. The first panel looks at the programme intake group and shows that – quite different from OECD countries (see above) – about 90 per cent of estimates are for the intake group of “disadvantaged” or “vulnerable” workers, while only about 10 per cent enter as registered unemployment insurance recipients, and none from long-term unemployment. “Disadvantaged” is typically defined – by programme eligibility rules or the evaluators – using some measure of low-income (e.g. individuals from lower percentiles of the household income distribution, or explicitly from relative or absolute poverty) and/or low skills (most often defined as having no secondary schooling degree). Individuals without work or working in the informal sector may also be defined as disadvantaged.

Looking at the second panel in Table 8, there is very little variation by ALMP programme type in LAC. More than 80 per cent of programmes are skills training programmes, and only a few impact estimates for the other three categories – job search assistance, private sector incentives, public sector employment – have been produced. This is likely in line with a deliberate focus of labour market policies in LAC on training programmes over the last two decades. At the same time, the third panel shows that these programmes are relatively short, falling into either the category of short duration (4 months or less) or medium duration (5-9 months).

¹⁰ To be precise, one single long-term estimate was identified in the entire data, and eventually coded with the medium-term impacts.

The participant composition is depicted in panels four and five of Table 8. About 40 per cent each of the available impact estimates are for male and female participants separately, and about 20 per cent are for pooled gender impacts. Finally, the focus on youth interventions shows in the distribution of programme estimates by age group: about 70 per cent of impact estimates are for the group of workers 25 years or younger, about 25 per cent are for workers older than 25, and about 5 per cent are for the pooled age group.

Table 8. LAC meta data: sample summary statistics

	Short-run		Medium-run	
	# Estimates	Per cent	# Estimates	Per cent
Programme intake group				
Registered UI	12	13.19	2	3.28
Disadvantaged	79	86.81	59	96.72
LTU	0	0	0	0
Type of programme				
Training	76	83.52	50	81.97
Job Search Assistance	3	3.3	4	6.56
Private sector incentive	8	8.79	3	4.92
Public sector employment	4	4.4	4	6.56
Programme duration				
Unknown or mixed	20	21.98	9	14.75
4 months or less	25	27.47	24	39.34
5-9 months	46	50.55	28	45.9
Over 9 months	0	0	0	0
Gender of programme group				
Pooled	26	28.57	9	14.75
Male only	32	35.16	26	42.62
Female only	33	36.26	26	42.62
Age of programme group				
Pooled age	28	30.77	14	22.95
Youths	55	60.44	45	73.77
Older workers	8	8.79	2	3.28

Table 9 presents the evaluation methods used in the studies represented in the LAC meta sample. It can be seen that about 20 per cent of estimates originate in experimental studies, while the majority of estimates (about 55 per cent) come from non-experimental designs using a comparison group with longitudinal data. There are virtually no estimates from duration models for Latin American ALMPs, and about one quarter of estimates is based on cross-sectional approaches. Looking at the dependent variable (panel 2), about half of the estimates each considers the probability of employment and earnings, respectively, as outcomes. Both regression and matching methods are used to adjust for covariate imbalance between treatment and control groups.

Table 9. LAC meta data: evaluation methods used

	Short-run		Medium-run	
	# Estimates	Per cent	# estimates	Per cent
Basic methodology				
Cross-sectional	24	26.37	18	29.51
Duration with comparison group	2	2.2	0	0
Experimental	8	8.79	16	26.23
Longitudinal with comparison group	57	62.64	27	44.26
Dependent variable				
Hazard off register	2	2.2	0	0
Probability employed	44	48.35	32	52.46
Earnings	45	49.45	29	47.54
Covariate adjustment method				
Regression	31	34.07	32	52.46
Matching	60	65.93	29	47.54

4.2.2 Results for the full sample

Table 10 depicts an overview of estimated programme impacts. First, it can be noted that only a very small number of estimates are significantly negative. For this reason, the meta regressions implemented subsequently (see below) do not use ordered probit models as for the Card et al. (2015) meta data above, but combine the “significantly negative” and “insignificant” categories into a non-positive category, and use linear probability models with an indicator “positive significant yes/no (1/0)” as dependent variable. Second, the descriptive statistics do not suggest that medium-run estimates are more likely to be positive in LAC than the short-run estimates – quite different from the strong findings for the full meta-analysis sample. Instead, the fraction of significantly positive estimates is 11 percentage points smaller in the medium run (44 per cent) than in the short run (55 per cent).

This is striking, especially against the fact that most programmes in the LAC data are training programmes, and the pattern identified in Card et al. (2015) and summarized in section 4.1 shows that especially the human capital inducing programmes show increasingly positive impacts in the long run. This result may point to the fact that the human capital investments implied in the LAC training programmes are too small (recall the relatively short durations of the programmes) to effectuate large long-term employment or earnings gains. Whereas counterexamples exist (e.g. Ibarrarán et al. 2015 who find some slowly increasing and sustained impacts in a long-term study for the Dominican Republic), it has to be mentioned that the overall positive judgment of the “Jóvenes” programmes has been largely based on their short-term impacts. These may in fact provide only a partial view. Finally, Table 10 reports median effect sizes for those few studies for which effect sizes could be coded. Since this number is quite small, however, the meta regressions will use the positive sign/significance models only – recall from the results in section 4.1 that the effect size models and the sign/significance models generally produce the same qualitative findings.

Table 10. LAC meta data: summary of estimated impacts

	Significant negative	Insignificant	Significant positive
Short-term (N=91)	5 5.49	36 39.56	50 54.95
Medium-term (N=61)	2 3.28	32 52.46	27 44.26
Median effect size for estimates with P(Emp), short-term, N=23		-0.0229	0.2456

Notes: One significant long-term impact coded with the medium-term impacts.

Table 11 contains empirical results from meta-analytical regressions. The first column reports a basic specification with covariates for (i) programme type and time horizon, (ii) target group, and (iii) evaluation design and programme details. Each augmenting separately the basic specification, the second column introduces country dummies, the third column includes interaction terms (training interacted with time horizon, age group, and duration, respectively), and the fourth column includes both interaction terms and contextual factors (Annual GDP growth and unemployment rate, both measured at the time when the specific programme was in place). Column five is the full specification with all covariates.

The results from the meta regression indicate that training in LAC is not more successful than other programme types (panel i), and – quite different from the results for ALMP worldwide – that impact estimates do not become more positive over time. This may be a cause for concern in the design of the training programmes, as the human capital component contained may not be substantial enough to bring about significant and sustained impacts. In terms of the target group (panel iii), no differential effects by age group seem to exist. Regarding gender, there is some indication for the same pattern found for the worldwide sample, i.e. females are more likely to benefit than males; the coefficients are consistently negative for males and consistently positive for females, though not significant at conventional levels.

Looking at programme details (panel iii), programmes with a short duration are significantly less likely to produce positive impact estimates. Also the contextual factors (panel iv) show significant correlations: Different from the overall results presented above, ALMP in LAC seem to be working particularly well during an upswing, not a recession: The annual GDP growth rate shows a significantly positive correlation with programme effectiveness, and the unemployment rate a significantly negative correlation. To some extent, this might explain that there are short-term impacts only: ALMPs in LAC may help disadvantaged individuals into (better) work during good times, but may not be able to sustain these impacts. This would also be in line with the significantly negative coefficient for the indicator for Argentina, the country in LAC with probably the severest experience of recessions during the last two decades.

Table 11. LAC meta data: Linear probability models for positive sign/significance of estimated programme impacts

	(1)	(2)	(3)	(4)	(5)
(i) Programme type and time horizon (base: other programs, short-run)					
Training programme	-0.048 (0.098)	-0.055 (0.097)	0.083 (0.150)	0.111 (0.154)	0.058 (0.155)
Effect estimated in medium-run	-0.054 (0.080)	-0.059 (0.075)	0.073 (0.149)	0.07 (0.138)	0.188 (0.162)
Interaction: training * medium-run			-0.143 (0.155)	-0.155 (0.144)	-0.261 (0.170)
(ii) Target group (base: pooled age, pooled gender)					
Youths (25 years and younger)	0.072 (0.131)	-0.11 (0.117)	0.192 (0.159)	0.23 (0.136)	0.081 (0.145)
Older workers (over 25)	-0.049 (0.146)	-0.074 (0.155)	-0.04 (0.145)	0.103 (0.142)	0.054 (0.159)
Interaction: training * youths			-0.152 (0.214)	-0.208 (0.169)	-0.116 (0.176)
Males	-0.267 (0.118)	-0.237 (0.124)	-0.278 (0.127)	-0.218 (0.140)	-0.214 (0.137)
Females	0.109 (0.116)	0.131 (0.124)	0.099 (0.124)	0.153 (0.119)	0.155 (0.123)
(iii) Evaluation design and programme details (base: non-experimental, missing or unknown duration)					
Experimental evaluation	0.005 (0.131)	-0.052 (0.149)	0.014 (0.133)	0.126 (0.126)	-0.006 (0.135)
Year of programme start	-0.003 (0.009)	0 (0.009)	-0.003 (0.009)	-0.003 (0.011)	-0.007 (0.010)
Short duration (4 months or shorter)	-0.572 (0.127)	-0.735 (0.158)	-0.595 (0.134)	-0.672 (0.140)	-0.912 (0.141)
Medium duration (5 to 9 months)	-0.317 (0.133)	-0.289 (0.130)	-0.303 (0.285)	-0.33 (0.309)	-0.515 (0.272)
Interaction: training * medium duration			-0.021 (0.333)	-0.002 (0.344)	0.201 (0.315)
(iv) Country indicators					
Argentina		-0.352 (0.189)			-0.314 (0.111)
Chile		-0.168 (0.190)			-0.222 (0.161)
Peru		-0.056 (0.146)			-0.33 (0.136)
Colombia		-0.004 (0.128)			0.043 (0.110)
Panama		0.05 (0.186)			-0.022 (0.190)
(v) Contextual factors					
GDP growth rate				0.026 (0.015)	0.038 (0.021)
Unemployment rate				-0.031 (0.009)	-0.04 (0.013)
Constant	7.169 (18.053)	0.336 (18.359)	6.812 (17.660)	7.924 (22.461)	15.874 (19.716)
N	152	152	152	150	150
R-squared	0.32	0.36	0.33	0.40	0.44

Notes: Standard errors (in parentheses) clustered at the study level.

4.2.3 Results for the training subsample

Given that the largest part of the LAC meta sample (126 of the 152 programme estimates) is categorized as the evaluation of a training programme, in a subsequent step an effort was made to investigate whether any additional conclusions can be drawn regarding the type of training. To that end, the data were augmented by binary indicators for training components, i.e. each indicating whether the specific programme contained i) classroom training, ii) on-the-job training or internship, iii) a job insertion or life skills component, and iv) whether it contained entrepreneurship training. Clearly, more detailed aspects would have been of interest as well, in particular the planned and actual durations of training (overall and by component). This would have potentially allowed a precise analysis of training design features. Unfortunately, however, too little information on these aspects is provided in the studies to be included and coded into the meta data. Two other – equally coarse – indicators that were coded additionally intend to capture dimensions of the target group, to investigate further the relatively large group of “disadvantaged” served by programmes in LAC: One indicator looks specifically at whether training programmes explicitly target the poor population, and another indicator specifies whether the programme targets youths up to 24 years of age.

Looking at these additional indicators, almost all training programmes comprise a classroom training component (93.6 per cent, or 118 of the 126 estimates). The share of on-the-job-training components is also high, with 77 per cent of the estimates (97 of the 126 overall). At the same time, only 20 per cent – 25 of the 126 estimates – contain a life skills or jobs insertion component. And a mere 5 estimates (i.e. 4 per cent) cover entrepreneurship training. Given this pattern, the meta regressions for the training subsample (reported below) will report specifications using indicators mapping this information into the number of components a training programme comprises: 25 per cent of programmes (32 estimates) have one component only, 55 per cent of programmes have two components (69 estimates), and 20 per cent have three or more components (25 estimates). Finally, regarding the additional population indicators, two thirds of training programmes (84 estimates) are explicitly pro-poor, and 58 per cent (73 estimates) target the bottom bracket of the youth population up to 24 years of age.

Table 12 reports the estimation results for a series of specifications for the training subsample, including the above specified indicators. First, the results do not show a strong pattern by number of programme components. Relative to one-component programmes, there is no indication that two- or three-component programmes are significantly more likely to effectuate positive labour market impacts. This is perhaps somewhat unexpected, in light of the overall ALMP results indicating that “comprehensive” programmes appear to work better. Secondly, however, as with the full sample (Table 11 above) it is the case that programmes with short duration (4 months or less) still display significantly less positive outcomes. This points to a potentially interesting result: The number of training components per se may not be the key design factor in devising a “comprehensive” programme, but it may be the length of the programme instead. Whereas the results for this sample point into this direction, the limitations of the analysis have to be recalled: the coding of the training components is relatively coarse, frequently studies do not report programme duration, and both measures only partially capture the “intensity” of the programme (as would be given e.g. by hours per day).

Table 12. LAC meta data training subsample: Linear probability models for positive sign / significance of estimated programme impacts

	(1)	(2)	(3)	(4)	(5)
(i) Training programme characteristics (base: one component, missing/unknown duration)					
Two training components	-0.353 (.196)	-0.387 (.209)	-0.37 (.227)	-0.427 (.178)	-0.405 (.202)
Three training components	-0.245 (.213)	-0.185 (.197)	-0.259 (.406)	0.049 (.255)	-0.045 (.281)
Short duration (4 months or shorter)	-0.427 (.223)	-0.692 (.26)	-0.414 (.257)	-0.429 (.229)	-0.625 (.161)
Medium duration (5 to 9 months)	-0.116 (.169)	-0.098 (.18)	-0.116 (.182)	-0.081 (.154)	-0.072 (.157)
Interaction one component * short duration	-0.162 (.288)	-0.037 (.281)	-0.169 (.383)	-0.175 (.232)	-0.212 (.211)
(ii) Target group (base: pooled age, pooled gender)					
Youths (25 yrs and younger)	0.191 (.185)	0.015 (.137)	0.191 (.223)	0.099 (.067)	-0.049 (.126)
Older workers (over 25)	0.093 (.139)	0.139 (.128)	0.093 (.156)	0.262 (.077)	0.189 (.138)
Males	-0.45 (.167)	-0.418 (.178)	-0.452 (.174)	-0.456 (.184)	-0.501 (.211)
Females	-0.05 (.174)	-0.022 (.19)	-0.052 (.183)	-0.063 (.164)	-0.107 (.207)
Programme explicitly targeting the poor			0.021 (.201)	-0.082 (.192)	0.073 (.218)
Programme targeting youths up to 24 yrs of age			0.003 (.398)	0.221 (.16)	0.123 (.205)
(iii) Evaluation design and programme details					
Experimental evaluation	-0.064 (.146)	-0.077 (.179)	-0.071 (.164)	0.03 (.143)	-0.079 (.126)
Year of programme start	-0.008 (.009)	-0.007 (.012)	-0.007 (.01)	-0.017 (.01)	-0.021 (.015)
Effect estimated in the medium-run	-0.011 (.076)	-0.01 (.075)	-0.012 (.076)	-0.015 (.067)	-0.02 (.068)
(iv) Country indicators					
Argentina		-0.296 (.245)			-0.364 (.124)
Chile		-0.099 (.244)			-0.11 (.225)
Peru		0.019 (.202)			-0.207 (.241)
Colombia		-0.082 (.173)			0.073 (.125)
Panama		0.336 (.305)			0.192 (.301)
(v) Contextual factors					
GDP growth rate				0.043 (.02)	0.061 (.03)
Unemployment rate				-0.038 (.008)	-0.038 (.018)
Constant	16.24 (18.832)	16.048 (23.39)	15.735 (20.4)	35.051 (20.43)	44.269 (29.507)
N	126	126	126	124	124
R-squared	0.43	0.43	0.44	0.40	0.40

Notes: Standard errors (in parentheses) clustered at the study level.

Besides the pattern by programme duration, the additional results that can be taken from Table 12 are similar to patterns found also for the larger LAC sample. First, there is an indication that programme estimates for male participants are (marginally) significantly less likely to be positive than for pooled-gender programmes. Second, training programmes seem to work better when unemployment is low. Third, other factors included here – experimental vs. non-experimental evaluation; time of programme operation – do not seem to play a significant role in determining programme success. In particular, the newly added variables capturing whether a programme is explicitly pro-poor, or targeting only the bottom bracket of the youth age range up to 24 years, do not seem to be determinants of a programme's success or failure.

Conclusion

This study provides a review of the evidence on ALMP effectiveness, with a focus on LAC. The paper first summarizes findings from previous systematic reviews, and then augments these findings presenting results from a meta-analysis of a new database of impact evaluations worldwide (Card et al. 2015, summarized in section 4.1). In addition, the paper generates a new meta-analytical data base of 152 impact estimates from 44 studies for LAC, likely constituting the most comprehensive and rigorous approach to systematically assess ALMP effectiveness in LAC to date.

In addition to the general findings on ALMP from the previous literature (reviewed in section 3.3) and the received wisdom on LAC (reviewed in section 3.4), several new patterns emerge from the analysis, and several known patterns are reinforced.

With regard to the impacts of different types of ALMPs, the evidence from the ALMP sample worldwide suggests that the time profiles of "work first" style job search assistance programmes differ from the profiles of "human capital" style training and private sector employment subsidies. Work first programmes tend to have larger short term effects, whereas human capital programmes have small (or in some cases even negative) short term impacts, coupled with larger impacts in the medium or longer run (2-3 years after completion of the programme). The analysis also confirms that public sector employment programmes have negligible, or even negative programme impacts at all-time horizons. Since there is very little variation in programme type in the LAC sample – more than 80 per cent of programmes are skills training – these patterns cannot be investigated in much detail. It is an important finding, however, that this overall time pattern for training programmes – impacts increasing with time – is not found in the LAC data. This result may be related to the generally rather short durations of the training interventions in the region, implying relatively small human capital investments.

A complementing analysis for the training subsample in LAC adds to this point to some extent, by indicating that training programmes with short durations (4 months or less) are significantly less likely to show positive treatment effects. A further interesting aspect in this respect is that this pattern seems to hold regardless of the number of training components – one, two, three or more – that the programme comprises. This is an initial finding that due to data limitations must be taken with caution; but it has potentially important implications for programme design, indicating that the key design factor making a programme "comprehensive" may be more the duration of the programme and less so the number of components.

With regard to different participant groups, female participants and those drawn from the pool of long term unemployed tend to have larger programme effects than other groups. There is similar suggestive evidence for females in Latin America, while the group of long-term unemployed is largely relevant

in OECD countries only and not at all represented in the LAC data. The programme estimates for youths and older workers are typically less positive than for other groups in the worldwide sample. There are some indications of potential gains to matching different participant groups to specific programmes, with evidence that work first programmes are relatively more successful for disadvantaged participants, whereas human capital programmes are more successful for the long term unemployed. Due to data limitations (too little variation by programme type and programme intake group) this aspect cannot be investigated for the LAC sample.

With regard to the state of the labour market, the results from the full sample worldwide find that ALMP's tend to have larger impacts in periods of slow growth and higher unemployment. In particular, there is a relatively large cyclical component in the programme estimates from four countries that account for one-half of the sample. There is also some suggestive evidence that human capital programmes are more cyclically sensitive than work first programmes. The results from LAC, however, are the opposite to these overall findings: Programme impacts in LAC are more likely to be positive during times of high economic growth and low unemployment. One conjecture might be that the relatively small human capital augmenting impulse of the programmes helps during good times only, but does not generate sustained impacts.

Methodologically, the worldwide analysis of Card et al. (2015) finds a number of interesting patterns in the recent ALMP literature. Most importantly, it finds that the estimated impacts derived from randomized controlled trials, which account for one-fifth of the sample, are not much different on average from the non-experimental estimates. Also, the choice of outcome variable used in the evaluation matters, with a tendency toward more positive short term impact estimates from studies that model the time to first job than from studies that model the probability of employment or the level of earnings. Finally, the analysis concludes that meta-analytic models based on the sign and significance of the programme impacts lead to generally similar conclusions as models based on effect sizes. This arises because much of the variation in the sign and significance of estimated impacts across studies in the ALMP literature is driven by variation in estimated effect sizes, rather than by variation in the corresponding sampling errors. This finding also allows the LAC meta-analysis to proceed using models of sign/significance.

References

- Ashenfelter, O.C. (2014), *The Early History of Program Evaluation and the U.S. Department of Labor*, IZA Discussion Paper 8118.
- Auer, P., U. Efendioglu and J. Leschke (2008), *Active Labour Market Policies around the World: Coping with the Consequences of Globalization*, 2nd edition, Geneva: ILO.
- Betcherman, G., K. Olivas and A. Dar (2004), *Impacts of Active Labor Market Programs: New Evidence from Evaluations with Particular Attention to Developing and Transition Countries*, Social Protection Discussion Paper Series 0402, Washington, D.C.: World Bank.
- Card, D., J. Kluve and A. Weber (2010), Active Labour Market Policy Evaluations: A Meta-analysis, *The Economic Journal* 120, F452-F477.
- Card, D., J. Kluve and A. Weber (2015), *What works? A meta analysis of recent active labor market program evaluations*, NBER Working Paper 21431.
- Crépon, B., Duflo, E., Gurgand, M., Rathelot, R. and Philippe Zamora (2013), Do Labor Market Policies have Displacement Effects? Evidence from a Clustered Randomized Experiment, *Quarterly Journal of Economics*, 128(2), 531-580.
- Dorsett, R. (2006), The new deal for young people: effect on the labour market status of young men, *Labour Economics* 13, 405-422.
- Fiala, N. (2013), *Can Microenterprises Grow? Results from a Loans, Grants and Training Experiment in Uganda*, mimeo, DIW Berlin.
- Gautier, P. A., Muller, P., Van der Klaauw, B., Rosholm, M. and Svarer, M. (2014). *Estimating equilibrium effects of job search assistance*. Mimeo, Aarhus / Amsterdam.
- Gertler, P.J., S. Martinez, P. Premand, L.B. Rawlings, C.M.J. Vermeersch (2011), *Impact Evaluation in Practice*, Washington, DC: The World Bank.
- Greenberg, D.H., C. Michalopoulos and P.K.Robins (2003), A Meta-Analysis of Government-Sponsored Training Programs. *Industrial and Labor Relations Review* 57: 31-53.
- Heckman, J.J., R.J. LaLonde and J.A. Smith (1999), The economics and econometrics of active labour market programs, in Ashenfelter, O. and D. Card (eds.), *Handbook of Labor Economics* 3, Elsevier, Amsterdam.
- Holland P.W. (1986), Statistics and Causal Inference (with discussion), *Journal of the American Statistical Association* 81, 945-970.
- Ibarrarán, P. and D. Rosas (2009), Evaluating the Impact of Job Training Programs in Latin America: Evidence from IDB funded operations, *Journal of Development Effectiveness* 1, 195-216.
- Imbens, G.W., and J.M. Wooldridge (2009), Recent Developments in the Econometrics of Program Evaluation, *Journal of Economic Literature* Vol. 47(1), 5-86.
- Kluve, J. (2010), The effectiveness of European active labor market programs, *Labour Economics* 17, 904-918.
- Kluve, J. (2012), *Active labor market programs and the business cycle*, Paper prepared for the OECD / University of Maryland conference “Employment policies in times of high unemployment”, Paris.
- Kluve, J. (2014), Youth labor market interventions, IZA World of Labor, <http://wol.iza.org/articles/youth-labor-market-interventions-in-oecd-countries-1.one-pager.pdf>.

- Kluge J., D. Card, Fertig M., Góra M., Jacobi L., Jensen P., Leetmaa R., Nima L., Patacchini E., Schaffner S., Schmidt C.M., van der Klaauw B., and A. Weber (2007), *Active Labor Market Policy in Europe: Performance and Perspectives*, Berlin, Springer.
- Kluge, J., F. Rother, and M.L. Sánchez Puerta (2012), Training Programs for the Unemployed, Low-Income, and Low-Skilled Workers, in R. Almeida, J. Behrman, and D. Robalino (eds.), *The Right Skills for the Job? Rethinking Effective Training Policies for Workers*, The World Bank: Washington, DC.
- Lechner, M., Miquel, R. and C. Wunsch (2011), Long-Run Effects of Public Sector Sponsored Training in West Germany, *Journal of the European Economic Association*.
- Martin, J.P. and D. Grubb (2001), What works and for whom: a review of OECD countries' experiences with active labour market policies, *Swedish Economic Policy Review* 8, 9-56.
- Martins, P. S., and Pessoa e Costa, S. (2014). *Reemployment and substitution effects from increased activation: evidence from times of crisis*. IZA Discussion Paper No. 8600: Bonn
- McKenzie, D. and C. Woodruff (2014), What Are We Learning from Business Training and Entrepreneurship Evaluations around the Developing World? *World Bank Research Observer* 29 (1), 48-82.
- Naranjo, A.S. (2002), *Capacitación y formación profesional para jóvenes en Uruguay: los programas Opción Joven y Projoven a través de sus experiencias de evaluación*. Montevideo: CINTERFOR/PNUD.
- Organisation for Economic Cooperation and Development OECD (1994), *The OECD Jobs Strategy*, OECD: Paris.
- OECD (2006), *OECD Employment Outlook*, OECD: Paris.
- OECD (2007), Activating the unemployed: what countries do, Chapter 5 in *OECD Employment Outlook*, OECD: Paris.
- Puerto, O.S. (2007), *Interventions to Support Young Workers in Latin America and the Caribbean: Regional Report for the Youth Employment Inventory*, mimeo, The World Bank.
- Sanz, T. (2012), *Meta evaluación de programas de empleo juvenil en América Latina y el Caribe 2003 – 2012*, ILO LAC regional office.
- Schochet, P.Z., J. Burghardt, and S. McConnell (2008), Does Job Corps Work? Impact Findings from the National Job Corps Study, *American Economic Review* 98, 1864-1886.
- Urzúa, S. and E. Puentes (2010), *La evidencia del impacto de los programas de capacitación en el desempeño en el mercado laboral*, Notas Técnicas #268, Banco Interamericano de Desarrollo (BID) – Unidad de Mercados Laborales del Sector Social: Washington, DC.
- Van Reenen, J. (2003), *Active labor market policies and the British new deal for the young unemployed in context*, NBER Working Paper 9576.
- Veza, E. (2013), *Policy scan and meta-analysis: Youth and Employment policies in Latin America – Updating Youth Employment Inventory for Latin America initiatives*, CEDLAS, Universidad Nacional de La Plata.

Studies included in the LAC meta-analysis sample

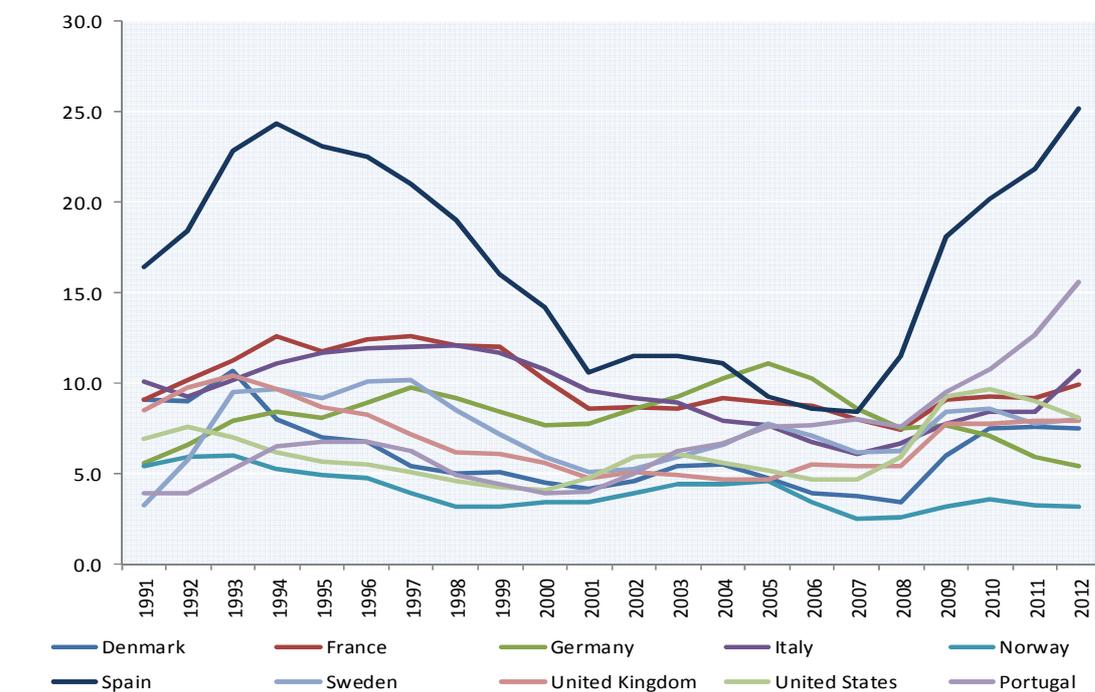
- Acero, C., Alvarado, M., Bravo, D., Contreras, D. and J. Ruiz-Tagle (2009). Evaluación de Impacto del Programa Jóvenes al Bicentenario para la cohorte de participantes en el año 2008. UNDP, Chile.
- Aedo, C., and Nuñez, S. (2004). The impact of training policies in Latin America and the Caribbean: The case of Programa Joven. Inter-American Development Bank. Latin American Research Network Working Paper #R-483. Washington, D.C.
- Alesina, L., Espíndola, F., Espino, A., & Sanromán, G. (2005). Resultados de la evaluación de PROIMUJER. Serie Documentos de Trabajo/FCEA-IE; DT01/06.
- Almeida, R. K., and Galasso, E. (2010). Jump-starting self-employment? Evidence for welfare participants in Argentina. *World Development*, 38(5), 742-755.
- Alzuá, M. L., and Brassiolo, P. (2006). The impact of training policies in Argentina: an evaluation of Proyecto Joven. Inter-American Development Bank. Office of Evaluation and Oversight, OVE. Washington, D.C.
- Alzúa, M. L., Cruces, G., and Erazo, C. L. (2013). Youth training programs beyond employment. Evidence from a randomized controlled trial. Universidad Nacional de La Plata: La Plata.
- Attanasio, O., Kugler, A., and Meghir, C. (2011). Subsidizing vocational training for disadvantaged youth in Colombia: Evidence from a randomized trial. *American Economic Journal: Applied Economics*, 188-220.
- Calero, C., Gonzales, V., Soares, Y., Kluve, J., and Corseuil, C. H. (2014). Can arts-based interventions enhance labor market earnings among youth? Evidence from a randomized trial in Rio de Janeiro. IZA Discussion Paper.
- Card, D., Ibarrran, P., Regalia, F., Rosas-Shady, D., and Soares, Y. (2011). The labor market impacts of youth training in the Dominican Republic. *Journal of Labor Economics*, 29(2), 267-300.
- Castillo, V., Ohaco, M., & Schleser, D. (2014). Evaluación de impacto en la inserción laboral de los beneficiarios de los cursos sectoriales de formación profesional (No. 486341). International Labour Organization.
- Castillo, V., Rojo Brizuela, S., & Schleser, D. (2008). El impacto de las políticas laborales contracíclicas sobre el empleo asalariado registrado. Ministry of Labour-ILO: Macroeconomía, empleo e ingresos: debates y políticas en Argentina frente a la crisis internacional, 2009.
- Centro Microdatos (2012). Evaluación de Impacto del Programa de Subsidio al Empleo Joven. Universidad de Chile. Informe Final Corregido. Santiago de Chile.
- Centro Microdatos (2008). Evaluación de Impacto Programa Formación en Oficios para Jóvenes de Escasos Recursos, ejecución 2005. SENCE, Chile.
- Chacaltana, J., & Sulmont, D. (2004). Políticas activas en el mercado laboral peruano: el potencial de la capacitación y los servicios de empleo. *Políticas de empleo en el Perú*, 1, 221-298.
- Chong, A. E., and Galdo, J. (2006). Training quality and earnings: the effects of competition on the provision of public-sponsored training programs. Inter-American Development Bank. Washington, D.C.
- Galdo, J., & Chong, A. (2012). Does the quality of public-sponsored training programs matter? Evidence from bidding processes data. *Labour Economics*, 19(6), 970-986.

- Corseuil, C. H., Foguel, M., Gonzaga, G., and Ribeiro, E. P. (2013). The effects of an apprenticeship program on labor market outcomes of youths in Brazil. Mimeo, Rio de Janeiro.
- Delajara, M., Freije, S., & Soloaga, I. (2006). An evaluation of training for the unemployed in Mexico. Inter-American Development Bank. Washington D.C.
- Díaz, J. J., and Jaramillo, M. (2006). An Evaluation of the Peruvian " Youth Labor Training Program"- PROJOVEN. Inter-American Development Bank. Working Paper: OVE/WP-10/06. Washington, D.C.
- Fundación AGROUC (2009). Evaluación De Impacto: Programa De Bonificación A La Contratación De Mano De Obra. SENCE, Chile.
- Galasso, E., Ravallion, M., and Salvia, A. (2004). Assisting the transition from workfare to work: A randomized experiment. *Industrial and Labor Relations Review*, 58(1), 128-142.
- Hernani-Limarino, W.L., Villegas, M. & Yáñez, E. (2011). Unemployment in Bolivia: Risks and Labor Market Policies. IDB Working Paper 271.
- Ibarrarán, P., Kluve, J., Ripani, L. and Rosas Shady, D. (2015), Experimental Evidence on the Long Term Impacts of a Youth Training Program, IZA Discussion Paper 9136.
- Ibarrarán, P., Ripani, L., Taboada, B., Villa, J. M., and Garcia, B. (2014). Life skills, employability and training for disadvantaged youth: Evidence from a randomized evaluation design. *IZA Journal of Labor and Development*, 3(1), 1-24.
- Ibarrarán, P., and Rosas Shady, D. (2009). Evaluating the impact of job training programmes in Latin America: evidence from IDB funded operations. *Journal of Development Effectiveness*, 1(2), 195-216.
- Ibarrarán, P., & Rosas Shady, D. (2006). Impact Evaluation of the Job Training Component (PROCAJOVEN) of the Assistance Program for the Building of a Training and Employment System in Panama (PN0125). Inter-American Development Bank. Washington, D.C.
- Jalan, J., & Ravallion, M. (2003). Estimating the benefit incidence of an antipoverty program by propensity-score matching. *Journal of Business & Economic Statistics*, 21(1), 19-30.
- Jimenez, E., & Kugler, B. (1986). An Economic Evcaluaion of a Nafional Job Training System: Colombia's Serviíco Nacional de Aprendizaje (SENA).
- Jimenez, E., & Kugler, B. (1987). The earnings impact of training duration in a developing country: an ordered probit selection model of Colombia's Servicio Nacional de Aprendizaje (SENA). *Journal of Human Resources*, 228-247.
- Kaplan, D.S., Novella, R., Rucci, G. & Vazquez, C. (2015). Training vouchers and labor market outcomes in Chile. IDB Working Papers 585.
- Klinger, B., & Schündeln, M. (2011). Can entrepreneurial activity be taught? Quasi-experimental evidence from Central America. *World Development*, 39(9), 1592-1610.
- Macours, K., Premand, P., and Vakis, R. (2013). Demand versus returns? Pro-poor targeting of business grants and vocational skills training.). *Impact Evaluation Series No. 88. World Bank Policy Research Working Paper*, (6389).
- Macroconsult S.A. (2012). Evaluación de Impacto del Programa Construyendo Perú. Banco Interamericano de Desarrollo.
- Madrid, A. C. (2006). Revisiting the employability effects of training programs for the unemployed in developing countries. Inter-American Development Bank. Latin American Research Network Working Paper #R-522. Washington, D.C.

- Medina, C., & Núñez, J. (2005). The impact of public and private job training in Colombia. Inter-American Development Bank. Research Network Working Paper #R-484. Washington D.C.
- Naranjo Silva, A. (2002). Capacitación y formación profesional para jóvenes en Uruguay. Los programas opción joven y pro-joven a través de sus experiencias de evaluación. Montevideo: OIT.
- Nopo, H., M. Robles, and J. Saavedra (2008). Occupational training to reduce gender segregation: The impacts of ProJoven. *Economía*, 31(62), 33-54.
- Revenga, A., Riboud, M., and Tan, H. (1994). The Impact of Mexico's Retraining Program on Employment and Wages. *The World Bank Economic Review*, 8(2), 247-277.
- Ronconi, L., Sanguinetti, J., and Fachelli Oliva, S. (2006). Poverty and employability effects of workfare programs in Argentina. PMMA Working Paper 2006-14
- Rosas Shady, D. (2006). Impact Evaluation of PROJoven Youth Labor Training Program in Peru. OVE Ex-Post Project Evaluation Report 04/06, IDB.
- Santa María, M., Olivera, M., Acosta, P., Vásquez, T., and Rodríguez, A. (2009). Evaluación de impacto programa Jóvenes con Futuro. Centro de Investigación Económica y Social. Working Paper No. 44. Bogotá.
- Statcom (2006). Evaluacion De Impacto Programa Aprendices. SENCE, Chile.
- Steiner, R., Rojas, N., & Millán, N. (2010). Evaluación de impacto del Programa Jóvenes Rurales Emprendedores del Servicio Nacional de Aprendizaje (SENA). Fedesarrollo. Informe Final. Bogotá.
- Valdivia, M. (2011). Training Or Technical Assistance? A Field Experiment To Learn What Works To Increase Managerial Capital For Female Microentrepreneurs, CAF Working Paper, Caracas, Venezuela.

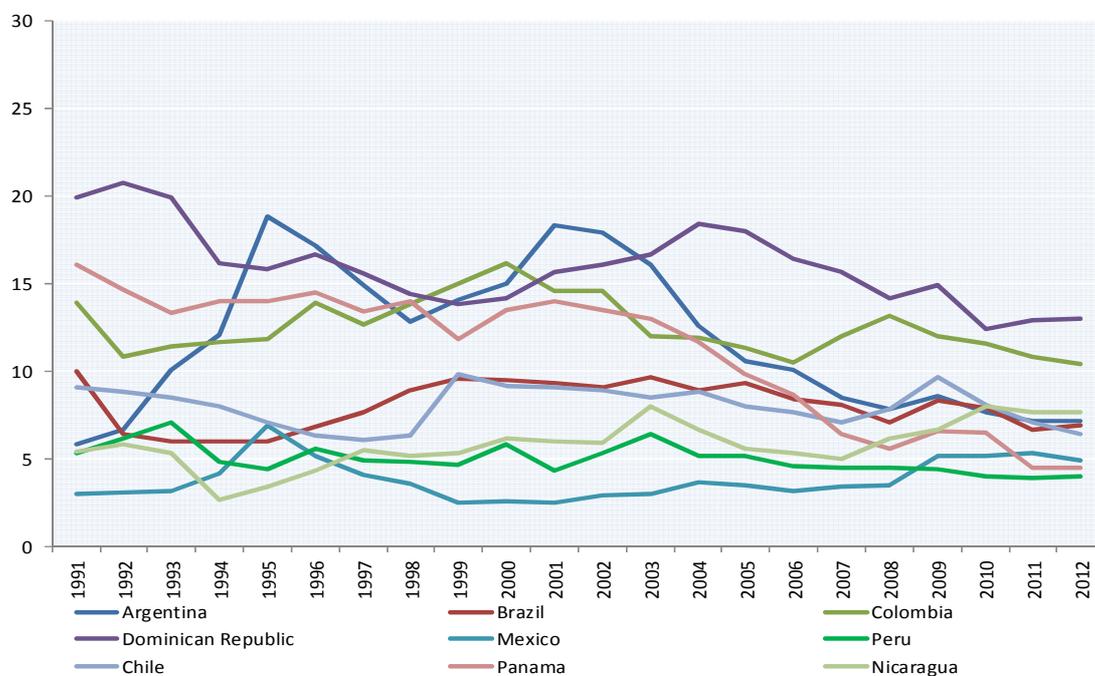
Appendix figures

Figure 1. Unemployment rates in selected OECD countries, 1991-2012



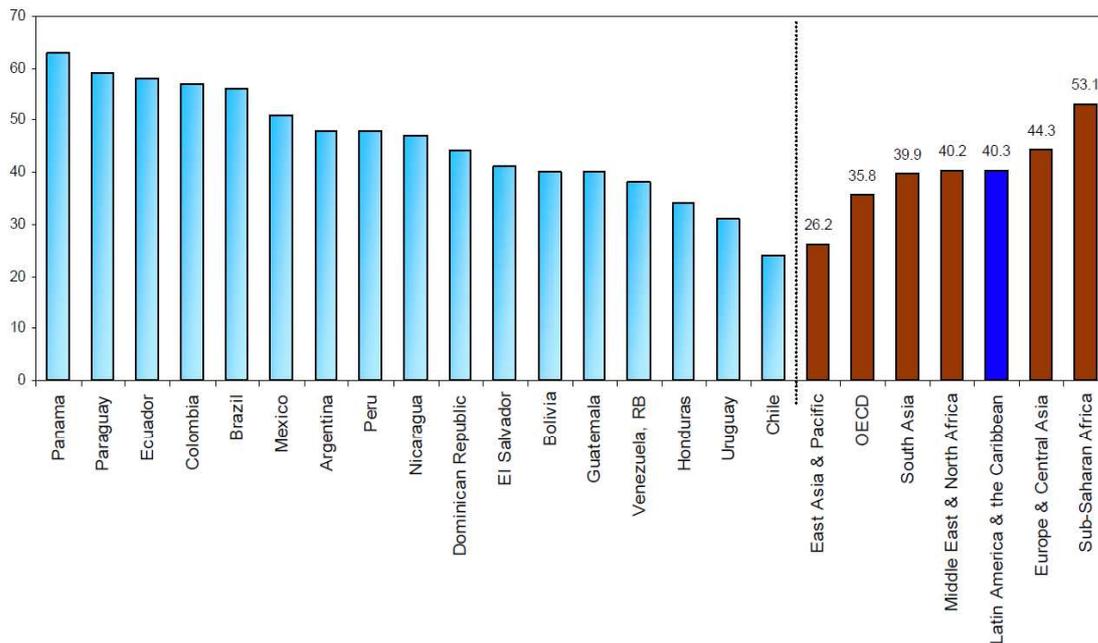
Source: World Bank data

Figure 2. Unemployment rates in selected LAC countries, 1991-2012



Source: World Bank data.

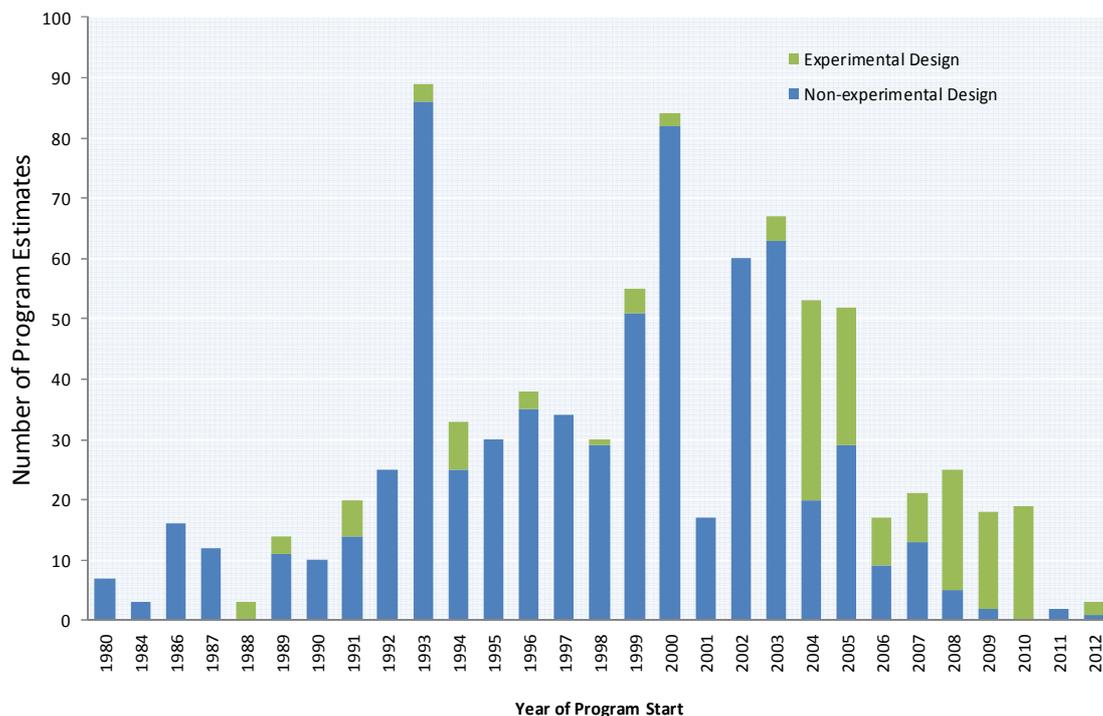
Figure 3. Rigidity of employment index in LAC and across regions



Note: The Rigidity of Employment Index is a composite measure that accounts for the presence or absence of the following: (1) contracts can only be temporary; (2) contracts have a maximum duration; (3) ratio of mandated minimum wage to average value-added of working population; (4) restrictions on night or weekend work; (5) workweek is five and a half days or more; (6) whether the workday can extend to 12 hours or more (including overtime); (7) 21 or fewer paid vacation days annually; (8) redundancy is grounds for dismissal; (9) employer must notify a labor union or labor ministry for group dismissals; (10) employers require labor union or labor ministry approval to dismiss a redundant employee; (11) law mandates training or reemployment prior to dismissal; (12) priority rules apply for dismissals; (13) priority rules determine reemployment. High index values indicate high employment rigidity; low values indicate low employment rigidity.

Source: Puerto (2007).

Figure 4. Number of Programme Estimates, By Year of Programme Start



Source: Card et al. (2015).

Figure 5. Impact estimates in LAC meta sample by country

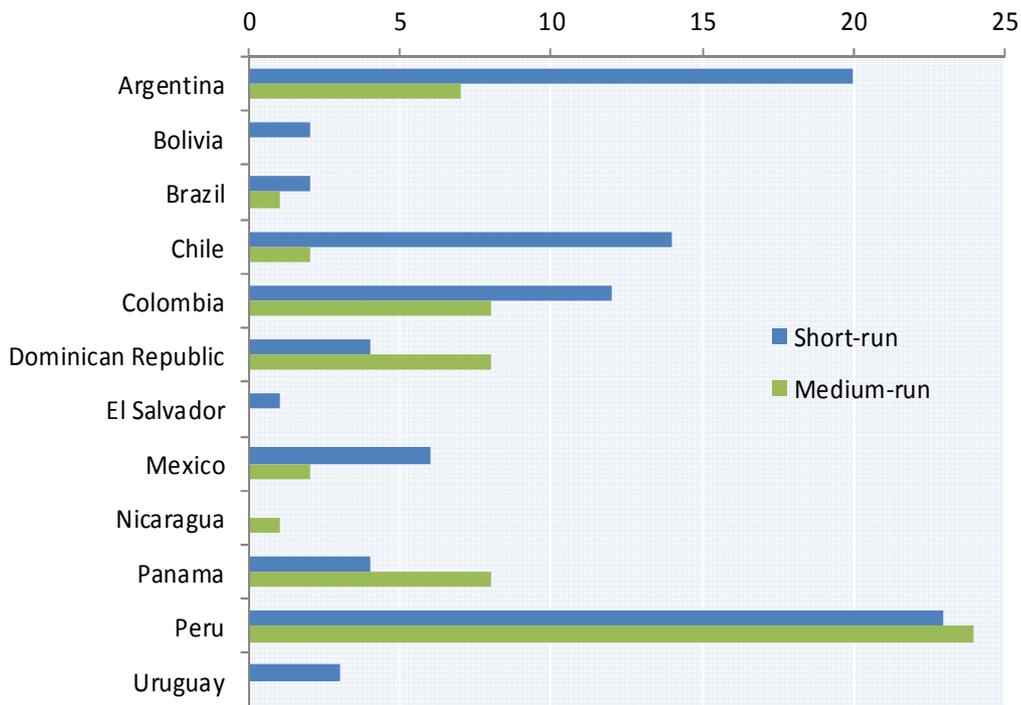
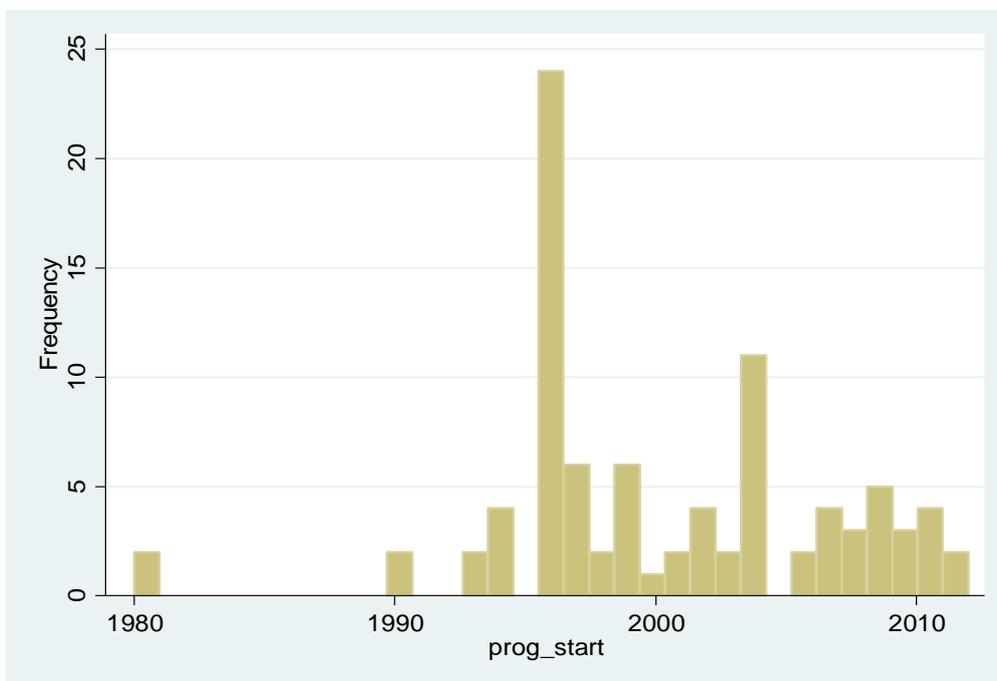
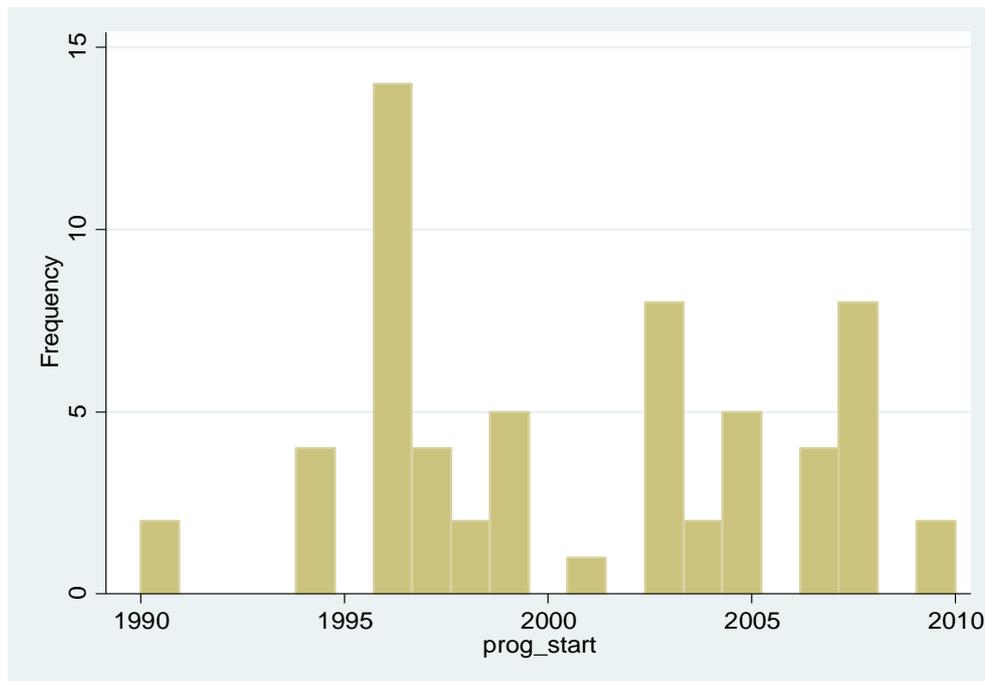


Figure 6. LAC meta sample: distribution of programme start times – short-run estimates



N=91 impact estimates.

Figure 7. LAC meta sample: distribution of programme start times – medium-run estimates



N=61 impact estimates.