

Evaluation Insights



Evaluation Insights are informal working papers issued by the Network on Development Evaluation of the OECD Development Assistance Committee (DAC). This *Evaluation Insights* presents findings from a systematic review commissioned by Germany (KfW Development Bank, Evaluation Unit). The views and opinions expressed here are those of the authors and do not necessarily reflect the official policy or position of the OECD DAC, its member countries or German Development Cooperation. This paper is published under the responsibility of the Director of the Development Co-operation Directorate.

Creating jobs in small businesses

Evidence from a systematic review

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THE JOB CHALLENGE

Creating new jobs and in particular “good jobs”, meaning jobs in high productivity sectors and offering decent working conditions, is one of the major challenges low and middle income countries face. According to the 2013 World Development Report, 600 million jobs are needed worldwide over the next 15 years to keep employment rates at their current level (World Bank, 2012). Governments, non-governmental organisations and donors spend large amounts of money for targeted programmes and broader policies to enhance employment and the creation of new firms. Because most employment in low- and middle income countries is in micro, small and medium-sized enterprises (MSMEs), often these firms are targeted by such interventions. Typical interventions include the provision of finance and financial services, entrepreneurship training, business support services, wage subsidies and measures that transform the business environment. Despite these efforts, not much is known about which of these interventions are really effective, or, more importantly, under which conditions particular interventions work.

A NEED TO TAKE STOCK

With the trend to conduct rigorous impact evaluations of development interventions, many researchers have started to look more closely at programmes and policies that either directly intend to create jobs or that generate jobs indirectly. This note summarises the main lessons that can be drawn from these studies. It is based on a comprehensive systematic review commissioned by the evaluation unit of KfW Development Bank (Grimm and Paffhausen, 2014). The review revealed several factors and design features likely to make job creation interventions successful. However, these findings have to be taken with care because evidence is still scarce. First and foremost, the review underlines how little we actually know about how to create jobs. This stands in sharp contrast to the high number of programmes and projects that claim to know – and on which considerable funds are being spent.

A FOCUS ON TARGETED INTERVENTIONS

Systematic reviews are designed to include studies that provide *causal evidence* linking results – in this case, jobs – to interventions. This necessarily limits the review to programmes and policies that – in one way or the other – are targeted in a way that a comparison group can be identified. Accordingly, trade and exchange rate policies, large infrastructure projects (such as power stations or trunk roads) and the like will not be covered, simply because it is very difficult to use an experimental or quasi-experimental evaluation design to relate cause and effect for such projects. Small scale infrastructure interventions, such as rural roads or solar home systems, have not been included because they are typically not targeted at micro, small and medium-sized businesses.

The following intervention categories were considered in the systematic review:

- ◆ **access to finance**
- ◆ **entrepreneurship training**
- ◆ **business development services**
- ◆ **wage subsidies**
- ◆ **improvements to the business environment (e.g. registration procedures)**

For each category, an overview is provided on: the studies included in the review, main effects on employment and key lessons. Two concluding sections describe key policy implications and messages for evaluation and research. The last section provides a full description of the review method and search approach for this study.



Tailor in Senegal (November 2012, Christian Schönhofen, Evaluation Unit KfW Development Bank)

Studies included: Most programmes directed at employment creation that were evaluated rigorously in the strict sense defined above relate to finance interventions. Out of a total of 54 studies that passed the quality check, 26 assess finance interventions. Most of them were microcredit schemes (20 studies), followed by conditional or unconditional cash- or in-kind-grants and a few studies that focus on saving devices. Not a single study could be identified that looks at the employment effects of micro-insurance. The amount of finance involved is typically between USD 100 and USD 2,000. By definition micro-credit programmes target poor households and micro firms. This must be taken into account when compared with other types of interventions.

The range of these studies reflects well the dominance of micro-credit in the debate about firm support as well as the common belief that limited access to financial services is a major constraint for the expansion of micro, small and medium enterprises. However, it should not be forgotten that the range of studies was also limited because of the suitability (or not) of different types of interventions for evaluations of high methodological standards. Interventions to overcome financial impediments via developing financial markets in general, for example by extending refinancing maturities for banks, were not covered.

Effects on employment: With respect to employment creation most micro-credit schemes turned out to be rather unsuccessful: only 14 out of the 44 impact estimates covered in the studies show a reliable (statistically significant) increase in employment or firm creation. Out of the 44 treatment effects, 28 were inconclusive (not statistically significant). In two cases, employment was actually reduced. Positive effects on employment, if found at all, were only small, especially for already existing small and micro enterprises. Major effects were achieved with regard to the creation of new (mostly micro-) enterprises and the expansion of already larger, well established and profitable firms.

Key lessons:

- 1) The fact that many evaluations found no statistically significant results does not necessarily mean that micro-credit does not work. Employment generation is typically not a primary objective of micro-credit programmes. Rather, income stabilisation most frequently seems to be the major intention. Most (but of course not all) enterprises make use of the credit or cash grants, if directly offered, but the money is primarily used as working capital, e.g. invested into inventories. Seldom would these result in fixed capital investments in machines or buildings. Hence, such interventions might have no employment effects, but often they show significant impacts on sales and revenues.
- 2) The generation of a substantial employment effect may require a major push, but most loans seem to be simply too small and their maturities too short to lead to large changes in the capital stock and the production technology. For instance, a tailor who – thanks to a micro-credit – switches from a mechanical to an electric sewing machine may neither have the need nor the profitability to immediately hire an additional worker. Nevertheless, s/he may well see an increase in performance as measured by revenues, profits and, of course, business investment. One study (Field et al. (2011)) shows that the details of the loan contract matter. They find that short repayment periods, which over the loan period translate into lower outstanding loans and shorter maturities, prevent poor entrepreneurs from investing since they fear not being able to repay on time (Field et al., 2011).
- 3) Programmes targeting women appear to be less successful in employment creation than programmes without such a focus. Certainly, this does not imply that women are bad entrepreneurs. It rather suggests that women face additional constraints which need to be overcome in order to increase the return to finance. Mothers, for instance, spend on average more money on food, clothes and health for the household, when compared to fathers, and may therefore have less to spend on capital goods. Resisting pressure from family members and relatives to share financial resources might also be more difficult for women, obliging them to share funds even when they would prefer to invest. In many settings, women still have lower education than men, they have no access to formal banking services without the consent of their husband, lack property rights and are not allowed to leave their house alone. All these factors may explain why, on average, loans to women have lower “employment returns” than loans to men. However, empirical evidence is still quite thin.

ENTREPRENEURSHIP TRAINING: MAKE IT SUBSTANTIAL, SPECIFIC AND LINKED TO FINANCE

Studies included: The sample also contained a substantial number of reports on entrepreneurship training. Training includes technical and vocational training (in-class and on the job), business skills training, business plan development, financial literacy training and life skills training. The review includes 20 studies that fall into this category. From this sample of studies it appears that skill constraints are believed to be more relevant to microenterprises than for well-established SMEs: the majority of interventions target microenterprises with up to five employees or aim to enhance self-employment in groups highly at risk of unemployment, such as young people. The majority of studies were again based on RCTs; only five employ a quasi-experimental design.

Effects on employment: Looking across all studies, 10 out of the 25 analysed interventions show significant positive employment effects, while 15 show no statistically significant effects. Yet most programmes did produce significant improvements in business skills and behavioural skills, and sometimes also higher optimism and motivation. In many cases training enhances the entrepreneurial spirit and forces (potential) entrepreneurs to think more carefully about the business model and its profitability.

Key lessons:

- 1) The objective of entrepreneur trainings is not always to increase employment. In fact, training might be considered effective if it helps non-profitable firms either to become profitable or to consider whether closing down is actually the best way forward. Likewise, training can prevent non-profitable business ideas from being started, for example before the entrepreneur runs up debts that s/he will never be able to pay back. Thus, non-existent or negative employment effects of training do not automatically mean the training as such was ineffective from a business stand point.
- 2) Employment seems to come last in the result chain of training. While some studies report higher investment, very few studies report process or product innovations or improvements in sales and revenues. Even fewer studies measure higher profits and, fewer again, employment. Short-term positive effects often seem to vanish in the long run.
- 3) There are no straightforward results on whether training a certain group of entrepreneurs is particularly successful. The evidence is mixed on whether the return on training is higher for those with initially lower skills. The review suggests, however, that training is more helpful for start-ups than for business expansion.
- 4) The more tailor-made and substantial the training the better, but it is not necessarily the more complex programmes that are the most successful. It appears that training needs to address specific knowledge gaps and be substantial in order to be effective, where substantial means that the training runs over an entire year with at least one training session per week.
- 5) Some training interventions also include financial assistance and it seems that this combination of finance and training is particularly successful.

REGULATION: URGING FIRMS TO FORMALISE MAY HAVE BENEFITS BUT DOES NOT ALWAYS CREATE JOBS

In most low and middle income countries the bulk of urban micro and small enterprises are informal, i.e. they are not registered with the tax authority and operate outside most regulations. A key policy question is whether the performance of these firms could be improved and their size in terms of employed capital and staff be expanded through formalisation. On the one hand, it is believed that formalisation increases access to credit and other resources important for business success and expansion, even if Maloney (2004) argues that most micro and small firms have little to gain here because their business is simply too small to benefit from any services offered to formal firms and in many countries the government has not much to offer anyway. On the other hand, formalisation could imply a significant increase in tax revenues which from the entrepreneurs' point of view translate into additional costs. These are added to the costs of the bureaucratic act of formalisation, which according to De Soto (1989) already can be so significant that they alone prevent firms from becoming formal.

Studies included: As both costs and benefits of formalisation are involved, the policy problem of formalisation is two-fold: what interventions are suited to enhance firms' formalisation, and what are the effects of becoming formal? As this review focuses on employment effects, formalisation studies were only included if they covered effects on employment. Five studies were identified that can credibly establish a link between formalisation and employment. They concentrate on Brazil and Mexico, where significant reforms have been implemented to reduce the costs of formalisation.

Effects on employment: The studies show that it is difficult to get the average firm formalised as the average firm is simply too small and not profitable enough to make use of the potential that formality offers. Among those firms that do formalise, performance typically improves, including employment, but for most only modestly.

Key lessons on regulation:

- 1) Programmes that “force” firms to formalise are unlikely to produce any significant employment effects. For many formerly informal firms formality does not translate into extra profits but rather into additional cost.
- 2) Programmes that offer cheaper and easier formalisation procedures are more likely to have success but only for a relatively small group of entrepreneurs and firms that already show a higher initial performance. In an exciting field experiment in Sri Lanka, De Mel et al. (2013a) offer cash rewards for firms that formalise. Even if the equivalent of one month of the median firm’s profits are offered only around one-fifth of all firms register the business. Interestingly, the lack of property rights to the ground they work on is a major deterrent to formalisation for many entrepreneurs.
- 3) In general, it seems easier to formalise firms while they are set up than formalising firms that already exist.
- 4) For the typical informal firm, it is not the costs of registration but the expected benefits of formality that is pivotal for their decision to formalise. To put it bluntly, the best incentive governments can provide for formalisation is to offer useful public services in return. Of course, this does not imply that policies should not simplify administrative procedures, but it is more than that.



Market place in Senegal (November 2012, Christian Schönhofen, Evaluation Unit KfW Development Bank)

Studies included: This block covers a set of ten studies on a diverse set of interventions. Broadly, they cover business development services and targeted subsidies. Four of the ten studies cover business development services in the narrow sense (supplier development, support for environmental audit, provision of working premises, etc.). One of these studies covers conditional tax-breaks and fiscal incentives for technological innovations as well. Two further studies measure the employment impact of grants for product and process innovations. An additional three studies cover supply or demand side wage subsidies, and one study measures the impact of minimum wage legislation on employment. All the studies on wage-related interventions are in Turkey or Asia, while the other studies cover almost exclusively Latin-American countries. Only one of these ten studies is based on an RCT design, while the others use a quasi-experimental approach or identify employment effects based on changes in policies.

Effects on employment: The results are not at all disappointing. The studies show mostly positive and statistically significant employment effects. Small sample sizes and selection biases that the evaluation designs could not remove entirely mean that these general conclusions have to be treated with care. However, it seems that business support services and targeted subsidies can contribute to employment generation if they are demand-driven, tailor-made and focused.

Key lessons:

- 1) Larger firms may need quite specific and sophisticated support, whereas small firms just need very rudimentary improvements to their business.
- 2) Tax-breaks and fiscal incentives conditional on process and product innovations seem to be particularly effective. However, the robustness of the findings is somewhat low. First, the sample of studies is quite small. Second, almost all studies face the problem that certain types of firms participated in the programmes and not a random sample (selection bias). It is also remarkable that nothing can be said about the East and South-East-Asian context, where at least in some countries business support services may have played an important role.
- 3) The studies on wage subsidies suggest that carefully choosing whom to subsidise matters for job creation. Two different programmes that have been examined in a similar context in Turkey allow for an interesting comparison of supply and demand driven subsidies. One programme targets the employers who benefit from reductions in social security contributions for additionally hired workers. This was found to increase the rate of employment growth and business growth substantially (Betcherman et al., 2010). A supply-driven programme where workers received the subsidy in the form of vouchers that allow them to be hired and get training on the job, turned out to have a negative impact on employment of the beneficiaries. Only a few beneficiaries kept their jobs once the subsidy came to an end. Various reasons could explain why this programme failed, but one explanation which seems most plausible has to do with targeting. The on-the-job training programme targeted employees whereas the more conventional wage subsidy programmes targeted employers. Employers may keep workers hired at a reduced rate, when they are free to choose the workers they actually prefer. If an unemployed individual approaches an employer with a voucher, not only may the profile not entirely fit, it may even have a negative signalling effect. Hence direct wage subsidies may have more positive employment effects than voucher based-programmes. However, they may have very different distributional effects.
- 4) It is obvious that wage subsidies are in general a quite expensive intervention and the programmes covered here are no exception. The pure wage subsidy programme in Turkey entails costs per job-month created that correspond to roughly 94% of the total cost of employing a minimum wage worker. This may still seem acceptable if the jobs created are sustainable, but evidence whether this is really the case is scarce (Betcherman et al., 2010). A major cost component is the inefficiency produced by the fact that many workers that are hired under a subsidised rate would have been hired anyway. This is also confirmed by the experimental study in Sri Lanka (De Mel et al., 2013b and 2010), where the authors find a strong correlation between pre-programme hiring intentions and programme uptake.

IMPLICATIONS FOR DEVELOPMENT POLICY: JOB CREATION IS A COMPLEX CHALLENGE

Do we know how to create jobs? Overall the review shows that creating and enhancing employment is a very complex challenge and targeting smaller businesses may not be the most effective approach.

- Many conditions have to be met before interventions actually improve business performance and also lead to additional jobs. Phrased differently, it is typically “a long way” in the result chain from policy inputs to employment impacts, even more so if employment is supposed to be sustainable and tied to acceptable and secure working conditions.
- Any entrepreneur will think twice before founding a new business or hiring an additional employee. Therefore, interventions **need to create a major push** to have an impact on job creation.
- It seems much **easier to have an effect on management practices, sales and (short term) profits than on employment**. Many interventions seem to lead to changes at the margin, but fail to deliver productivity increases that go hand in hand with more jobs.
- Of the studies covered in this review, many look at target interventions that strive primarily for **income stabilisation and poverty reduction**. Hence, one should not expect impressive results in the form of additional jobs if interventions were not designed with a clear eye on maximising employment effects.
- **Targeting** seems to be key to achieving positive employment effects. Not all potential and actual entrepreneurs can make good use of support. Different types of interventions will be required to increase employment for different groups.
- It seems **easier to create new businesses** than to expand existing firms.



Car part dealer in Burkina Faso (August 2012, Michael Grimm, University of Passau)

IMPLICATIONS FOR EVALUATIONS AND RESEARCH: THE EVIDENCE IS STILL SKETCHY

The review clearly shows that the available evidence on job creation is still sketchy. In particular, evidence is lacking for large parts of **Sub-Saharan Africa and Asia**, regions where the need for jobs will be the highest in the coming decades.

Very few studies are able to assess the **longer term effects** of their interventions and policies and many studies fail to provide a detailed analysis of why certain effects occurred or did not occur – making it hard to extrapolate lessons.

Analysis of programme costs is particularly lacking. Almost none of the 54 studies provided a detailed **cost effectiveness analysis**, i.e. how much does it cost to create an additional job with a certain programme compared to another? This gap should alert both implementers and researchers. Implementers should provide the necessary numbers and researchers should go beyond the estimate of simple impacts, which is not really helpful for those who have to allocate resources across different interventions.

Last but not least, it has to be mentioned that the existing evidence seems to suffer from a **method bias** (see Box 1). RCTs are applied particularly to small programmes, very poor areas and very specific target groups. This limits how readily the lessons and findings can be generalised to other contexts. Quasi-experimental approaches have a wider scope of application than RCTs, but still the range of application is limited by the necessity to create a control group. Therefore, evaluations covering policies for which it is difficult, if not impossible, to apply (quasi-) experimental approaches and thereby link cause and effect in a rigorous way will have no chance of being included in a systematic review of the type used here. However, for evaluations to give policy guidance, it would be desirable to draw on lessons learnt about the entire range of job programme designs. This leads to a dilemma as it is impossible to include all types of programmes and meet the quality standards of a systematic review at the same time. For now, the way forward seems to be in not neglecting the findings of other types of evaluations – excluded from systematic reviews – while being frank about their methodological shortcomings. In the long run, however, research might come up with methodological quality standards which cover those types of interventions not open to rigorous impact measurement yet.



Microfinance Client Group in Uttar Pradesh, India (September 2013, Thomas Gietzen, Evaluation Unit KfW Development Bank)



Car parts shop in Istanbul, Turkey (November 2013, Thomas Gietzen)

SYSTEMATIC REVIEW: THE METHODOLOGICAL APPROACH AND SEARCH STRATEGY

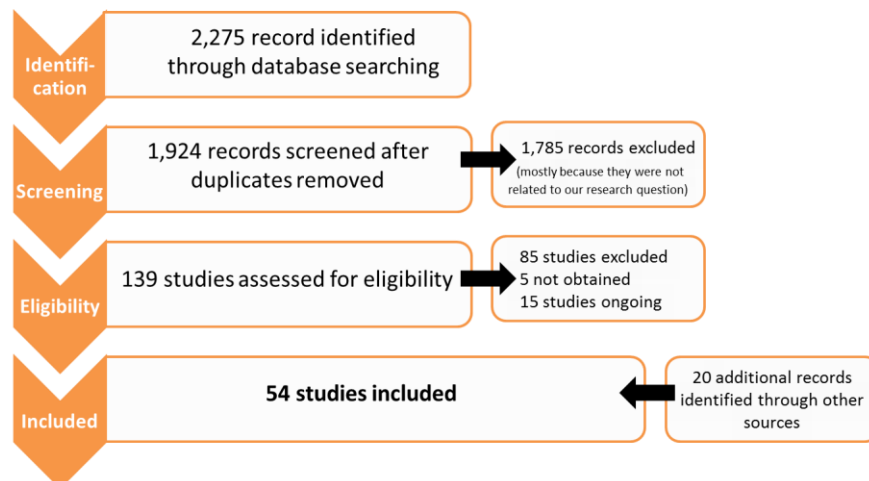
Systematic reviews are meant to fill a research gap that is left by individual impact measurements. No matter how rigorously it is conducted, the study of a single case can only produce reliable results on the impact of the specific intervention under evaluation. Such studies' virtue, having a high case specific (internal) validity, always comes with a shortcoming: it is unknown whether similar results can be expected if the intervention is replicated in other settings (limited external validity). Systematic reviews address the question of external validity by rigorously compiling the evidence supplied by single rigorous studies of similar types of interventions.

To offer a rigorous, scientifically sound review of the existing evidence, systematic reviews use transparent processes for literature searching, data collection and synthesis. They draw on published and unpublished literature to answer the research question and use appropriate methods to critically appraise the identified sources on whether they meet required quality standards (see e.g. Waddington et al., 2012). To be considered, studies must – in a credible way – be able to establish a causal relationship between a policy intervention and the desired result under review, in this case the creation of employment.

This systematic review included evaluation studies that either used an experimental design (randomised control trials (RCTs)) or a “quasi-experimental” approach by artificially composing a control group. Employment refers to new jobs in existing firms or jobs that are created through the set-up of new firms. The latter also includes self-employment, the main occupation of most urban poor people in the developing world. The review covers studies that focus on micro, small and medium sized enterprises (MSMEs): to be considered, the study must provide results that explicitly relate to firms with less than 250 employees, in countries that are classified as either low or middle income by the World Bank.

The identification of the studies under review was based on a systematic search comprising electronic databases and relevant websites, screening key journals, literature snowballing and contacting researchers and key experts. Studies could be published or unpublished and could be written in English, Spanish, French, Portuguese or German.

Some of the identified studies assess policy packages or several policies; many consider both employment and the set-up of new firms. Moreover, some studies compare effects of more than one intervention, for instance when they assess interventions separately as well as combined with other types of interventions. In consequence, we have more impact observations than studies in our sample. Hence, in total the analysis can draw on 92 so-called impact estimates.



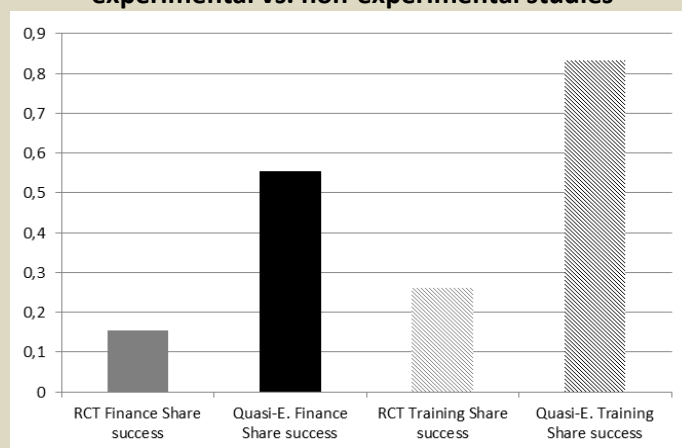
The studies cover interventions in all regions of the world, but a disproportionally high number of countries in Latin America. This is probably due to three reasons: first, these countries have experimented more with labour market interventions than most others; second, they have more and better data allowing for an easier assessment of policies; and they have more local research capacity than many low and middle income countries in other regions.

Box 1. The “method bias”

Interestingly, the review also reveals that studies that are based on Randomised Controlled Trials (RCTs) show fewer significant employment effects than studies that rely on quasi-experimental methods (see figure). On access to finance, for instance, 20 of 26 treatment effects that are based on an RCT show insignificant effects, while only 8 of 18 treatment effects based on quasi-experimental methods lead to this result.

Obviously, the most intuitive explanation is that the latter studies cannot entirely deal with selection effects. Accordingly, employment effects are often over-estimated. However, investigating the included RCTs in more detail also shows another potential explanation. RCTs systematically focus more prominently on small programmes, very poor areas and very specific target groups (as compared to evaluations based on quasi-experimental designs), all of which may increase the probability of a failure. In other words, since RCTs are only applied in very specific cases, one needs to be careful about generalising their findings.

Share of successful interventions among experimental vs. non-experimental studies



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This note presents key findings from a systematic review on job creation, commissioned by KfW Entwicklungsbank Evaluation Department. It was written by Prof. Dr. Michael Grimm of University of Passau, Erasmus University Rotterdam (ISS) and the Institute for the Study of Labor (IZA), Bonn and Anna Luisa Paffhausen, University of Passau. The authors can be contacted at: michael.grimm@uni-passau.de

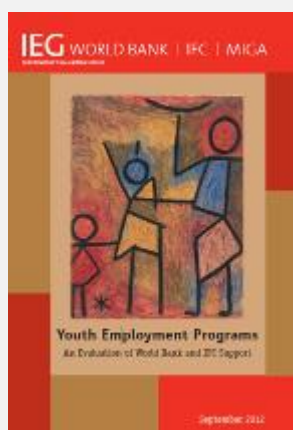
Evaluation Insights are informal working papers issued by the Network on Development Evaluation of the OECD Development Assistance Committee (DAC). These notes highlight emerging findings and policy messages from evaluations and share insights into the policy and practice of development evaluation.

Further reading

Interventions for employment creation in micro, small and medium-sized enterprises – A systematic review

Grimm, M. and A.-L. Paffhausen (forthcoming)

The review follows international standards of systematic reviews in international development, employing a transparent decision making process for literature searching, data collection, quality appraisal and synthesis, drawing on published and unpublished literature to answer the research question and using appropriate methods to critically appraise the literature. Considered studies must in a credible way be able to establish a causal relationship between a policy intervention or a certain set of conditions and job creation. The review will be theory based, i.e. it will be explicitly considered how outcomes may vary by context and the underlying causal mechanisms at work.



Youth Employment Programmes

September 2012

This evaluation looks at World Bank Group's support to countries trying to address youth employment issues. The evaluation makes two recommendations: (i) apply an evidence-based approach to youth employment operations, and (ii) at the country level, take a strategic approach to youth employment by addressing the issue comprehensively, working across World Bank Group teams, with governments and other donors.



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