

# What interventions create jobs?

A review of the evidence

# Michael Grimm

Professor of Development Economics University of Passau, Erasmus University Rotterdam, IZA Bonn and DIW Berlin

Prepared for the 2016 Brookings Blum Roundtable

# The job challenge

Creating new jobs and in particular "good jobs"—in other words, jobs in high productivity sectors and that offer decent working conditions—is one of the major challenges faced by low- and middle-income countries. According to the World Bank's 2013 World Development Report on jobs, around 600 million jobs are needed across the globe over the next 15 years to keep employment rates at their current level. Governments, non-governmental organizations, and donors spend large amounts of money on targeted programs and broader policies to enhance employment creation and the creation of new firms. Because most employment in low- and middle-income countries is in micro, small, and medium enterprises (MSMEs), these firms are often 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. But do they work?

## Lessons from experiments and quasi-experiments

Over the past 15 years, many of these interventions have been evaluated using a randomized or quasi-experimental approach, i.e., based on a comparison of treatment and control groups so that the identified effects can be considered as causal. Summarized below are the major findings from a systematic review covering 55 evaluations.<sup>1</sup> Figure 1 shows the regional distributions of the studies.

Figure 1: Distribution of included studies across regions

Source: Own representation.

#### Access to finance

Interventions that aim to improve access to finance include microcredit schemes, conditional or unconditional cash or in-kind grants, as well as a few interventions focused on saving devices (26 in total). The amount of finance involved is typically between \$100 and \$2,000. Figure 2 shows how in theory access to finance should improve business performance and eventually create jobs.







With respect to employment creation, most microcredit schemes turned out to be rather unsuccessful; only 13 out of 40 impacts that were measured show a statistically significant increase in employment or firm creation. Twenty-five out of the 40 treatment effects were not statistically significant. In two cases, a statistically significant negative effect was found. Positive effects on employment, if found at all, were small, especially for already existing small and microenterprises. Major effects were achieved with regard to the creation of new (mostly micro) enterprises and the expansion of already larger, well-established profitable firms.

Key lessons:

- 1. The high proportion of statistically insignificant results does not necessarily mean that microcredit does not work. Employment generation is typically not a primary objective of microcredit programs. Rather, income stabilization most frequently seems to be the major intent. Most enterprises make use of the credit or cash grants, if directly offered, but the money is primarily used as working capital, e.g., to pay inventories; many also use it just for consumption or to pay back earlier loans. Seldom would these result in capital investments in machines or buildings. Hence, such interventions might have no employment effects, but more 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. Hence, growth is often generated by extracting more output from a given number of workers than by increasing the number of workers. More efforts need to be made to target those entrepreneurs that can make good use of loans and shift the attention away from just income stabilization and poverty reduction and instead more toward productive investments.

#### Entrepreneurship training

Training measures include technical and vocational training (in-class and on the job), business skills training, business plan development, financial literacy training, and life skills training. How they should work is also shown in Figure 2. The review drew on 20 of the 55 evaluations. From this sample it appears that skills constraints are believed to be more relevant to new microenter-prises than for already established MSMEs: The majority of interventions target microenterprises with up to five employees or aims to enhance self-employment in groups highly at risk of unemployment such as the youth.

Looking across all studies just one-third (nine out of 31 impacts) showed significant positive employment effects. Twenty-one treatment effects were not statistically significant. Yet most programs produced significant improvements in business and behavioral skills, and sometimes also higher optimism and motivation. In many cases training has enhanced the entrepreneurial spirit and forced (potential) entrepreneurs to think more carefully about their business models.

- Key lessons:
- Training was found to help unprofitable firms either to become profitable or to close down. Likewise, training can prevent non-profitable business ideas from being started.
- 2. Some studies report higher investment, while very few report process or product innovations and 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 the influence of targeting. 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 startups than for business expansion.
- 4. The more tailored and substantial the training the better, but it is not necessarily the more complex programs that are the most successful. It appears that training needs to address specific knowledge gaps and be substantial to be effective, where substantial means that the training runs at least 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

This section covers a set of 10 studies, which are rather heterogeneous in the specific nature of the underlying interventions. Broadly, they fall under the heading of business development services and targeted subsidies (including wage incentives). All the studies on wage-related interventions are in Asia, while the others cover almost exclusively Latin American countries. Only one of these 10 studies is based on a randomized design, while the others exploit the variation in the policy across time and space to identify effects.

The studies show mostly positive and statistically significant employment effects. Although general conclusions have to be treated with care due to small number of studies, it seems that business support services and targeted subsidies can contribute to employment generation if they are demand driven, tailored, and focused.

Key lessons:

- 1. Larger firms may need quite specific and sophisticated support, whereas small firms just need 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 given the

small sample size. Remarkably, there are no relevant evaluations from East and Southeast Asia, where at least in some countries business support services may have played an important role.

3. It is obvious that wage subsidies are in general a quite expensive intervention. The pure wage subsidy program in Turkey has costs per month and per job created that correspond to roughly 94 percent of the total cost of employing a minimum wage worker. This may still seem acceptable if the jobs created are sustainable, but evidence regarding whether this is really the case is scarce.<sup>2</sup> A major cost component is the dead weight loss produced by the fact that many of the workers hired under a subsidized rate would have been hired anyway. This is also confirmed by an experimental study in Sri Lanka, where the authors find a strong correlation between pre-program hiring intentions and program uptake.<sup>3</sup>

#### **Business development**

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) could be expanded through formalization. On the one hand, it is believed that formalization increases access to credit and other resources important for business success and expansion (see Figure 2). On the other, formalizing could imply a new tax burden, on top of which come the bureaucratic costs of formalization, which can already be so steep that they alone prevent firms from becoming formal.

As formalization involves both costs and benefits, it presents a dual conundrum: What interventions are suited to enhance the firm's formalization, and what are the effects of becoming formal? Five studies were identified that can credibly establish a link between formalization and employment. They concentrate on Brazil and Mexico, where significant reforms have been implemented to reduce the costs of formalization. The studies show that it is difficult to get the average firm formalized 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 formalize, performance typically improves, including employment, but for most only modestly.

Key lessons:

- 1. Programs that compel firms to formalize are unlikely to produce any significant employment effects, since for many previously informal firms, such a change in status confers additional costs and no increase in profits.
- 2. Programs that offer cheaper and easier formalization procedures are more likely to have success but only for a relatively small group of entrepreneurs and firms that already exhibit



higher initial performance. In a field experiment in Sri Lanka, firms were offered cash rewards for formalizing.<sup>4</sup> Even if the equivalent of one month of the median firms' profits are offered, only around one-fifth of all firms register as businesses. (Interestingly, the lack of property rights for the land they work on is a major deterrent to formalization for many entrepreneurs.)

3. In general it seems easier to formalize firms while they are in the start-up phase rather than formalizing those firms that are already fully operational.

## Implications for the job agenda and the future of work

Overall the review shows (Table 1) that creating and enhancing employment by MSMEs is a very complex challenge.

- Many conditions have to be met before interventions favoring individual enterprise both improve business performance and lead to additional jobs.
- 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 intensive margin but fail to deliver productivity increases that go hand in hand with more jobs.
- 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.

There is no general evidence for poverty traps, i.e., small firms are not systematically bound to remain poor. To the contrary, returns to investment are generally quite high—returns of 60 percent per year are not rare—and these firms can grow to some extent even if the optimal firm size might in many cases be well below what is typically called a medium-sized firm.<sup>5</sup> MSMEs can and need to play an important role in securing and creating new jobs. That being said, the development of a vibrant private sector also requires the presence of large and export-oriented firms. However, it is difficult to see how bigger firms could solely provide the jobs needed over the next 15 years, especially since in low- and middle-income countries only a small fraction of the workforce is employed by such firms.



#### Table 1: Distribution of standardized effect sizes by intervention area

	Finance Count	e Share (%)	Trainin Count		BDS/W Count	age Share (%)	Formal Count	
Negative effect size (<0)	13	24.1	8	22.2	2	10.5	0	0
Small effect size (>0, <0.2)	33	61.1	16	44.4	12	57.9	5	71.4
Med. effect size (>0.2, <0.5)	7	13.0	5	13.9	2	10.5	0	0
Large effect size (>0.5, <1)	1	1.9	7	19.4	3	15.8	2	28.6
Total	54	100	36	100	19	100	7	100

Notes: Effect sizes are computed as the standardized mean difference, i.e., as the ratio between the change in the outcome due to the intervention divided by the standard deviation of the outcome in the control group (or at baseline). If the outcome is a binary outcome such as 'having set up a firm or not' the risk ratio is computed (-1). Effect sizes are not fully comparable across studies and hence can only roughly reflect the order of magnitude of program impacts. There are more impacts than studies as many studies show impacts for different types of interventions.

#### Source: Grimm and Paffhausen (2015).

Hence, governments in poorer countries need to pay attention to both MSMEs as well as large and export-oriented firms to push the job agenda. Interventions targeted at MSMEs should take the above findings seriously, for example by improving their targeting and by having a more focused set of objectives. Improving productivity of those firms that have potential but are constrained by outside factors—like access to capital, a lack of specific skills, and adverse business environments— is important. This is because, at least in the manufacturing sector, import competition will increasingly become a threat to MSMEs. Already now imports from China and other countries with high labor productivity have pushed local producers in many sectors out of the market.

For larger formal firms, governments of poorer countries need to think about interventions that direct resources towards sectors that allow for an integration of domestic firms into global value chains. Poor countries can benefit from two recent developments. First, wages in China are rising and its economy is undergoing structural transformation to cope with these ris-ing wages. This in turn opens a window of opportunity for sub-Saharan Africa and possibly parts of the Middle East and North Africa (MENA) where in the future less sophisticated products can be produced at lower cost, provided these countries make progress with respect to infrastructure and the general business environment. Second, the digital economy offers the possibility to de-liver services from poorer countries to the rich world. India has demonstrated that this can be a viable strategy by its international call centers. In general, the digital economy will offer new opportunities for countries that have an educated workforce.



While shifting such jobs from rich to poor countries will reduce poverty and inequality in poor countries as well as inequalities between rich and poor countries, it may exacerbate inequalities within rich countries.<sup>6</sup>

# How can the global development community strengthen the evidence base for job interventions?

This review clearly shows that the available evidence remains sketchy, in particular for large parts of sub-Saharan Africa, MENA, and Asia—regions where in the coming decades the need for jobs will be the highest. Information that can help to improve targeting is needed. So far, very few studies are able to assess the longer-term effects of interventions and policies aimed either directly or indirectly at improving the job market and raising labor productivity. Moreover, the analysis of program costs is particularly lacking. Almost none of the 55 studies analyzed provided a detailed cost effectiveness analysis detailing the cost of creating an additional job with a certain program compared to another. This gap should serve as a wakeup call to both implementers and researchers. Implementers should provide the necessary numbers and researchers should go beyond studying simple impacts, which is not helpful for those who have to allocate resources across different interventions. As argued above, the challenges are increasing so action is important.

3 De Mel, McKenzie, and Woodruff 2010. Wage subsidies for Microenterprises.

<sup>1</sup> Grimm and Paffhausen 2015. Do Interventions Targeted at Micro-entrepreneurs and Small and Medium-sized Firms Create Jobs? A Systematic Review of the Evidence for Low and Middle Income Countries, Labour Economics.

<sup>2</sup> Betcherman, Daysal, and Pagés 2010. Do Employment Subsidies Work? Evidence from Regionally Targeted Subsidies in Turkey.

<sup>4</sup> De Mel, McKenzie, and Woodruff 2013. The Demand for, and Consequences of, Formalization among Informal Firms in Sri Lanka.

<sup>5</sup> Grimm, Knorrigna, Lay 2012. Constrained Gazelles: High Potentials in West Africa's Informal Economy.

<sup>6</sup> Basu 2016. Globalization of Labor Markets and the Growth Prospects of Nations.