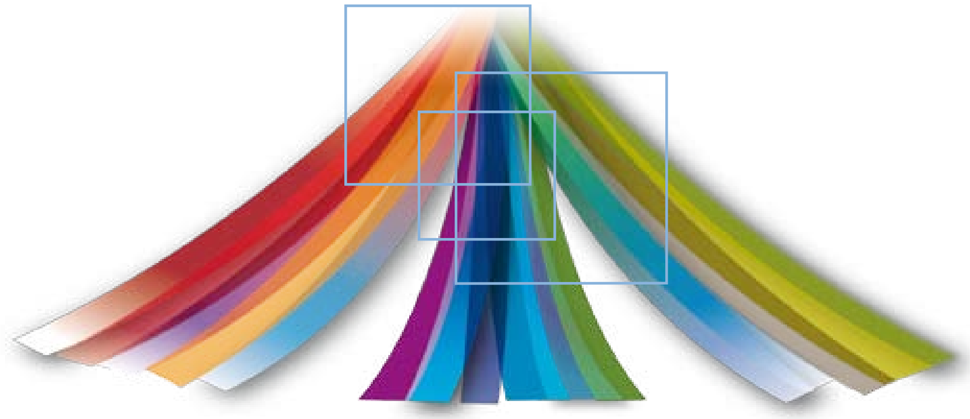
BRIEF Nº 01

GLOBAL JOBS PACT POLICY BRIEFS

International Labour Organization



INVESTMENTS IN INFRASTRUCTURE – AN EFFECTIVE TOOL TO CREATE DECENT JOBS

1. Executive summary

Counter-cyclical public spending on infrastructure is an effective tool to create jobs. With weak demand in the private-sector, governments serve as employers of last resort in an effort to sustain both jobs and aggregate demand. Investments in infrastructure are often in economic sectors (improving transportation in particular, including roads, railways and waterways) and social sectors (education, water, sewage, and other services). This lays the foundation for long-term development and deals with immediate social needs.

Bringing forward planned infrastructure investments or improving the efficiency of the implementation of works budgeted in public investment programmes are common features of fiscal stimulus packages and can be implemented rapidly as plans have often been approved. Wherever feasible, decentralized public investment should be favoured. Local investments and their impact on development strategies lead to more job creation, greater ownership, and can rapidly boost local economies. This is particularly relevant in times of crisis.

It is of crucial importance to assess the overall labour outcome of these investments in terms of direct, indirect and induced employment, not only to assess their short-term effects, but also to assess the longer-term impact on growth and its distributional effects. As many infrastructure projects in low and medium-income countries are co-financed by IFI, these institutions should make all efforts to allow for larger labour content in infrastructure development.

2. Description of the policy challenges

According to the World Bank, infrastructure spending announced for 2009 represented on average 64 per cent of the total stimulus packages in emerging market economies, and 22 per cent of the total stimulus in high-income economies. The time-lag in implementation of such projects can be a challenge, with the boosted infrastructure investments unable to produce the expected results when a timely response to the crisis is required.

An ILO survey of employment and social protection measures taken by 54 countries confirmed the importance of infrastructure in fiscal stimulus packages: 87 per cent of the countries allocated additional fiscal spending on infrastructure. One-third of these included a specific employment component, often with targets for disadvantaged groups. So while infrastructure is well recognized as a means for employment creation, the required attention to the number of jobs, and targeting employment in their design, implementation and monitoring has been less recognized.

A theoretical model-based assessment of the impact of infrastructure spending on employment concluded that US$1 billion spent on large projects in advanced countries generates around 28,000 jobs, both directly and indirectly in roughly equal proportions. Infrastructure expenditure in developing countries has a substantially greater employment

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More briefs can be found and downloaded at http:www.ilo.org/jobspact impact: US$1 billion spent in Latin America can yield up to 200,000 direct jobs; spending the same on labour-intensive rural projects can create up to 500,000 direct jobs. However, these rough estimates should be treated with caution.

Programmes based on increasing public investment in infrastructure, and emergency employment programmes all face challenges in targeting and reaching the intended beneficiaries. Whereas in boom times the public sector's efforts use categorical targeting mechanisms by focusing on population groups with difficulties in finding jobs (such as young people and women with certain educational and socio-economic backgrounds), in a crisis, public support must target a much wider range of the population. Regarding categorical targeting, generally the aim is to prioritize the employment situation of male and female heads of households at risk. There is also a need for geographical targeting, to ensure that programmes reach those areas most affected by the crisis. The policy challenge is to match the targeting of infrastructure investments with the targeting of employment creation, be it by category or geographic area.

Some examples of the level of infrastructure spending and impact on employment

Experiences with infrastructure in stimulus packages vary greatly. In the United States, infrastructure expenditures constitute only a small portion of the total potential fiscal stimulus from the American Recovery and Reinvestment Act. While grants by the Federal Government to State and local governments for infrastructure investments are estimated to be US$44 billion, infrastructure expenditures incurred up to 30 September 2009 amounted to US$4.44 billion or 2.6 per cent of the total fiscal stimulus during the period. The overwhelming bulk of the infrastructure expenditures was aimed at improving the country's transportation system. It is estimated that about 59,300 new jobs may have been created, either directly or indirectly. Compared to the loss in employment experienced by the favoured industries during the current recession, the likely gains appear to be quite modest in construction but more impressive in transit. However, given the scale of infrastructure expenditures in the American Recovery and Reinvestment Act, their potential to alleviate the current unemployment problem in the United States is quite limited. Furthermore, compared to the existing pattern of employment, additional employment resulting from the infrastructure investments would tend to favour men over women, whites over non-whites, those without college degrees over college graduates, and prime-age workers over workers of other ages.

Indonesia launched a fiscal stimulus package worth 73.3 trillion Indonesian rupiahs (IDR) (US$7.6 billion) aimed at boosting aggregate demand. It included up to IDR12.2 trillion (17 %) for infrastructure development, including the improvement of highways, ports, bridges and irrigation systems. The Government's estimate of setting a job creation target of over one million workers was surpassed. A new diagnostic tool, developed under the leadership of the CMEA, with the technical support of the ILO, which is a dynamic social accounting matrix with an employment satellite account, will help to improve further policy decisions, by giving advice through the analysis of the impact of public investment on specific groups of workers and on the economy as a whole.

The Egyptian Government committed about 15.53 billion Egyptian pounds (EGP) (US$2.82 billion) in the financial year 2008–09 to a set of rescue measures. It included a large number of front-loaded projects which were aimed to preserve and to stimulate domestic demand, to support the sectors affected by the crisis and, to accelerate the implementation of national projects seen as contributing to social welfare through increasing investment in public utilities infrastructure. The largest share of investment expenditure was allocated to water and sewage projects followed by roads and bridges as well as the building sector and the Egyptian railways. Estimates show that the complete stimulus package is expected to create between 661,420 and 729,650 new job opportunities, depending on the assumed levels of elasticity of household demand and export supply.

Some components of public spending contribute not only to short-term relief, but also to economic growth and general development through the accumulation of physical and human capital: physical, in particular through the development and maintenance of useful public infrastructure (mainly transport and housing), and human through skills development of workers and the promotion of SMEs involved in implementation. Spending cuts in such forms of investment would have a serious negative impact on employment and recovery unless ways could be found to maintain services with reduced costs.

3. Policy options to address the challenges

The above examples highlight the issues related to the number of jobs created and the targeting of different sections of the workforce. The strategic focus of policy needs to shift from the amount of money spent to the number of jobs created relative to the employable pool of workers and, to the amount of public services provided relative to existing needs. A two-pronged strategy aiming to provide immediate short-term relief from unemployment and, long-term job creation aiming to meet the structural infrastructure deficits, needs to be developed. Long-term goals cannot be met without developing national, state, regional and local infrastructure plans that, in their totality, form a coherent national vision including the potential to create employment.

Responding to the increasing demand for a green economy and adapting to climate change present new opportunities for jobs, skills and entrepreneurship development. Infrastructure investments supporting new low emission production and consumption patterns, and the restoration of the productive natural resource base (protecting against floods, regaining agricultural lands and forests, etc.) are crucial elements of a Green Jobs approach.

Measures to guarantee timely implementation

Increasing public investment as a means of job creation during a crisis involves a lag inherent in the cycle of identifying, formulating and approving projects. Therefore, speedy implementation is even more important because an economy in recession can deteriorate quickly. The faster that governments can act to create jobs and boost aggregate demand, the better. The pace at which jobs can be created depends largely on the type of projects (new large construction versus small or maintenance projects), institutional capacities, procurement procedures and earlier experience in those areas. The streamlining of public tender procedures is essential to facilitate the rapid rollout of stimulus measures. Nonetheless, it is much easier to allocate additional resources than to execute the corresponding projects.

Many countries experience average effective execution of public investment at less than 50 per cent of the amount budgeted. Therefore, the main short-term challenge is to achieve the full execution of available resources rather than to allocate additional resources. Special efforts to speed up execution, without any legal changes to the regulatory framework within which the resources are executed, is a cost-efficient means to boost employment.

To ensure the timely implementation of stimulus packages and to benefit from existing administrative structures, ongoing infrastructure projects and public works schemes can be given additional funding to allow them to be scaled up. The front-loading of infrastructure investments planned for future years helps to speed up timely implementation because there is normally no need to invest in the planning of new projects. Bringing forward planned infrastructure investments or improving the efficiency of implementation of works budgeted in public investment programmes are common features of fiscal stimulus packages because plans have often already been approved and can be rapidly mobilized.

New programmes funded through fiscal stimulus packages following standard administrative procedures can be decentralized and broken into small grants at local level to employ small-scale local contractors, local labourers and local resources to efficiently enhance the employment outcomes of the infrastructure component of the packages. This is often more effective than centrally planned and executed projects in terms of timely response and more jobs.

Targeting

In traditional public investment programmes, the targeting options are often limited, as most works tend to be executed by private enterprises. However, their objectives can be influenced to a certain degree through innovations to procurement systems and procedures. It is for this reason that Public Employment Programmes, for which special targeting mechanisms can be applied, may play an important complementary role.

Simply prioritizing the execution of investment projects in the areas most affected by the crisis constitutes an important means of targeting, and subcontracting small works to local (labour) contractors allows for the targeting of special groups, such as women. A real win-win situation is investments in neglected maintenance projects. They tend to require a variety of skills, services and supplies that may be available locally. In regular maintenance activities, women may take a larger share of job opportunities.

Impact of infrastructure spending

Investments in infrastructure are often in economic (improving transportation in particular, including roads, railways and waterways) and social sectors (education, water and sewage, and other public sectors). This lays the foundation for long-term development and also deals with immediate social needs. The composition of infrastructure investments depends largely on the immediate needs of the country. Improving access through the maintenance and rehabilitation of roads is an efficient recipe, as the needs always exceed regular budget allocations even in normal times. In addition, a significant part of these works can be executed through small or medium-scale contractors or micro-enterprises therefore promoting them.

Infrastructure investment with an employment focus has a strong employment multiplier effect. It creates direct jobs for those directly involved. The local resource-based approach guarantees a high indirect employment effect through the increased use of local goods and services. As a result, local consumption and demand is stimulated from higher local incomes with a resulting induced effect for the local economy. The number of jobs really created by recent fiscal stimulus packages seems to be in line with those forecasted. However, this has to be taken cautiously because the definition of a job differs from one country to another. There is no uniform way to account for the direct employment created under a fiscal stimulus package, and most countries face problems in collecting reliable data. A consolidated effort is needed to better understand and document the effects, in order to provide improved guidance on the measures where multiplier effects are best, given the objectives of the particular country.

4. Conclusions and recommendations

Infrastructure investments should be launched both to build up capital for sustainable development and inclusive growth: human capital including skills, employment (including green jobs) and entrepreneurship development, and physical capital such as construction, rehabilitation and maintenance of infrastructure and natural and productive resources. It is of crucial importance to assess the overall labour outcome of these investments in terms of direct, indirect and induced employment, not only to assess their short-term effects but also the longer-term impact on growth and its distributional effects.

Wherever feasible, decentralized public investment should be preferred. The advantages of local investments are particularly relevant in times of crisis. First, decentralized decision-making processes are usually faster and make the local population more committed to the projects. It improves targeting and its proper use and maintenance. Secondly, the works undertaken are usually on a smaller scale and involve less expensive tenders, which means there is less need for heavy machinery, and hence greater job creation for the amount invested. Third, decentralized tenders are more likely to be executed by local firms using workers from the area, thus boosting the local economy and recovery.

Because many infrastructure projects in low and medium-income countries are co-financed by international financial institutions, these institutions should make sure that their regulations allow for an increase in labour content in infrastructure development. Readjusting the design, procurement and contracting modalities of such projects could have a major effect on employment.

5. Further reading and resources

- Bental, P; Beusch, A; de Veen, J. 1999 *Employment-Intensive Infrastructure Programmes: Capacity building for contracting in the Construction Sector* (Geneva, Development Policies Department, ILO). Also available at: http://www.ilo.org/public/english/employment/recon/eiip/download/green_guide.pdf

- Tournée, J.; van Esch, W. 2001 *Community contracts in urban infrastructure works – Practical lessons from experience.* (Geneva, ILO) also available at: http://www.ilo.org/public/english/employment/recon/eiip/download/community_contr.pdf

- Tajgman, D; de Veen, J. 1998. *Employment-Intensive Infrastructure Programmes: Labour policies and practices - How labour issues are incorporated and progress on working conditions and standards can be made with the involvement of the social partners.* (Geneva, Development Policies Department, ILO)

- "Employment-Intensive Investments for Sustainable Development" – Open courses in English and French at ILO/ITC Turin for high level planners, decision makers and social partners.