

Priority policy research issue for the first PAGE II (2016) call for proposals

### Youth employment – supply and demand side constraints and policy options

In what follows, we introduce the priority thematic issue of **Youth employment - supply and demand side constraints and related policy options**, identified for the first round of PEP's call for research proposals for its PAGE II program. In order to ensure that the outputs (findings and recommendations) yielded by PAGE II-supported projects will eventually serve to address the most salient issues and needs in terms of policymaking in developing countries, a group of international experts in the field of development economics have been convened to identify the priority topics – under the broad theme of inclusive growth and employment – for this call for proposals.

To assist applicants in designing their research proposal, PEP resource persons have prepared a complete review of existing scientific literature on each of the themes listed below. Follow this link to access the [recommended reading](#) lists online.

IMPORTANT: For all policy research issues identified for this round of funding, applicants are encouraged to explore impacts on inequality across gender, socio-demographic groups and age groups. Consideration of gender aspects should be included for all issues.

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## Motivation and situation analysis

Youth in the developing countries often face unique challenges in participating in labour markets. The main entry barriers to better paying occupations are their lack of access to productive assets including credit, education, and vocational training (Heyer, 2006; Quisumbing and Pandolfelli, 2010). As a result, they tend to engage in low-skilled wage labour and labour-intensive self-employment and informal sector activities that are characterised by insecurity, seasonality and low returns (Banerjee and Duflo 2007; Haggblade et al., 2007; Banerjee and Duflo 2008; Bezu and Barrett, 2010).

Over the past decade, youth unemployment rates in the developing economies of Africa, Asia, Latin America did not show significant improvements despite generally positive economic growth. These regions have experienced important growth in labour supply, mainly in the youth population, which has put more pressure on the labour markets. As a result, the global youth unemployment rate has been rising since 2011. Recent estimates indicate that about 12.6 percent are unemployed and this is projected to increase to 12.8 percent by 2018. In contrast, the global adult unemployment rate, while also rising slightly, is much lower at 4.6 percent in 2013 (ILO, 2013).

Many low- and middle-income countries in the developing regions are experiencing an increasing incidence of the 'educated unemployed' phenomenon. This is a consequence of rising levels of participation in higher education, where concerns with quality of training and the adequacy of curricula to labour market requirements are common. Job creation rates for positions require this type of education cannot absorb the new entrants into the labour market (AfDB, 2011). The challenge is primarily for youth aged 15-24, but sometimes also ages 25-29, because there is growing evidence that the transition to adulthood, including school-to-work transition, is now more protracted into these higher ages.

## Research issues

Although several supply and demand-side interventions have been proposed to enhance employment for youth and women in Africa (AfDB, 2011) and other developing regions (Karlan and Valdivia, 2011; Giné and Mansuri, 2014), there is limited context-specific evidence to inform policy choices to support job creation and productive employment for them. Several studies focusing on education and training programmes that prepare youth for the labour market have also been proposed to help them transition into the world of work. Although these programmes are fairly widespread, most of the evaluations and assessments that have been carried out so far have been done for programmes implemented in upper- and middle-income countries. The applicability of these lessons and policy recommendations to poor countries is therefore still questionable and more research is needed to test and rigorously evaluate context-specific interventions in these countries. The key research questions in this thematic area will explore policy options aiming at narrowing labour supply and demand gaps, reducing labour market mismatch, reducing vulnerability and promoting productive employment.

### a. Narrowing labour supply and demand gaps

To reduce youth unemployment (and materialise the demographic dividend), new entrants need to be absorbed by the labour market.<sup>1</sup> Traditionally, this has been addressed from the supply side by the means of labour market training programmes intended to improve skills of the youth labour force. School-to-work transition programmes were widely implemented in LAC in the form of vocational trainings with positive but modest outcomes (see Betcherman et al., 2007). Narrowing the growing

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<sup>1</sup> The demographic contribution to accelerating economic growth is often referred to as the demographic dividend. This provides a time-limited window of opportunity for growth if it coincides with strategic investments to enhance human capital and create an enabling environment for businesses to demand and deploy the skills of the youth population more efficiently and equitably.

gap will require better information systems on available employment opportunities, as well as the creation of new jobs to absorb the growing number of unemployed youth.

Labour market information and support systems for youth transitioning from school to work are scarce but crucial to reduce unemployment since they help young job seekers by i) improving the quantity and quality of information on available jobs and ii) better signalling their productivity and skills to potential employers.

In an integrated view that considers both labour supply and demand side approaches, some relevant research issues for developing and low-income economies include:

- Country-specific interventions that address the supply side constraints in terms of creating jobs and employment opportunities for unemployed youth (public employment and public works projects, wage subsidies, active labour market programmes, etc.).
- Employment information hubs and mentorship for youth that enhance the availability of labour market information
- Identification of public and private interventions that generate the greatest impact in developing labour market networks among the youth
- Implementation of employment information systems in the presence of unreliable information due to informal labour market including unregistered workers, jobs and firms.
- Estimation of the economy-wide and regional impacts of expanded youth employment on inclusive growth and poverty reduction

#### **b. Reducing labour market mismatch**

In general, the concept of labour market mismatch refers to situations where new labour market entrants or the unemployed do not have the set of skills needed by employers who are hiring. In many low-income countries, curricula – including which fields of study are considered important – still derive from former colonial powers. The resulting ‘educated unemployed’ phenomenon raises concerns regarding the effectiveness of such supply driven interventions<sup>2</sup> (AfDB, 2011).

In many poor countries, vocational education received little attention as there is a widespread lack of support and acceptance of this type of training, not only by employers but also by the youth population. Manual skills are often discredited, as are many practical skills which may enhance the employability of youth. Even when youth obtain vocational training, the skills taught often belong to a previous generation of craftsmanship rather than current demands. Such programmes are focused on job seekers’ lack of skills (supply side) and do not consider their corresponding job providers’ demand, which may be limited<sup>3</sup>.

The key research issues to reduce the mismatch to enhance youth employment in the poor economies would therefore include appropriate country-specific approaches to:

- Estimate skill mismatches in different sectors and programmes
- Identify the policies required to address this mismatch through reorienting curricular to meet skills needed in the local economy
- Understand the kind of educational policies and interventions that are needed to build demand-relevant skills and prepare young people for the labour market
- Analyse formal and informal training opportunities and job skills development options that support youth to develop the skills needed in labour markets

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<sup>2</sup> Demand-driven interventions are often found to be more effective. For further details see Betcherman, et al. (2007)

<sup>3</sup> This has been partly addressed by programs such as ‘Jóvenes’ program. This is a demand-driven intervention where potential employers offer working experience (internship) through a bidding process. Even though it has been successful in many countries, it was also expensive due to the long duration of the program (eight years on average).

- Explore apprenticeship and internship opportunities that involve the private sector to help the out-of-school youth develop the experience and skills needed for local employment.

### **c. Reducing vulnerability and promoting productive youth employment**

In most rural, less-developed economies, youth must undertake whatever livelihood activities they can find or create, even if these have extremely low levels of productivity and/or do not nearly fill a work day. If they engage in any kind of economic activity for one hour or more during the reference week, they are counted as employed according to international definitions, but the quality and/or quantity of this employment is often inadequate.

One measure that casts a wider net, and abstracts away from whether a young person is ready and available for work or actively searching for it, is the “Neither in Employment nor in Education or Training” (NEET) measure. The key policy research questions to reduce vulnerability and to promote productive youth employment in low- and middle income developing countries would include:

- What kind of employment opportunities will help the youth transition from the informal and vulnerable employment to productive employment that will enhance their incomes and offer decent working conditions?
- What kind of support systems and interventions are needed to build skills and prepare young people working in the informal sectors to successfully enter formal labour markets?
- How can the expansion of educational opportunities for youth in the low and middle income developing countries be accompanied by improvements in quality that employers in productive sectors will require?

## **Methodological Approaches**

### **1. CBMS approaches**

The CBMS methodology can be adopted as a platform for generating the necessary primary data for micro-level measurement techniques and randomised control trials (RCTs) in providing empirical evidence on relevant research questions relating to youth employment. With the lack of required disaggregated and timely data from national censuses in most developing countries, CBMS is recognised as a viable instrument for filling in the information gaps to analyse the individual (e.g. educational attainment and skills, nature of jobs and quality of employment) and household characteristics (e.g. household size, geographical location, and income and non-income poverty status) of youth in the labour market.

Various econometric techniques can be adopted using data on individual and household characteristics of the target youth population from CBMS to examine specific topics of interest as shown in [PAGE-I research projects](#). For instance, logistic or probit regression models can be employed to examine CBMS data on poverty dynamics and unemployment among the youth (Pakistan); causes/determinants of youth unemployment (Ethiopia, Tanzania, Kenya, and South Africa), access to different types of youth employment programmes (Pakistan and Philippines), and youth in informal sector employment (Tanzania and Uganda). On the other hand, Cox regression can be employed to analyse CBMS data on youth unemployment spells or sustained unemployment (Philippines; Argentina; South Africa).

Under PAGE II, CBMS studies will provide more in-depth analysis of the fore-going priority and emerging issues relating to youth in vulnerable employment, youth NEET population, and the implications of the risks faced by these population sub-groups for social protection policies. In this context of these issues relating to youth employment, the following are examples of specific research questions for policy options that can be examined using CBMS application:

- What are the different types of risks being faced by the youth in the labour market particularly those in engaged in vulnerable employment?

- What is the extent of youth who are migrant workers? What are the risks faced by overseas youth workers? What types of social protection and support programmes are available and accessed by the youth overseas workers to mitigate the risks of their jobs?
- What are the differences in the extent and types of risks faced by the youth workers (across population sub-groups e.g. location, gender, ethnicity, persons with disabilities)? Who are the most vulnerable among the employed youth to certain types of risks?
- What are the consequences of the risks being in vulnerable employment on the conditions of youth's well-being (development/poverty) outcomes?
- How do youth in vulnerable employment cope with the consequences of the risks of their jobs?
- What types of support programmes are available to and accessed by youth in vulnerable employment to help them cope with the consequences of the risks of their jobs?
- What are the trends and extent of youth NEET population in urban and rural areas? What is the link of youth NEET to household poverty status?
- What are the measures and programmes that effectively address youth unemployment?
- How can existing youth employment programmes be linked with access to social protection programmes?

The table below shows a selection of recent PEP-supported projects with CBMS applications focusing on some of the research issues proposed related to youth employment.

Research title	Authors and PAGE round
Youth employment and entrepreneurship: A Case Study of Punjab Province, Pakistan	Akhtar et al. (PAGE i)
Youth employment and entrepreneurship in Argentina	Auguste et al. (PAGE i)
The Link Between Youth Unemployment and Vulnerability in Tanzania: The Case of Buloba Municipal Council and Muleba District Council in Tanzania	Bashemera et al. (PAGE i)
An Examination of Multidimensional Poverty, Youth Unemployment and Entrepreneurship in Limpopo Province	Bicha-Oloo et al. (PAGE ii)
Entrepreneurship as a Mechanism to Address Youth Unemployment and Poverty in Kenya: A Case Study of Murang'a County	Kimani et al. (PAGE ii)
Challenges and Prospects of Entrepreneurship Development and Job Creation for Youth Unemployed: Evidence from Addis Ababa and Dire Dawa City Administrations Ethiopia	Tewolde et al. (PAGE ii)

## 2. Microeconomic policy approaches

Different microeconomic evaluation approaches can be used to address these relevant research issues. Micro-level measurement techniques can be applied for gauging the importance of skills mismatch for youth unemployment, as well as quantifying the supply and demand side factors that contributes to explain its magnitude in the labour market. Panel data approaches can help to understand the causes (e.g. social background, cognitive and non-cognitive skills, skills mismatch) of the incidence of unemployment and vulnerable employment among youth and their consequence on future labour market outcomes (e.g. unemployment, turnover, wages). Quasi-experimental methodologies can be applied to assess the effectiveness of policy interventions,

such as those dealing with the structural barriers for youth employment (e.g. educational reforms, labour market regulations) or active labour market policies (including subsidised employment, training and job search assistance).

In combination with large and diverse data sources and techniques, the use of quasi-experimental designs can help understanding the mechanisms underlying the policy effects on youth labour market behaviour; measuring their distributional and long-term impacts; evaluating the impact of the institutional and implementation features; as well as assessing the benefits of the policy relative to its costs.

Household Surveys and Labour Force Surveys containing specific modules on respondent's cognitive skills, individual and workplace characteristics (e.g. occupation and skills use at work) are crucial for measuring skill mismatch in labour market. Several surveys follow individuals across time or contain retrospective information on labour, wage as well as on individual and household characteristics. Furthermore, some of those surveys provide modules on school-to-work transitions. That information is relevant to understanding the factors that play a major role in explaining long-term “scarring” effects on youth labour market outcomes. The availability of administrative datasets (programme records, labour histories, social security records, etc.) combined with modern quasi-experimental methods can yield convinced evidence on the impacts of either, specific programmes or macro policies on youth population. Moreover, combining administrative records with follow-up surveys can provide valuable information on the effects of public policies on “missing dimensions” such as informal employment. Finally, when available the use of matched firm-employee data provide a unique opportunity to examine in depth the match quality and employment duration of youth workers and firms as well as shed light on the role of policies to encourage search.

The microeconomic evaluation tools presented above (and others) together with appropriate data can be help to evaluate and provide policy recommendations about, for example:

- Youth unemployment and labour supply/demand gaps, and the effectiveness of different public programmes (e.g. public works, wage subsidies, active labour programmes, non-wage benefits and union facilitation) in reducing them;
- Skill mismatches in different sectors and programmes, and how education and labour market policies (e.g. vocational and training courses, internship and apprenticeship opportunities) help to reduce such mismatches;
- The situation of informal and vulnerable jobs especially among the youth, the transition from informal (vulnerable) to formal (productive) jobs and social protection schemes for informal employments, and how specific educational interventions (e.g. investment in schooling quality and re-orientation of educational curricula towards specific programmes) and labour market/fiscal interventions (e.g. lowering taxes for formal employments, widening social protection schemes) can increase formal employment.

The table below shows a selection of recent PEP-supported projects using micro modelling approaches focusing on some of the research issues proposed in this section.

Research title	Authors and PAGE round
Youth self-employment in households receiving remittances in Macedonia	Petreski et al. (PAGE i)
Internal mobility and youth entrepreneurship in Democratic Republic of Congo	Kikani Kiuma et al. (PAGE iii)
Mismatch unemployment: the case of Macedonia – with special reference to young adults	Atanasovska et al. (PAGE ii)
Remittances impact on youth labour supply: evidence from Kyrgyzstan	Karymshakov et al. (PAGE ii)
Wage 'scarring' when youth unemployment is extremely high: Evidence from Macedonia	Mojsoska-Blazevski et al. (PAGE ii)
Non-wage benefits, union 'facilitation effect' and labour market outcomes in Ghana	Nkechi S. Owoo et al. (PAGE iii)

### 3. MPIA approaches

CGE modelling can be used to explore different dimensions of youth employment through various disaggregations of the available data. Given specific hypothesis on sectoral labour market composition and/or the proportion of youth in the informal sector, the CGE techniques can simulate various labour market shocks or policies to assess impacts and effects at the macroeconomic level. The different hypothesis on structural composition of the labour market can be made in part from available micro data and from similar context or studies (e.g. similar countries or regions, similar labour market structure, etc.) For example, CGE modelling can be used to assess the impact of the return of migrant on the informal sector and the impact of supporting youth employment policies across various interlinking sectors. In addition, dynamic CGE model and micro-macro simulation can be used to explore the impact of education reforms on youth employment and the extent of the skill mismatch between supply and demand of labour in alternative growth scenarios. With the correct approach to have different labour categories based on age, CGE can also be used to inform policy in a wide range of context.

Given initial hypothesis on labour categories (e.g. age) to identify youth in the labour market, national accounting is then used to create the relevant social accounting matrix used in CGE modelling. From this social accounting matrix, the modeller can then infer different parameter defining youth preferences and attitudes toward labour market (e.g. elasticities, risk aversion, mobility). Finally, using the completed model, the modeller can simulate different scenarios representing exogenous shocks or policies promoting youth employment.

Within PAGE II initiative, macroeconomics modelling using CGE frameworks could help evaluate and provide policy recommendations on the following aspects:

- Migration effect on youth employment
- Dynamic effects of education reforms
- Public policies targeting at the youth
- Analysis of the informal sector from a youth employment perspective

The table below shows a recent PEP-supported project with macro-modelling application focusing on some of the research issues proposed related to youth employment.

Research title	Authors and PAGE round
Impact of public education spending on labour market and households' welfares in Cambodia: A CGE approach	Ear et al. (PAGE iii)