

# PAGE

## policy analysis on growth and employment



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

### Sectoral composition, patterns of economic growth - implications for job creation, employment and poverty reduction

In what follows, we introduce the priority thematic issue of **Sectoral composition and patterns of economic growth - implications for job creation, employment and poverty reduction**, 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

While it is generally accepted that rapid economic growth is a favourable factor in reducing poverty (at least absolute poverty), opinions differ widely when assessing the impact of growth on distribution of income and equity. Many differences also exist in the literature on key engines of growth. Among the key factors considered and often put forward are the following: open trade policies, access to foreign capital and the ability of countries to create a favourable climate for foreign direct investment, human capital formation and the availability of a skilled workforce, existence of natural resources, public expenditure policies and infrastructure investments, public regulatory policies and practice, etc.

Others are also wondering what types of sectoral growth will have the largest impact on aggregate economic growth including the impact on poverty and income distribution. There is extensive literature and empirical evidence on the impact of trade policy on growth and inequality (e.g. Winters, 2003; Anderson, 2005). However, it remains unclear how these elements could be decomposed since the sectoral composition of activities and the regional distribution of activities are interlinked and both have a strong impact on regional poverty and income distribution. There is also a considerable knowledge gap in the understanding of the impact of public investment on poverty and particularly on the regional decomposition of poverty. The purpose of this thematic area is therefore to explore the engines of economic growth, to assess the consequence at the regional level in terms of their effects on employment creation and the generation of income and poverty reduction, with particular emphasis on vulnerable groups and women.

## Research issues

While aiming to address knowledge gaps in understanding the impact of patterns of economic growth on job creation, employment and poverty reduction in developing countries, this thematic area also seeks to improve our understanding on the interaction between the labour markets and economic growth. With these objectives, this thematic area will focus on determining sectoral patterns of economic growth that could lead to an improvement in welfare and employment for a specific country as well as cross-country comparisons; understanding the relationship between economic growth and regional composition of poverty; women's participation in the formal labour market; trade policy, FDI and integration in the world economy; price shocks and compensatory mechanisms for the economies in the agriculture and energy sectors.

### **a. Sectoral decomposition of growth and impact on employment**

Countries are very diverse in their economic structures. Depending on whether the pattern of growth is based on natural resources, export, rural-oriented agricultural production, industrial mass production (especially in Asian countries) or the development of services (telecommunications, tourism, etc.), the impacts on employment creation and income generation for the poor can be very different. We therefore intend to generate a number of comparative studies to analyse the impact of sectoral economic growth policies and patterns on overall growth and employment creation.

Research questions that address these issues include:

- What would be the sectoral effects on employment as a result of increases in agricultural total factor productivity (TFP)?
- What are the benefits of specialisation, in comparison to diversification, of the agricultural sector?
- Can higher growth rate in some sectors lead to a higher growth rate in other sectors?
- Which sectors should public investment be directed in order to generate higher growth rate?
- Are sectoral discriminated fiscal measures favourable to economic growth?
- What type of fiscal measures could lead to higher growth rate?
- Which policies can be implemented to change the sectoral structure of production?
- Which sectors have higher payoff in terms of employment creation and formality of employment?

## **b. Rural and urban poverty, labour mobility and regional composition of poverty**

In developing countries, rural poverty generally exceeds urban poverty. The regional dimension of economic growth is an important issue especially if an equitable distribution of the benefits of growth is considered to be an important factor of stability in a country. High economic growth in urban areas may have very low impact on poverty in general and even lower on extreme poverty, particularly in rural areas. Regional dimension of poverty can be related to the nature of regional economic activities and some studies have shown the strong impact of agricultural growth on reducing rural poverty.

- What would be the regional impacts of external shocks (positive and negative) on economic growth and regional poverty?
- Which regional policies are applicable to mitigate the negative regional impact of some external shocks?
- How would changes in the labour market regulation (e.g., minimum wages) impact regional labour market?
- What types of policies could be implemented to reverse the direction of labour mobility from rural to urban areas?
- What are the consequences of fiscal measures that favour some sectors on regional poverty?

## **c. Women's participation in the formal labour market**

Women often have less access and participation to the formal labour market than men and certain activities are identified, socially and culturally, as “reserved” either for men or for women. In many countries the textile and garment industries are typically female jobs while natural resources sectors are predominantly male. As women are often relegated to employment in the informal sector with low pay and precarious livelihood, sectoral growth strategies are therefore important to enable women to access formal employment and participation in the modern economy. In addition, policies that acknowledge gender differentiation can be important to support women's participation in the formal labour market.

- What would be the economy-wide impact of subsidising (formal) female employment in selected sectors under alternative financing mechanisms?
- How sensitive are the results to different assumptions regarding labour mobility among sectors, especially for women in comparison to men?
- What would be the economy-wide impact of such policies on the unpaid activities (i.e. home care) performed by women?

## **d. Integration in the world economy, trade policy, FDI and sectoral economic growth: impacts on employment and welfare**

Free trade policies and integration into the global economy are often seen as means to accelerate economic growth. The reduction of trade barriers and trade facilitation measures are expected to attract foreign firms to increase their direct investments. The distribution of these foreign direct investments by sector across activities will have major impacts on the pattern of growth and distribution of benefits in terms of sectoral job creation and income generation for different strata of the population. We would therefore aim to conduct retrospective and prospective analysis on sectoral trade and foreign direct investment patterns to propose economic policy options for job creation through following research questions:

- What would be the economy-wide impact in terms of employment and welfare from sectoral patterns of FDI-led growth?
- How would FDI increase in natural resource-based and services sectors affect the employment and welfare in an economy?
- What would be the employment consequences of sectoral public investment?

#### **e. Price shocks and compensatory mechanisms for economies based on the development of the agriculture, mining or energy sectors**

Fluctuating world prices of major agricultural commodities and mineral or energy resources pose major problems for economies that rely their growth strategies on development of the international market of these commodities. In many cases the impact on employment and income can be significant both at the household and firm level. Distributional effects of these shocks are significant but public policies to mitigate them are not clearly identified. In this regard, we would seek to generate some case studies to determine the effects of public policies that can be set up to mitigate the negative effects of these price fluctuations:

- What would be the regional employment consequences (for men and women) of trade reforms and international prices fluctuations?
- What would be the regional and sectoral consequences of the recent drop in international prices of oil and other natural resources?
- What would be the best strategy to compensate for volatile world prices for commodities?
- What would be the effect on employment and welfare of alternative policies such as budget rules (e.g. sovereign fund) to compensate for volatile public revenue from natural resources?

### **Methodological approaches**

#### **1. Microeconomic policy approaches**

Different past PEP projects have covered some of the thematic issues proposed in this section. In particular, under the PEP-PAGE initiative, some projects analyse the sectoral composition and contribution to economic growth, household well-being and creation of jobs. For example, Dedehouanou et al. (PAGE ii) use the household surveys on living conditions and sophisticated econometric approaches to assess the average treatment effect of income diversification. In particular, the authors propose the endogenous switching models, the Probit switching model, the propensity score matching models, etc. This study finds a positive impact of rural income diversity on wellbeing and agricultural investment, confirming the importance of promoting the non-farm activities for the economic development. Hoang et al. (PAGE ii) examines the relationship between trade liberalisation of imported intermediate inputs (i.e. decline in fertiliser price) and non-farm employment in rural Vietnam. Using panel data and a selection model with instrumental variables, the authors show that a decline in the fertilisers price reduces labour participation in the non-farm sector but increases the employment in the farm sector and the income from agricultural activities. Using the World Bank Enterprises survey, Seck et al. (PAGE ii) analyse sectoral efficiencies related to the access to credit. This study uses the Data Envelopment Analysis (DEA) method to estimate firms' efficiency. Further, it uses the endogenous switching regression approach to assess the impact of credit on firm's efficiency and, more specifically, to analyse the extent to which female entrepreneurs are discriminated against credit market, if any, and how such a disparity in access to credit translates into productivity differential. The authors show that firms in the trade sector are the most economically efficient and enterprises which are capital intensive need a larger access to credit in order to improve their efficiency rates.

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

- Changes in welfare distribution and labour market opportunities over time due to sectoral growth (e.g. oil sector).
- Patterns of economic growth and their effect on overall, intra and inter-regional poverty and inequality.
- Patterns of price shocks (e.g. agriculture/food commodities/products, oil and electricity) and reforms (e.g. removal or reduction in price subsidies), and compensatory safety

mechanisms (e.g. insurance schemes), and their effect on household welfare across the different economic quintiles.

PEP has continuously supported a number of projects covering the issues proposed in this section:

Research title	Authors and PAGE round
Spillovers from off farm self-employment opportunities in rural Niger	Dedehouanou et al. (PAGE ii)
The effect of price of intermediate imported Product on nonfarm participation of households in rural Vietnam	Hoang et al. (PAGE ii)
Female entrepreneurship, access to credit, and firms' productivity in Senegal	Seck et al. (PAGE ii)
An analysis of the impact of income tax reforms on poverty and inequality in Namibia	Swartz et al.
Inequality, Polarization and Poverty in Nigeria	Awoyemi et al.
Spatial and inter-temporal sources of poverty, inequality and gender disparities in Cameroon: A regression-based decomposition analysis	Ngahet et al.

## 2. MPIA approaches

Although the opening of the economy and a better integration in the world market could eventually generate a higher economic growth rate but the welfare impact on households could be very unequally distributed across sectors and regions. CGE modelling is an ideal tool for the analysis of public policies aiming to mitigate negative effects of world price shocks for imports and exports. The major transmission mechanism of an exogenous external shock to a local economy is through the labour market. Thus, modelling of the labour market nationally and locally would play a relevant role in transmitting benefits of a higher growth rate. In addition, the issue of formal and informal segments of the labour market is relevant for this research topic, particularly for women. A gendered CGE model with formal and informal labour markets would be an ideal tool to analyse the impact of government policies aimed at reducing informality among women. For example, the impact of wage subsidies for female workers in specific sectors could be analysed.

This research topic also incorporates the regional dimension to the analysis which is a comparative advantage of CGE models. Despite greater complexity of an interregional CGE model compared to a national model, some level of regionalisation is possible to generate more interesting policy relevant results than a pooled macro model (e.g. different types of producers in different location for the same product). In this case, one could discuss the drivers of sectoral growth. For example, through simulation of the decreases in agricultural productivity which, in turn, could promote the movement of workers out of agriculture into the manufacturing/service sectors. One relevant issue with the simulation of increased total factor productivity (TFP) growth in agriculture is the treatment of the foreign market (i.e. exports and imports). In fact, for simulations of increased TFP in agriculture, it would be interesting to consider alternative values for the constant elasticity of transformation (CET) between sales to the domestic market and exports, with the assumption of perfect transformability as a special case. Also, simulations of increased foreign direct investment in selected sectors could be considered, particularly in countries with relatively abundant natural resources. Generally speaking, there are two major factors that could be used to change the sectoral pattern of economic growth: (1) increase in sector specific TFP due to foreign direct investment; and (2) public investment in infrastructure producing a derive impact on private investment and productivity growth.

A number of very interesting research question for policy options can be examined using CGE models include:

- What would be the sectoral employment effects of increases in agricultural TFP?

- Is there some gain from specialisation or diversification of the agricultural sector?
- In which sectors could public investment lead to a higher growth rate?
- Are sectoral discriminated fiscal measures favourable for economic growth?
- What is the extent and impact of wage disparities between formal and informal employment creation?
- Given the regional composition of the labour market, what would be the regional impact of changes in the labour market regulation (e.g. minimum wages)?
- What type of policy could be implemented to reverse the migration of labour from rural to urban sector?

PEP has continuously supported a number of MPIA projects covering some of the issues proposed in this section.

<b>Research title</b>	<b>Authors and PAGE round</b>
Impacts of Agricultural Incentive Policies on Socioeconomic and Environmental Variables in Guatemala	Vargas et al. (PAGE iii)
L'impact des réformes commerciales sur la croissance économique, l'emploi et la pauvreté dans les pays de la CEDEAO: le cas du Sénégal	Mboup et al. (PAGE iii)
L'analyse socio-économique du secteur et de l'emploi informel au Cameroun	Medard et al. (PAGE ii)
Trade Liberalisation and Employment Effects in Indian Manufacturing: An Empirical Assessment	Raju et al (PAGE ii)
La croissance chinoise, une aubaine pour l'économie centrafricaine?	Yele et al. (PAGE i)
Impact de l'expansion économique et commerciale de la chine sur la croissance et l'emploi au Burkina Faso: une analyse en EGC	Sawadogo et al. (PAGE i)