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Fiscal Policy, Labour Productivity Growth, and Convergence in Agriculture and Manufacturing: Implications for Poverty Reduction in Cameroon

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INTRODUCTION

- The Role of Agriculture for Growth and Poverty Reduction
- Growing consensus: growth translates into poverty reduction and low growth is accompanied by failure to reduce poverty
- Focus is on idea that agriculture which harbors almost entire workforce in SSA can play a crucial mediating role between growth and poverty.
- In 2001, more 85% of the total work force was employed in the informal sector moving to 92 % in 2007
- On average 61.5% are involved in small scale agriculture of which a majority is in rural areas relative to urban areas

INTRODUCTION Con't

- In Cameroon, the 2007 level of poverty remains higher for those involved in agriculture (56%) relative to the National rate of 39% and 31.7% in non-agriculture (INS, 2008)
- Assumption: for poverty to be reduced, productivity and earnings (real wages, as well as returns to agriculture) must increase sufficiently to increase the incomes of the poor
- Productivity growth appears to have become one of the surest routes to growth and poverty reduction. The literature provides strong evidence that growth reduces poverty (Dollar and Kraay, 2002; CSLS, 2003) and in dynamic economies most economic growth comes from productivity growth
- The most popular notion of productivity is that relating to labour and that compares production to the quantity of labour employed in the production process.

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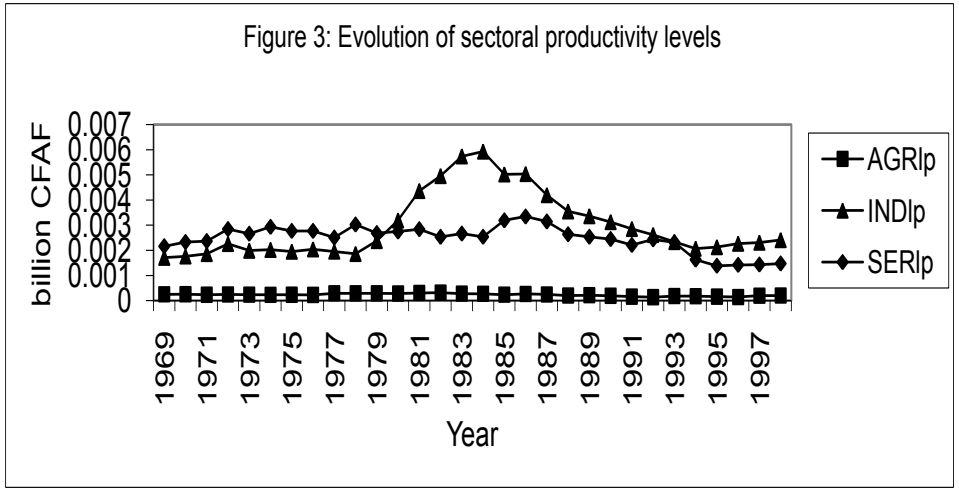
- In sub-Saharan Africa, labour productivity is low especially in agriculture compared to manufacturing.
- To this end, developing an understanding of the relationship between productivity growth in agriculture and manufacturing, and on the impact of policies on sectoral productivity convergence can provide insights to government policy action.



Source: Tabi (2005)

OBJECTIVES

- In this paper, we examine the effect of public expenditure on sectoral labour productivity convergence
- Find out if there are spillover effects (i.e., diffusion of productivity or technology between sectors).
- To propose policy recommendations based on the findings of the study.

LITERATURE REVIEW

- Similar to the literature on international convergence of labour productivity, national convergence of sectoral productivity levels can also be explained from the endogenous growth model. While a vast literature exists on this issue, national convergence of sectoral productivity levels has featured less prominently in theoretical models (de la Fuente, 2002; Mulder and de Groot, 2004).
- The Lewis (1954) theory of structural change is important here, where labour productivity growth and the intensive use of labour can occur either via reallocation of labour or spillovers in production techniques between sectors resulting to productivity convergence.

METHODOLOGY

- Recall that the broad aim of this paper is to develop a framework for understanding the role of agriculture in poverty reduction via increasing productivity

- The usual theoretical presentation of these concepts is based on the result of the Cobb-Douglas model using two factors of production, labour and capital, and the embodied technical progress:

$$Y = F(TFP, K, L) = TFP \times K^{\alpha} \times L^{\beta}$$

where Y is the production, TFP is technical progress or total factor productivity, K is physical capital, and L is labour.

- Taking logarithmic differences, i.e. the rate of growth, the relationship is expressed as:

$$\Delta y = \Delta tfp + \alpha \Delta k + \beta \Delta l \qquad (2)$$

METHODOLOGY

- and provides the GDP growth breakdown, split between improvements in technical progress and growth of the two factors of production with α and β representing the elasticities of the production factors, whose sum is equal to one, $\alpha + \beta = 1$.

$$\Delta (y - 1) = \Delta \text{tfp} + \alpha \Delta (k - l) \qquad (3)$$

- The relationship (3) determined from (2) provides a breakdown of the change in labour productivity $\Delta (y - 1)$ into two effects: the effect linked to capital deepening or capital intensity $\Delta (k - l)$ and the effect linked to total factors productivity Δ tfp. The multi-factor productivity concept embraces all variables that affect output for any given level of inputs. It accounts for the growth not accounted for by capital accumulation or increased inputs. The components usually included in this unexplained growth are: advances in knowledge (i.e. education and training), research, and efficiency in the allocation of resources. Thus, labour productivity is determined by the amount of available factor inputs, i.e. labour (including human capital), physical capital and intermediate
- inputs (Vander and Wiel, 1999) and other factors (Chang and Chen ,2001; Heisey 2004; Matsuyama ,2002) and via spillover effects (Gemmell et al., 2000).

RESULTS AND POLICY

- Our findings indicate that while government spending on education, health, and road infrastructures promotes convergence, agricultural spending reinforces inequality in sectoral labour productivity by disproportionately increasing non-agricultural sector productivity.
- Furthermore, increases in manufacturing and service productivity levels both have a positive impact on agricultural productivity in the long-run, with manufacturing equally contributing in the short-run.
- We argue that a catch-up of the lagging agricultural sector with the leading industrial sector in terms of labour productivity will foster poverty reduction.
- Thus, Cameroon could still reduce poverty and enhance growth if spending on infrastructure such as education, health, rural roads, and agricultural equipments and research were rendered efficient and judicious.

Thank you!