Research in Economics 71 (2017) 306–336

Contents lists available at ScienceDirect

Research in Economics

journal homepage: www.elsevier.com/locate/rie

Growth, inequality, and poverty reduction in developing countries: Recent global evidence[☆]

Augustin Kwasi Fosu[a,b,c,d,e,*]

[a] Institute for Statistical, Social and Economic Research (ISSER), University of Ghana, Legon, Ghana
[b] Faculty of Economic and Management Sciences, University of Pretoria, Pretoria, South Africa
[c] School of Business, Aalto University, Helsinki, Finland
[d] Global Development Institute, University of Manchester, Manchester, UK
[e] Centre for the Study of African Economies, University of Oxford, Oxford, UK

ARTICLE INFO

Article history:
Received 16 April 2016
Accepted 23 May 2016
Available online 1 June 2016

Keywords:
Growth
Inequality
Poverty
Developing countries

ABSTRACT

The study presents comparative global evidence on the transformation of economic growth to poverty reduction in developing countries, with emphasis on the role of income inequality. The focus is on the period since the early-mid-1990s when growth in these countries as a group has been relatively strong, surpassing that of the advanced economies. Both regional and country-specific data are analyzed for the $1.25 and $2.50-level poverty headcount ratios using World Bank Povcalnet data. The study finds that *on average* income growth has been the major driving force behind both the declines and increases in poverty. The study, however, documents substantial regional and country differences that are masked by this 'average' dominant-growth story. While in the majority of countries, growth was the major factor behind falling or increasing poverty, inequality, nevertheless, played the crucial role in poverty behavior in a large number of countries. And, even in those countries where growth has been the main driver of poverty-reduction, further progress could have occurred under relatively favorable income distribution. For more efficient policymaking, therefore, idiosyncratic attributes of countries should be emphasized. In general, high initial levels of inequality limit the effectiveness of growth in reducing poverty while growing inequality increases poverty directly for a given level of growth. It would seem judicious, therefore, to accord special attention to reducing inequality in certain countries where income distribution is especially unfavorable. Unfortunately, the present study also points to the limited effects of growth and inequality-reducing policies in low-income countries.

1. Introduction

The last two decades have witnessed the economic emergence of developing countries, which have as a group exhibited relatively high GDP growth rates, in excess of those prevailing in the developed countries. The gap has been particularly

☆ The current paper is a revised version of Fosu (2011) and an earlier paper submitted to the OECD Development Centre project, 'Shifting Wealth: Implications for Development', for which the author served as Non-Residential Fellow. The author is grateful to the Centre for financial support and for helpful comments from three anonymous referees, as well as from the editors of *Research in Economics*, on previous drafts of the paper. The author thanks Jan-Erik Antipin for valuable research assistance.

* Correspondence address: Institute for Statistical, Social and Economic Research (ISSER), University of Ghana, Legon, Ghana.
E-mail addresses: afosu@isser.edu.gh, afosu@ug.edu.gh

http://dx.doi.org/10.1016/j.rie.2016.05.005

apparent since the middle 1990s. Much of this 'shifting wealth' has, furthermore, been translated to increasing human development, such as poverty reduction. Global poverty has fallen substantially, with a major portion of the decline attributable to China. Even when China is omitted from the sample, poverty reduction is still considerable (Chen and Ravallion, 2008). This record of achievement has, however, been far from uniform. A number of countries have experienced little poverty reduction or even increasing poverty. Part of the disappointing performance might be attributable to dismal growth, as experienced by many African countries in the 1980s and early 1990s. High income inequality, evident in several Latin American countries historically, could also prove to be a major culprit.

In explaining how the substantial growth in developing countries may have contributed to improving human development, particularly poverty reduction, it is crucial to understand the role of (income) inequality in the growth-poverty nexus (e.g., Bourguignon, 2003; Epaulard, 2003; Fosu, 2009; Kalwij and Verschoor, 2007; Ravallion, 1997; World Bank, 2006a, 2006b). That inequality influences growth's transformation to poverty reduction, furthermore, suggests that even with the same level of growth, countries faced different likelihoods of attaining goal 1 of the Millennium Development Goals (MDG1) of halving poverty by 2015, instead of the generally accepted 7 percent average annual GDP growth. There would indeed be country-specific thresholds depending on the distribution of income inequality across countries (ibid.). The current sustainable development goal 1 (SDG1) of eradicating poverty by 2030 would similarly entail country-level growth requirements.

Based on available internationally comparable global panel data from the World Bank's Povcalnet (see Chen and Ravallion, 2008; World Bank, 2007, 2008, 2009a), the present paper presents regional and comparable country evidence on poverty reduction. It explores the extent to which the recent generally strong growth of developing countries may have been translated into poverty reduction. In particular, the paper provides country estimates of the relative contributions of inequality and income to the inter-temporal behavior of poverty for a large global sample of developing countries, and decomposes the progress on poverty into income and inequality changes, during the relatively recent period when developing countries have experienced strong growth. The paper finds that while *on average* income growth has been the main factor behind poverty reduction globally, the role of income distribution has been critical for many countries.[1]

While the present results support the general view in the literature that growth is the main driver of the recent decline in poverty (e.g., Dollar and Kraay, 2002), it nonetheless suggests a prominent role for income distribution. Indeed, for a number of countries, it is the main factor behind the progress, or lack thereof, on poverty. By providing country-specific evidence on the relative roles of income and inequality, the current findings should inform the policy debate on especially the sustainable development goal 1 (SDG1), as well as provide a retrospective perspective on its MDG1 predecessor. More generally, though, the paper's country-specific results present a useful comparative analysis that transcends the usual cross-country and regional analyses. After all, the challenge is at the country level where policymakers must seek the optimal mix of emphases on economic growth versus inequality, in order to maximize poverty reduction. The findings of the current study should, therefore, prove useful for both focused research and policymaking not only regionally but especially at the country level.

The paper is structured as follows. First, it presents regional and country comparisons of progress on both growth and poverty, with emphasis on the recent period since the early-to-mid 1990s (Section 2). The main objective in Section 2 is to glean, based on qualitative analysis, the comparative abilities of developing countries and, hence, regions to transform growth to poverty reduction. Second, the paper employs the 'identity model' to estimate the poverty equation involving changes in income and inequality as well as the poverty line relative to mean income, and estimates the income and inequality elasticities of poverty (Section 3). Third, employing these elasticities, poverty changes during the more recent period since the early-to-mid 1990s are decomposed for each sample country into contributions by income and inequality changes (Section 4). Fourth, Section 5 presents several illustrative comparative country simulations on poverty progress, based on various growth and inequality scenarios. Finally, Section 6 summarizes the findings of the paper, with implications for research and policy.

2. Comparative trends in growth and poverty

2.1. Regional GDP growth and poverty reduction, 1981–1995 vs. 1996–2005

We present in this section the regional trends in GDP growth and poverty reduction for the periods: 1981–1995 and 1996–2005. The sample period begins in 1981 when much of the globally comparable poverty data became available. These two sub-periods are chosen to reflect the dichotomy of the growth pattern of developing countries, which exhibit relatively strong growth in the latter period (Fig. 1).[2]

Table 1 presents the 1981–1995 and 1996–2005 regional averages of per capita GDP growth and annualized growth rates of the headcount ratio based on the \$1 (\$1.25) and \$2 (\$2.50) standards.[3] The six regions are: East Asia and the Pacific (EAP),

[1] Fosu (2015) presents similar findings for sub-Saharan Africa.

[2] Note, though, that as Fig. 1 also shows, there was a similar increasing gap from the 1960s until the mid-1970s, but then a decline until the early-mid-1990s when the more recent acceleration began.

[3] The annualized growth rates are calculated as the logarithmic differences between the poverty rates between 1996 and 2005, divided by the frequency of the intervening years.