15. Poverty, inequality and governance: a global perspective

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INTRODUCTION

Over the past two decades, poverty alleviation has been the primary goal of the global policy agenda, while inequality has gradually moved to the forefront of the development discourse. During this period, the world has experienced notable progress on poverty mainly as a result of the strong economic growth in China and other emerging Asian economies (Chen and Ravallion 2008; World Bank 2016). The substantial decline in global poverty led to optimistic forecasts about the world's ability to end absolute poverty by 2030 – Sustainable Development Goal one (SDG 1). Such predictions were predicated on an average annual growth rate of 6 per cent or more, and a complementary reduction in inequality (World Bank 2018; Lakner et al. 2019).

However, with the COVID-19 pandemic and the ensuing economic downturn as well as worsening of income distribution, there is now the real likelihood of a reversal of this anticipated trend regarding the future progress on poverty and inequality. Indeed, the COVID-19 crisis has not only hindered growth, but is also expected to have a disproportionately high toll on incomes in developing countries, especially on the livelihoods of people at the bottom of the income distribution. Such an outcome would lead to increased global and within-country inequalities (Buheji et al. 2020; Jurzyk et al. 2020; Sumner et al. 2020; IMF 2021).

Before the pandemic, some 689 million people still lived in extreme poverty, and 53 per cent of the world income belonged to the upper 10 per cent of the population (Alvaredo et al. 2018; World Bank 2020a). Until the world economy strongly rebounds from the crisis, the overall outlook remains grim, and poverty levels are expected to rise (Buheji et al. 2020; IMF 2020; Sumner et al. 2020).

As the conceptual literature and countries' development experiences have shown, pro-poor growth and favourable income redistributions are engendered by 'appropriate' government policies and institutional arrangements which are, in turn, shaped by political systems, the distribution of political power, as well as social groups' preferences and choices (Fosu 2013a, 2013b; Acemoglu et al. 2015). Thus, addressing poverty and inequality challenges in the coming years may require improvements in key aspects of political and economic governance (WEF 2020).

This chapter sheds light on poverty and inequality linkages within a global context, and highlights the role of governance. Following this introduction, the rest of the chapter is structured as follows. In the next section, we present an overview of the global and regional trends in poverty and inequality. The third section discusses the theoretical relationships among growth, poverty and inequality, as well as the role of governance in the linkages. The following section presents the quantitative evidence on the implications of inequality for poverty reduction, while the fifth section provides some empirical evidence on the importance of governance. The sixth and final section concludes the chapter.

TRENDS IN POVERTY AND INEQUALITY

Poverty: Global and Comparative Regional Trends

Conventional understandings hold that poverty is a state of human deprivation of basic needs. The two dimensions are monetary and non-monetary. For the latter, the definition of poverty goes beyond the lack of sufficient income to purchase necessary items, and extends the meaning to include capabilities in health and education (Sen 1999).

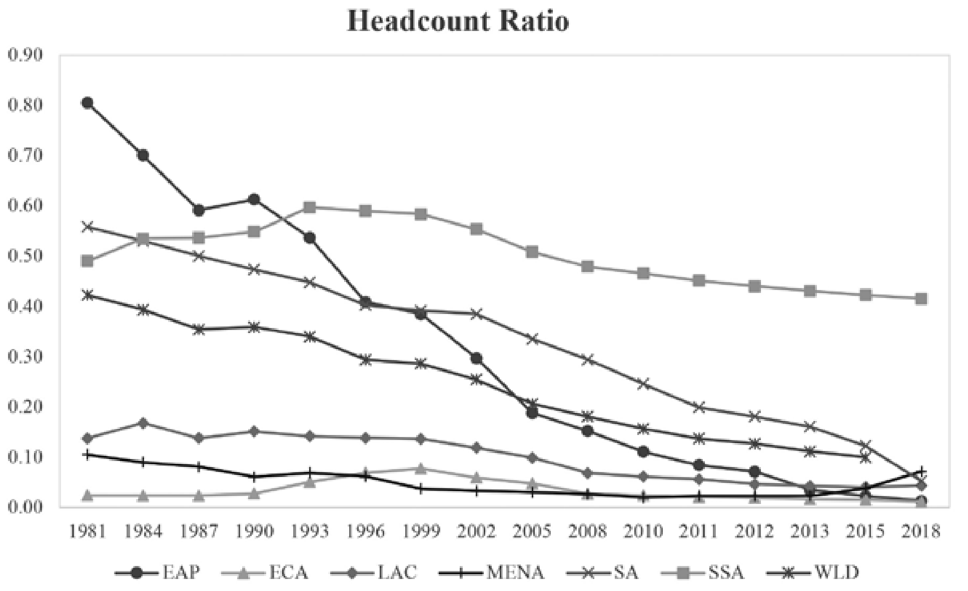
Monetary poverty is measured in absolute and relative terms. 'Absolute poverty' corresponds to not meeting the minimum resource or income required to satisfy basic human needs. In contrast, 'relative poverty' measures a person's deprivation relative to the prevailing socio-economic conditions in the location in which he or she lives. While the absolute poverty line is fixed, the relative poverty line tends to rise proportionately with incomes (Foster 1998). A 'quasi-relative poverty' represents a compromise between these two concepts, with the line rising less proportionately with income (Fosu 2008a).

The threshold, the poverty line, can be country-specific or internationally defined. For instance, the poverty lines of US$1.90, US$3.20 and US$5.50 per person per day, at 2011 Purchasing Power Parity (PPP),[1] proposed by the World Bank, are widely used in the empirical literature to measure monetary poverty internationally (World Bank 2018).

In the present chapter, we focus on absolute poverty, using the poverty line measured at US$1.90. The poverty measure is a Foster-Greer-Thorbecke (FGT) indicator: the headcount ratio. Measuring poverty incidence, the headcount ratio is by far the most popular indicator, and was the basis of the Millennium Development Goal one (MDG1).

Figure 15.1 presents global trends in poverty incidence for the US$1.90 standard.[2] As the graph for the developing world (DW) for instance clearly shows, poverty has been trending downward since 1981. There are major regional differences in the poverty trends, however. East Asia and Pacific (EAP) is by far the best performer, halving extreme poverty incidence by the late 1990s, and moving from being the poorest region in the 1980s to becoming one of the least poor by 2018. Its current poverty levels are, indeed, comparable to those of Latin America and the Caribbean (LAC), Europe and Central Asia (ECA) and Middle East and Northern Africa (MENA), whose poverty rates have historically been the lowest in the developing world. Similar, though much less impressive, performance is observed for South Asia (SA) (Figure 15.1).

EAP's stellar record on poverty reflects the region's tremendous per capita GDP and income growth over the years, particularly in China, but also in other countries such as Indonesia, Philippines and Vietnam (World Bank 2020a). Meanwhile, sub-Saharan Africa (SSA) not only currently has the highest average poverty levels, but also the slowest progress on poverty, leading to apparent widening gaps between the region and the rest of the developing world. In fairness, SSA has exhibited significant poverty reduction since the mid-1990s in correspondence to the region's growth resurgence, following its dismal economic performance in the 1980s. Nonetheless, other regions with very high poverty rates in the early 1980s, namely EAP and SA, have simply performed much better on reducing poverty (Figure 15.1).



Note: EAP = East Asia and Pacific; LAC = Latin America and the Caribbean; SA = South Asia; ECA = Eastern Europe and Central Asia; MENA = Middle East and North Africa; SSA = Sub-Saharan Africa; DW = Developing World.
Source: PovcalNet, World Bank (2020b).

Figure 15.1 Progress on poverty reduction across regions, 1981–2018 (poverty line: US$1.90 a day in 2011 PPP)

Furthermore, the progress on poverty has not been uniform over time. Except in EAP and SA where there seem to have been steady declines, poverty increased in other regions between 1981 and the early 1990s, albeit to different degrees. The rise in poverty in the 1980s and early 1990s was apparent in SSA, LAC and ECA, presumably attributable to the weak per capita GDP and income growth in these regions (Figure 15.1; World Bank 2020a, 2020b). Meanwhile, as the world generally grew faster from the late 1990s onward, poverty dropped significantly. More recently, however, all regions, except EAP and SA, seem to have seen considerable slowdowns in poverty reduction. This is particularly the case in MENA, which experienced poverty increases of about 16 per cent annually between 2011 and 2018, likely the result of the low per capita GDP growth and the fall in income following the Arab Spring, a period of severe political and socio-economic challenges (Figure 15.1; World Bank 2020a, 2020b).

Inequality: Global and Comparative Regional Trends

Inequality is often equated to disparities in well-being among individuals, groups of people, countries or regions. It spans different dimensions, including income, expenditure, assets, health, education and opportunities. Several studies have revealed that global (economic) inequality has decreased over time, particularly since the 2000s (Milanovic 2016; World Bank 2016; Niño-Zarazúa et al. 2017; Hong et al. 2019). For example, Hong et al. (2019) found that the global Gini coefficient decreased by about 7.9 per cent between 2000 and 2010, compared to 0.5 and 0.3 per cent declines in the 1990s and 1980s, respectively. This considerable improvement in global income distribution is mainly attributed to the fall in between-country inequality resulting from the notable income growth in China and India, which together account for a very large share of the global population (Niño-Zarazúa et al. 2017; Hong et al. 2019).

Although between-country inequality accounts for a larger proportion of global inequality, within-country inequality is more relevant for countries' performance on poverty (Cornia and Kiiski 2001; World Bank 2016). In Table 15.1, therefore, we report the regional averages of 'within-country' inequality. These averages are computed using the latest year estimates of the Gini coefficient at the country level (World Bank 2020b).

Table 15.1 Level and trends in average 'within-country' inequality across regions (Gini index), early 1990s–2000s to 'present'

Region	Average Gini (latest year)	Number of countries that experienced rising inequality: early 1990s–2000s to present	Number of countries where inequality stagnated: early 1990s–2000s to present	Number of countries that experienced falling inequality: early 1990s–2000s to present	Average annualized growth of Gini: early 1990s–2000s to present	Share of regional population (%)
EAP	0.371 (18)	3	3	9	-0.46 (15)	86.59
ECA	0.318 (27)	11	4	11	-0.07 (26)	49.45
LAC	0.468 (19)	4	2	13	-0.41 (19)	88.18
MENA	0.345 (11)	2	3	4	-0.39 (9)	71.72
SA	0.347 (7)	3	1	3	-0.15 (7)	97.08
SSA	0.434 (42)	12	3	22	-0.43 (37)	84.00

Notes: Total numbers of countries in parentheses. EAP = East Asia and Pacific; LAC = Latin America and the Caribbean; SA = South Asia; ECA = Eastern Europe and Central Asia; MENA = Middle East and North Africa; SSA = Sub-Saharan Africa. The average Gini is the arithmetic mean of the Gini coefficient estimates, based on country estimates for the latest year available. Only countries with data from 2010 to 2018 are included in the sample. In computing the annualized growth of Gini, the start year is from 1990–2005 and the latest year is from 2010–2018. Countries for which data are not available for the start year and the latest year, based on this criterion, are omitted from the sample. High income countries, which would typically have zero value for (absolute) poverty, are excluded.
Source: Authors' computation using data from PovcalNet, World Bank (2020b).

On average, countries in LAC have the highest inequality levels. The region is followed by SSA, EAP, MENA and ECA, respectively (Table 15.1). While inequality within countries seems to have fallen in all the regions between the early 1990s–2000s and the late2010s, on average, the highest decline is observed in EAP, followed by SSA, LAC, MENA, SA and ECA, respectively. In EAP, 3 out of 15 countries (China, Indonesia and Lao PDR), however, experienced a rise in inequality over the period; in SSA and LAC, the ratio of countries with rising inequality is 12/37, and 4/19 countries, respectively. The countries with increasing inequality in SSA include: Benin, Burundi, Cameroon, Congo Rep., Cote d'Ivoire, Chad, Ghana, Guinea Bissau, Sao Tome and Principe, South Africa, Tanzania and Uganda. In LAC, the worst performers are Costa Rica, Paraguay, Haiti and Saint Lucia. For MENA, inequality rose in Djibouti and Yemen, and for SA, in India, Bangladesh and Sri Lanka. Notably, the two regions with the highest level of inequality are among those with the largest reductions in inequality: SSA and LAC, in that order (the highest reduction experienced by EAP). Furthermore, distinct majorities of countries in these regions experienced inequality reductions: nearly 70 per cent in LAC, and 60 per cent in SSA.

THEORY IN BRIEF: THE GROWTH-INEQUALITY-POVERTY NEXUS, AND THE ROLE OF GOVERNANCE

The Growth-Inequality-Poverty Nexus

Economic theory generally posits that poverty reduction is achieved through the channels of growth and income distribution. According to recent studies, economic growth is the main engine for poverty reduction (Dollar et al. 2016; Fosu 2017). However, the nature of growth and the extent of its transformation into poverty reduction depend on several factors, such as initial poverty, inequality, and the level of development (Bourguignon 2004; Ravallion 2012). For faster poverty reduction in the developing world, the policy emphasis over recent years has been on 'pro-poor' growth that also takes into account the transformation process (Perry et al. 2006; Ravallion 2012).

Focusing on the inequality-poverty nexus, income redistribution may directly affect poverty, even in the absence of growth. However, the direction of change may be ambiguous, depending on the level of income. Although the general view is that redistribution from the non-poor to the poor would decrease poverty, it is still possible that at very low average income levels, such redistribution could actually increase poverty[3] (Fosu 2010).

Income distribution could also affect poverty indirectly: by influencing growth and/or the poverty-responsiveness of growth. The inequality-growth literature has identified a two-way relation between redistribution and income growth, implying the indirect effects of both variables on poverty (Thorbecke 2013). Yet, existing evidence on the inequality-growth interlinkage is both theoretically and empirically ambiguous.

The pioneering hypothesis of Kuznets suggests that at an early stage of development, growth leads to widening income disparities as a result of changes in sectoral productivity and labour transfer across sectors; however, at a sufficiently high level of development, inequality declines (Kuznets 1955). Although this inverted U-shaped relationship was supported by a number of empirical studies (Ahluwalia 1976), several cross-country and country-specific analyses have failed to support the Kuznets hypothesis (Ravallion 2001), creating ambiguities regarding the relationship between growth and inequality.

Several studies have argued that inequality positively affects economic growth through savings and investment (Kaldor 1957), and creates incentives for innovation and entrepreneurship (Dabla-Norris et al. 2015). In contrast, others stipulate that income disparities hinder economic growth by fuelling social discontent, thereby promoting distortionary redistributive policies (Alesina and Rodrik 1994), as well as political instability and conflicts (Alesina and Perotti 1996). Inequality may also encourage rent-seeking and weaken existing institutions

(Acemoglu and Robinson 2000; Thorbecke and Charumilind 2002). Furthermore, inequality tends to discourage human capital accumulation and investment, especially in situations of imperfect or non-existing markets (Galor and Zeira 1993; Aghion et al. 1999). Reconciling the opposing views on the effect of inequality on growth, Barro (2000) and Shin (2012) suggest that the effect of income distribution on growth would rather depend on the country's stage of development. For instance, Barro (2000) found that inequality hurts growth in poor but not in rich countries.

Moreover, high initial inequality constrains the transformation of growth into poverty changes, by limiting the poor's participation in the growth process, as the poor often have little access to productive resources or capital (Bourguignon 2003). Thus, growth may minimally benefit the poor. Countries' performance on poverty reduction, therefore, depends not only on the level of growth, but also on its patterns; pro-poor growth can be achieved through high growth coupled with its distribution favouring those at the bottom of the income ladder.

The Role of Governance

The importance of governance and institutions in shaping economic development has increasingly been emphasized over recent years (Bates et al. 2013). The theoretical and empirical literature suggests that 'good governance' promotes economic growth, through channels such as market efficiencies, sound macroeconomic and resource policies, human and physical capital development, investment, and technological progress (Acemoglu et al. 2003; Gradstein 2004; Bates et al. 2013).

Similarly, the effectiveness of redistributive policies as well as the patterns of growth – whether growth is accompanied by pro-poor or anti-poor redistribution – are influenced by the quality of the institutions that govern resource management and allocation, property rights enforcement, the choice of domestic policies, and government effectiveness in the provision of social services (Al-Samarrai 2009; Acemoglu et al. 2015). Consequently, the state of institutions and the quality of governance would affect poverty performance indirectly via growth and income distribution, and also influence the dynamics in the growth-inequality-poverty interrelations by shaping the transformation of growth and redistribution into poverty reduction (Thorbecke 2013).

Political systems can foster or inhibit wealth creation and social gains, depending on the nature of political institutions and the rule of law (Bates et al. 2013; Acemoglu et al. 2015). In non-democratic regimes where political institutions favour power concentration among the elites, public policies are used for private gains to the detriment of the welfare of the masses, thereby creating socio-economic distortions. Hence, democracy is expected to promote growth by fostering social capital and investment, as well as reducing the risk of instabilities and conflicts (Acemoglu et al. 2005; Doucouliagos and Ulubaşoğlu 2008; see also Chapter 6 in this volume).

Meltzer and Richard (1981) emphasized that democratization would lead to pro-poor redistribution due to a shift in the position of the decisive voter towards the poorer segments, as the voting franchise is extended to the poorer sections of society. However, there are cases where the relationship between democracy and redistribution may be more complex. According to Acemoglu and Robinson (2008) and Acemoglu et al. (2011), while the franchise confers de jure power to the masses, the rich elites in some democratic societies may increase their de facto political power through high spending on lobbying, thereby influencing legislation, regulation and redistributive policies, and thus maintaining a system of patronage and weak institutions in their interest.

Furthermore, considering the 'Director's Law' of Stigler (1970), when a democracy confers greater political power to the middle class, the nature of redistribution is influenced by the preferences of the middle class, which may not be pro-poor. Theory further highlights the role of social cleavages and ethnic fragmentation in creating a voting system where the voter values social identity over his or her economic self-interest, thereby creating a political equilibrium that limits redistribution and inequality reduction (Alesina et al. 1999; Shayo 2009). Mirroring the theoretical literature, there seems to be no solid empirical consensus that democracy significantly accounts for cross-country variations in economic growth or pro-poor redistributive policies (Gradstein and Milanovic 2004; Fosu 2008b; Acemoglu et al. 2015).

Several studies have also examined the effects of governance or institutions on growth, inequality and poverty reduction (Tebaldi and Mohan 2010; Fayissa and Nsiah 2013; Asongu and Kodila-Tedika 2018). For instance, Tebaldi and Mohan (2010) showed that control of corruption, government effectiveness and political stability contribute to poverty reduction via growth and favourable income distribution. Meanwhile, the quality of the regulatory system, rule of law, and voice and accountability mainly operate through income inequality. Gupta et al. (2002) further argued that corruption not only inhibits investment and growth, but also introduces biases in taxation systems, thereby promoting inequalities in the distribution of assets and capital, with negative implications for poverty reduction.

EVIDENCE: IMPLICATIONS OF INEQUALITY FOR PROGRESS ON POVERTY

Estimating the 'Identity' Model

Following Fosu (2017, 2018), we estimate the partial effects of income growth and inequality changes on poverty growth using the *identity model*. This model encapsulates the poverty-growth-inequality interrelationship, and has been widely used in the empirical literature. The poverty equation is presented as follows:[4]

$$p = b_1 + b_2 y + b_3 y * G^I + b_4 y * \frac{Z}{Y} + b_5 g + b_6 g * G^I + b_7 g * \frac{Z}{Y} + b_8 G^I + b_9 \frac{Z}{Y} \quad (15.1),$$

where p is the logarithmic change of the headcount ratio, y is the logarithmic change in income, and g is the logarithmic change in the Gini coefficient. G^I is the logarithm of the initial level of the Gini (at the beginning of the period) and $\frac{Z}{Y}$ is the inverse of the ratio of income to the poverty line (expressed in logarithms); b_j (j=1, 2, …, 9) are the respective coefficients to be estimated.

In line with the extant literature, b_2 is anticipated to be negative, as an increase in income growth would lead to a reduction in poverty growth. Meanwhile, b_3 and b_4 should be positive, so that countries with low initial inequality and those with high mean income would have greater income elasticities of poverty, respectively. Furthermore, b_5 is anticipated to be positive, depicting the negative effect of rising inequality on poverty reduction; b_6 should be negative, meaning that high initial inequality dampens the poverty-reducing effect of improvements in income distribution; and the sign of b_7 is likely to be negative, so that the inequality elasticity of poverty would be relatively low in low-income countries. Lastly, the signs of b_8 and b_9 should be positive, as countries with relatively low levels of initial inequality and those with higher initial mean income are expected to experience respectively faster poverty reductions.

Equation (15.1) is estimated using the two-step system GMM (Sys-GMM) technique to account for the potential endogeneity of income growth in the model.[5] The estimation is performed using unbalanced panel data for 137 developing countries from 1981 to 2018. The estimation focuses on the headcount ratio and the results are presented for the US$1.90 poverty standard. The estimated equation is given by (t ratios in parentheses):[6]

$$\underset{(-0.57)}{p=-11.94}\;\underset{(-2.35)}{-15.19y}\;\underset{(2.21)}{+3.85yG^I}\;\underset{(2.80)}{+1.27y\left(\frac{Z}{Y}\right)}\;\underset{(2.28)}{+12.77g}\;\underset{(-2.11)}{-3.02gG^I}\;\underset{(-3.02)}{-1.94g\left(\frac{Z}{Y}\right)}\;\underset{(0.41)}{+2.32G^I}\;\underset{(-1.17)}{-1.66\frac{Z}{Y}} \qquad (15.2)$$

Overall, the results are consistent with a priori expectations. The coefficients are generally statistically significant and have the expected signs, suggesting that: (1) a rise in income leads to a fall in poverty incidence, but the effect is weaker when a country's level of income is lower and/or its level of initial inequality is higher; (2) favourable redistribution contributes to poverty alleviation, with a higher initial income and lower initial inequality contributing to greater poverty-responsiveness to redistribution.

Income and Inequality Elasticities

Using the estimates of equation (15.1), the regional-level and country-level income and inequality elasticities of poverty are calculated and employed to decompose poverty progress into the contributions of income growth and changes in inequality.[7] The income elasticity and inequality elasticity are computed, respectively, as:

$$\mathrm{E}_y = -15.19 + 3.85G^I + 1.27\left(Z/Y\right) \qquad (15.3)$$

$$E_g = 12.77 - 3.02G^I - 1.94\left(Z/Y\right) \qquad (15.4)$$

E_y and E_g are expected to be negative and positive, respectively, consistent with theory. However, it is possible for these elasticities to exhibit perverse signs for countries with high initial inequality and/or very low initial income (Fosu 2017). Generally, higher magnitudes of elasticities are desirable, as they mean greater poverty-reducing effects for given levels of growth or redistribution.

The regional estimates of the income and inequality elasticities across sub-periods (1990s and 2010s) are reported in Table 15.2. In general, the poverty response to income growth and redistribution policies seems to have increased substantially over time in the developing world and across sub-regions.[8]

Table 15.2 Income and inequality elasticities across regions – headcount ratio, US$1.90 a day (2011 PPP)

Income elasticity	1990s	2010s	Overall
DW	−2.68	−3.47	−3.06
EAP	−2.64	−3.14	−2.87
ECA	−4.29	−4.69	−4.44
LAC	−2.24	−2.91	−2.46
MENA	−2.69	−3.48	−3.17
SA	−2.41	−2.74	−2.65
SSA	−0.87	−1.73	−1.29
Inequality elasticity			
DW	4.34	5.43	4.92
EAP	3.94	4.88	4.45
ECA	5.87	6.61	6.26
LAC	4.26	5.17	4.60
MENA	4.21	5.11	4.79
SA	3.18	4.06	3.69
SSA	1.91	2.98	2.53

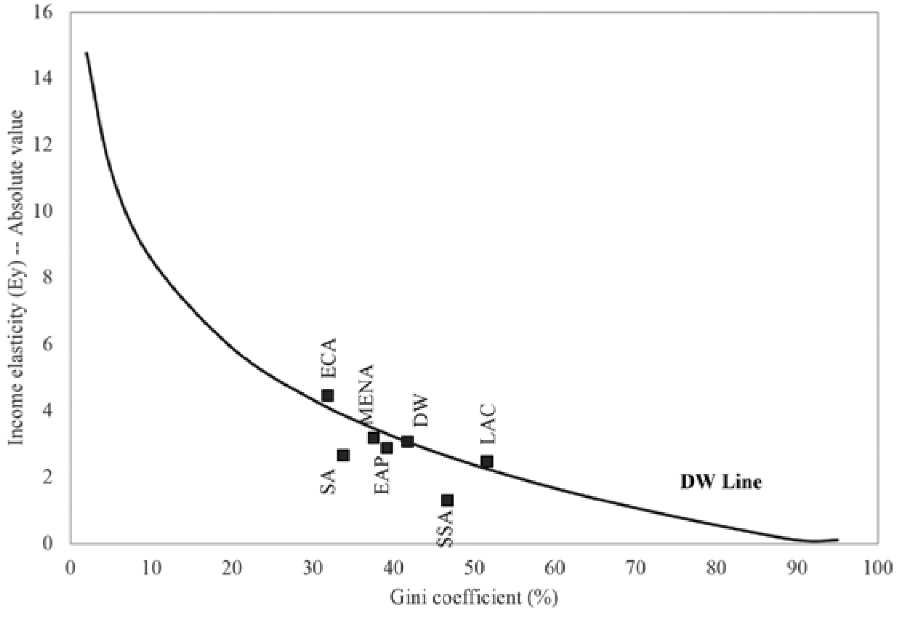
Notes: EAP = East Asia and Pacific; LAC = Latin America and the Caribbean; SA = South Asia; ECA = Eastern Europe and Central Asia; MENA = Middle East and North Africa; SSA = Sub-Saharan Africa; DW = Developing World. The income and inequality elasticities are derived based on equations (15.3) and (15.4) of the text, respectively. They are computed using the regional averages of income and inequality, the latter measured by the Gini index. The number of countries included in each region may differ across decades. However, overall, 16 countries are included for EAP, 29 countries for ECA, 24 for LAC, 10 for MENA, 7 for SA and 44 for SSA.

Consistent with the findings in Fosu (2017), ECA has historically had the largest income and inequality elasticities, and poverty has been least sensitive in SSA, particularly since the 1990s. Hence, greater growth rates, accompanied by more favourable pro-poor redistributions, would be required in SSA for faster poverty reduction.

The largest income elasticity of poverty is observed for ECA, followed by MENA, EAP, SA, LAC and SSA, in that order. Similarly, ECA exhibits the highest level of inequality elasticity, followed by MENA, LAC, EAP, SA and SSA, respectively. The high poverty response in ECA is attributable to the region's relatively low level of inequality and large mean income. In MENA, the moderate sensitivity of poverty is similarly explained by the moderate levels of income and initial inequality. Conversely, income and inequality elasticities are low in SSA, thanks to the combination of the region's relatively low level of income and high inequality (see Table 15.1).

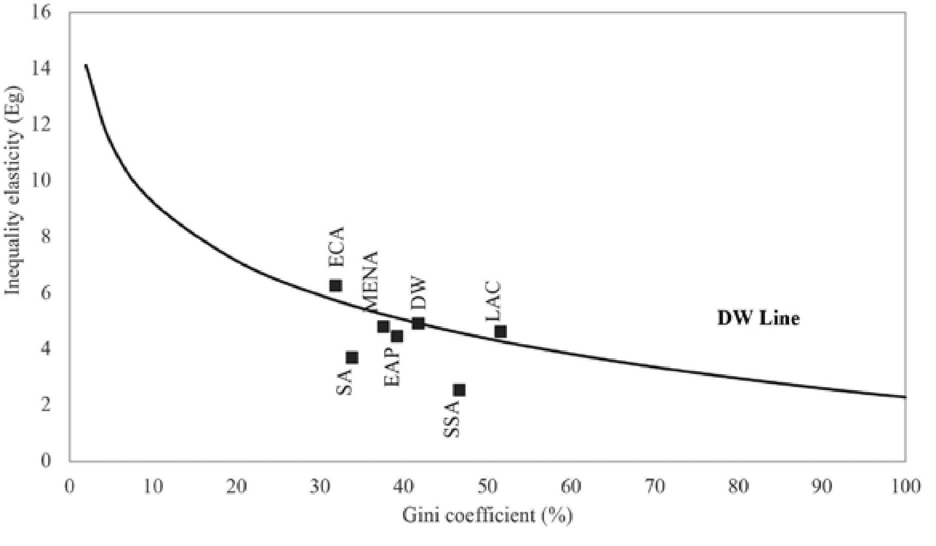
To provide better insights into the implications of initial inequality for regional poverty reduction, Figures 15.2 and 15.3 present the graphical representations of the income elasticity (absolute-valued) and inequality elasticity as respective functions of initial inequality. The line represents the estimates of the elasticities for the DW as a whole at different levels of initial inequality, given a fixed level of income (average income). Consequently, the gap between a region and the DW line represents the deviation of regional income from the DW average.

Comparing the estimates for MENA and LAC, the relatively low elasticities observed in LAC are mainly attributable to the region's larger within-country income inequalities. Indeed, the poverty-reducing effect of income growth and redistributive policies would have been larger in LAC than in MENA, if it were not for the counteracting effect of high initial inequality in LAC. Furthermore, the income and inequality elasticities of SA and SSA would have been closer to those of LAC if income levels in these regions had been higher.



Note: The elasticities are the 'overall' regional values reported in Table 15.2. The line is the locus of the global (developing countries – DW) estimates. The regions above the line have higher levels of income relative to the DW average, while those below have relatively low incomes. See Fosu (2017) for further details. For definitions of acronyms, see Figure 15.1.

Figure 15.2 Regional income elasticity (absolute value) and initial Gini – headcount ratio, US$1.90 a day (2011 PPP)



Note: See Figure 15.2.

Figure 15.3 Regional inequality elasticity (absolute value) vs initial Gini – headcount ratio, US$1.90 a day (2011 PPP)

Decomposition of Poverty Progress

Using the above elasticities, and following Fosu (2017), we decompose the change in poverty incidence into changes in income and in inequality by country as:

$$P = yE_y + gE_g \tag{15.5}$$

where P is the predicted growth of the headcount ratio, E_y and E_g are the respective income and inequality elasticities, and y and g represent the growth of income and inequality, respectively.

The results of the decomposition are summarized in Table 15.3. These results suggest that, on average, growth has been the main driver of poverty reduction in the developing world since the 1990s. Indeed, many of the top performers on poverty reduction, including the highly populous China and Indonesia, achieved their feat solely on the strength of income growth (World Bank 2020b). Nonetheless, reduced inequality played a complementary role in nearly one-half of the cases. Furthermore, it was the main contributor to extreme poverty reduction in 26 per cent of countries, and nearly one-half of these countries were in SSA.

We observe from Table 15.3 that a huge majority of the countries have registered poverty reductions (82 per cent). Among the relatively small subset experiencing poverty increases, inequality was a key contributor. And, in about 30 per cent of the countries, inequality counteracted the poverty-reducing effect of income growth.

IMPLICATIONS OF GOVERNANCE FOR POVERTY AND INEQUALITY: A BRIEF EMPIRICAL EXCURSION

Over the last three decades, there has been a notable shift of the developing world towards more democratic political systems and institutional arrangements that ensure checks and balances, and constraints on executives. On average, Polity2 score,[9] which is a measure of democracy, increased steadily from −1.10 in 1990 to 3.58 in 2018, and XCONST,[10] measuring the constraint on the executive branch of government, rose from 3.51 to 4.94 over the same period (Polity5 Project 2020). Thus, on average, countries have been becoming increasingly democratic over time.

Furthermore, there have been considerable improvements in economic freedom, overall, as many developing countries implemented policies and reforms to promote openness, free-business environments and greater integration of the domestic economy into the global market. The average of the Economic Freedom (EF) index,[11] which has been widely used as an indicator of economic governance, increased from 5.10 in 1990 to 6.62 in 2018 (Gwartney et al. 2020).

To provide further insights into the importance of governance for growth, inequality, poverty reduction and the sensitivity of poverty to growth and redistribution, Table 15.4 presents the respective zero-order correlation coefficients. The governance measures comprise the World Bank's indicators[12] (control of corruption, rule of law, government effectiveness, political stability and absence of violence, voice and accountability and regulatory quality), the EF index, Polity2 score and XCONST.

Interestingly, all the above governance measures are positively associated with the responsiveness of poverty to both income growth and improvements in income distribution.

*Table 15.3 Decomposition of poverty growth into the contributions of inequality and income changes – headcount ratio, US$1.90 a day (2011 PPP) – generally early to mid-1990s to 'present'**

Countries experiencing poverty increase				
Region	Number countries experiencing poverty increase: early 1990s–2000s to 'present'*	Number of countries where growth and inequality were complementary**	Number of countries where the contribution of growth to the rise in poverty dominated	Number of countries where the contribution of inequality to the rise in poverty dominated
EAP	1	0	1	0
ECA	4	0	1	3
LAC	3	2	0	2
MENA	3	2	1	1
SA	0	0	0	0
SSA	11	4	6	3
DW	22	8	9	9
Countries experiencing poverty decrease				
Region	Number of countries experiencing poverty decrease: early 1990s–2000s to 'present'*	Number of countries where growth and inequality were complementary**	Number of countries where the contribution of growth to poverty reduction dominated	Number of countries where the contribution of inequality to poverty reduction dominated
EAP	19	10	13	6
ECA	16	8	13	3
LAC	18	13	15	3
MENA	7	5	5	2
SA	8	2	8	0
SSA	33	20	20	12
DW	101	58	74	26

Notes: EAP = East Asia and Pacific; LAC = Latin America and the Caribbean; SA = South Asia; ECA = Eastern Europe and Central Asia; MENA = Middle East and North Africa; SSA = Sub-Saharan Africa; DW = Developing World. The decomposition is based on equation (15.5) of the text; income and inequality elasticities are derived using respective elasticity equations (15.3) and (15.4) of the text. The table excludes countries with zero poverty rates in the latest year, as growth is computed as a logarithmic change. These countries are: Azerbaijan, Belarus, Bulgaria, Croatia, Czech Republic, Latvia, Maldives, Montenegro, Slovak Republic, and Slovenia. Also excluded are countries for which data are not available for the period considered. These countries are: Belize, Colombia-Urban, Ecuador-Urban, Trinidad and Tobago.
* The latest year for which data are available for a given country.
** The category 'number of countries where growth and inequality were complementary' includes countries where the sign of the predicted poverty growth differs from that of the actual poverty growth. This is the case of Argentina-Urb, Malawi, West Bank and Gaza and Zambia – among countries experiencing poverty increase – and Mozambique – for countries where poverty decreased.

However, only government effectiveness is apparently potent enough to be positively associated with poverty reduction directly. Furthermore, it is only economic freedom and government effectiveness that are positively related with per capita GDP growth. And, surprisingly, none of the measures are associated with income growth. Thus, the findings here do not necessarily support the view that the 'good governance' effect on poverty is through income per se; instead, it appears to be via its ability to accelerate the transformation of economic growth and changes in inequality into changes in poverty.

Table 15.4 Zero-order correlation coefficients: governance variables vs. per capita GDP growth, income growth, Gini growth, poverty growth, income elasticity (absolute value) and inequality elasticity of poverty

	Average GDP per capita growth	Income growth	Gini growth	Headcount poverty growth, US$1.90	Income elasticity (absolute value), US$1.90	Inequality elasticity, US$1.90
	0.26***	0.01	0.10	−0.07	0.43***	0.51***
Economic Freedom (EF)	(2.84)	(0.09)	(1.05)	(−0.75)	(4.98)	(6.24)
Polity 2 Score	−0.11	−0.10	0.11	−0.00	0.30***	0.37***
	(−1.19)	(−1.06)	(1.23)	(−0.01)	(3.36)	(4.22)
XCONST	0.01	−0.05	0.04	−0.10	0.36***	0.41***
	(0.08)	(−0.55)	(0.45)	(−1.03)	(4.11)	(4.88)
Control of Corruption	0.12	0.07	0.12	−0.08	0.44***	0.53***
	(1.31)	(0.75)	(1.30)	(−0.89)	(5.56)	(7.04)
Government Effectiveness	0.22**	0.09	0.16	−0.19**	0.59***	0.67***
	(2.51)	(1.00)	(1.78)	(−2.07)	(8.24)	(10.29)
Political Stability &	0.07	0.01	0.08	−0.06	0.38***	0.46***
Absence of Violence/ Terrorism	(0.79)	(0.07)	(0.84)	(−0.68)	(4.69)	(5.89)
Voice and Accountability	−0.12	−0.06	0.21**	0.11	0.41***	0.48***
	(−1.35)	(−0.63)	(2.44)	(1.17)	(4.99)	(6.20)
Regulatory Quality	0.149	0.15	0.23**	−0.10	0.54***	0.62***
	(1.70)	(1.66)	(2.61)	(−1.11)	(7.25)	(8.90)
Rule of Law	0.14	0.08	0.14	−0.12	0.52***	0.59***
	(1.53)	(0.85)	(1.61)	(−1.34)	(6.89)	(8.19)

Notes: t-statistics are in parentheses. *** p<0.01, ** p<0.05. The correlation coefficients are computed using data on 127 developing countries. Given that governance is measured at the national level, observations for China-Urb, China-Rural, India-Urban, India-Rural, Indonesia-Rural, Indonesia-Urban, Colombia-Urban and Ecuador-Urban were excluded from the sample. Trinidad and Tobago and Belize where the latest year for the poverty data is in the 1990s. EF index, Polity2 score, XCONST, control of corruption, government effectiveness, political stability, voice and accountability, regulatory quality and rule of law are averages over the period early to mid-1990s to 'present', generally. The average per capita GDP growth is the arithmetic mean of the annual per capita GDP growth rates obtained from World Bank (2020a).

To further illustrate the possible role of governance in reducing inequality and poverty, we provide the case of Bhutan (see Box 15.1). The evidence indeed suggests that improved governance in Bhutan was instrumental in the country's progress on particularly poverty.

BOX 15.1 BHUTAN: POVERTY REDUCTION DRIVEN BY EFFECTIVE GOVERNANCE

Bhutan's long term 'vision document' for 2020 released in 1999, provided a roadmap which guided the country's subsequent five-year development plans (FYP). A pillar of this 'vision document' is the Bhutanese Gross National Happiness (GNH) development concept, which has also been an important indicator of the country's socio-economic progress (Royal Government of Bhutan 1999). In recent years, the country has witnessed an improvement in economic conditions in a politically stable environment (World Bank 2019).

Bhutan's per capita GDP growth has been 5.8 per cent, on average, per annum between 2000 and 2019 mainly driven by the hydropower sector (World Bank 2020a). Over the same period, the country ranked in the second top decile on government effectiveness in the developing world, on average (World Bank 2020c). Poverty, measured by the headcount ratio, decreased by nearly 17.5 per cent annually between 2003 and 2017 (World Bank 2020b). The country recently moved from low-income to lower middle-income status and is expected to graduate from the group of Least Developed Countries in 2023 (World Bank 2019; Razzaque 2020).

The effective planning and implementation of the Bhutanese government's five-year plans has been a major driver of the country's success story in increasing well-being and impressive poverty reduction (ADB 2014). Decentralization policies, social sector and rural development programmes, and public sector management reforms have been the core initiatives of the ninth, tenth and eleventh FYPs, covering the periods 2002–2007, 2008–2013 and 2013–2018, respectively. Over these years, a number of targeted interventions and programmes, including the Rural Economy Advancement Programmes, the National Rehabilitation Programme, and Rural Remote Community Development Programme were initiated and effectively implemented (ADB 2014; Royal Government of Bhutan 2013). As emphasized by Santos (2013), poverty reduction in Bhutan was driven by increases in income as well as improvements in other welfare dimensions, including access to roads, potable water and sanitation, health care and education.

CONCLUSION

The twin goals of poverty alleviation and inequality reduction remain at the heart of global development policies. In this chapter, we have examined the trends in poverty and inequality since the 1980s, and presented evidence on the implications of inequality and growth for poverty reduction, particularly from the early to mid-1990s to the late 2010s – a period of accelerated growth in many developing countries. Also provided is some evidence on the role of governance.

Consistent with previous studies, this chapter has shown, based on the US$1.90 headcount ratio, that the world has made tremendous progress on poverty and inequality reductions over the past three decades. The progress has not been limited to a small number of countries. Some 82 per cent of the sample of 123 developing countries experienced poverty reductions globally, involving vast majorities in all regions. Indeed, even in SSA where progress was the least, some 75 per cent of the countries registered poverty reduction.[13]

Similarly, a majority (55 per cent) of the sub-sample of 113 developing countries, for which we computed inequality changes, enjoyed improved income distribution. Interestingly, the regions registering the highest inequalities were among those with the greatest proportions of such countries: LAC (68 per cent) and SSA (59 per cent).

The findings in the present chapter also suggest that the progress on poverty was primarily driven by income growth, consistent with earlier studies (Dollar et al. 2016; Fosu 2017). In roughly one-half of the sample, growth and changes in income distribution were complementary in reducing poverty. However, these factors differ substantially across countries in their relative roles in explaining the progress on poverty.

The evidence further suggests that the quality of governance matters, but mostly in its ability to transform growth and changes in income distribution into poverty progress. Of the various governance variables considered – control of corruption, rule of law, government effectiveness, voice and accountability, political stability, regulatory quality, democracy, constraints on the executive branch of government and economic freedom – government effectiveness appears to be the only measure that seems to directly decrease poverty. Meanwhile, the relationships of these governance/institutional measures with income growth or its distribution per se generally appear weak.

Hence, going forward, 'good governance' as measured by the above indicators seems to play an important role in the fight against poverty, mainly via their respective abilities to accentuate the responsiveness of poverty to changes in income and/or inequality. Nevertheless, government effectiveness appears to be the most potent among them with respect to directly affecting poverty. In this regard, this form of governance clearly stands out as one lever that requires special attention.[14]

NOTES

1. The international poverty lines are estimated by converting national poverty lines at current prices into US dollars using the Purchasing Power Parity (PPP), rather than the official exchange rate, in order to account for cost-of-living differences across countries.
2. Overall, similar trends are observed for the other FGT measures (poverty gap and squared poverty gap) and for both US$1.90 and US$3.20. The improvement is greater at the former, however, suggesting that the progress on extreme poverty has been faster (Fosu and Gafa 2020: figures A2–A6).
3. In a very low-income country, most non-poor would likely be concentrated near the poverty line. Thus, a redistribution from the non-poor to the poor would reduce the income of the former, pushing more people into absolute poverty (Fosu 2010).
4. This *identity* model, first derived by Bourguignon (2003), is based on an approximation to an assumed lognormal income distribution, and allows one to explain the heterogeneity of the nexus across countries and time periods. For details of the application of the Bourguignon model see, for example, Fosu (2017, 2018), and also Kalwij and Verschoor (2007).
5. The instruments used in the analysis include: lagged income growth, sub-regional dummy variables and their interactions with initial income and inequality, and population growth. The Sargan and Hansen-J tests of over-identifying restrictions are reported to check for the appropriateness of the instruments employed in the Sys-GMM estimation.
6. All regressors involving dlogY_{it} are considered endogenous and are instrumented using the following variables: lnY_{it-1} interacted with regional dummy variables, population growth, lnY_{it-1} x lnG_{it-1}, lnY_{it-1} x $\ln(Z/Y_{it-1})$ and lnG_{it-1} x $\ln(Z/Y_{it-1})$.
7. See Fosu (2017) for details.
8. It should be noted that the elasticity estimates for the sub-periods may not be comparable due to possible country-composition changes over time.
9. Polity2 score ranges from −10 (strongly autocratic) to +10 (strongly democratic), obtained from the Center for Systemic Peace's Polity5 Project (2020).
10. XCONST ranges from 0 to 7, with 0 representing 'a state of disorder or perfect incoherence', 1 is 'no institutionalized constraints on government chief executives' and 7 means 'restrictions on the decision-making powers of chief executives and limited authority.' For details see Polity5 Project (2020).
11. EF captures the extent to which economic policies and institutions favour free-business environment, market competition, openness and property rights enforcement. The index comprises five areas of economic freedom, namely, (1) size of government, (2) legal system and property rights, (3) sound money, (4) freedom to trade internationally, and (5) regulations. The variable ranges from 1 to 10, with 1 representing the lowest performance and 10 the highest.
12. The indicators range from −2.5 to 2.5, and zero (0) represents the world average (Kaufmann and Kraay 2002).

13. While, on average, progress on poverty reduction was modest in SSA, there was quite a bit of variation across countries, with countries such as Eswatini, Gambia, Ghana, and Mauritania ranking in the top five deciles globally, compared for instance with India's top 6th decile ranking over roughly the same period (1990s to the present based on World Bank data: World Bank 2020b).
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