Is Latin America's Rise of the Middle Classes Lasting or Temporary? Evidence from Ecuador

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Abstract

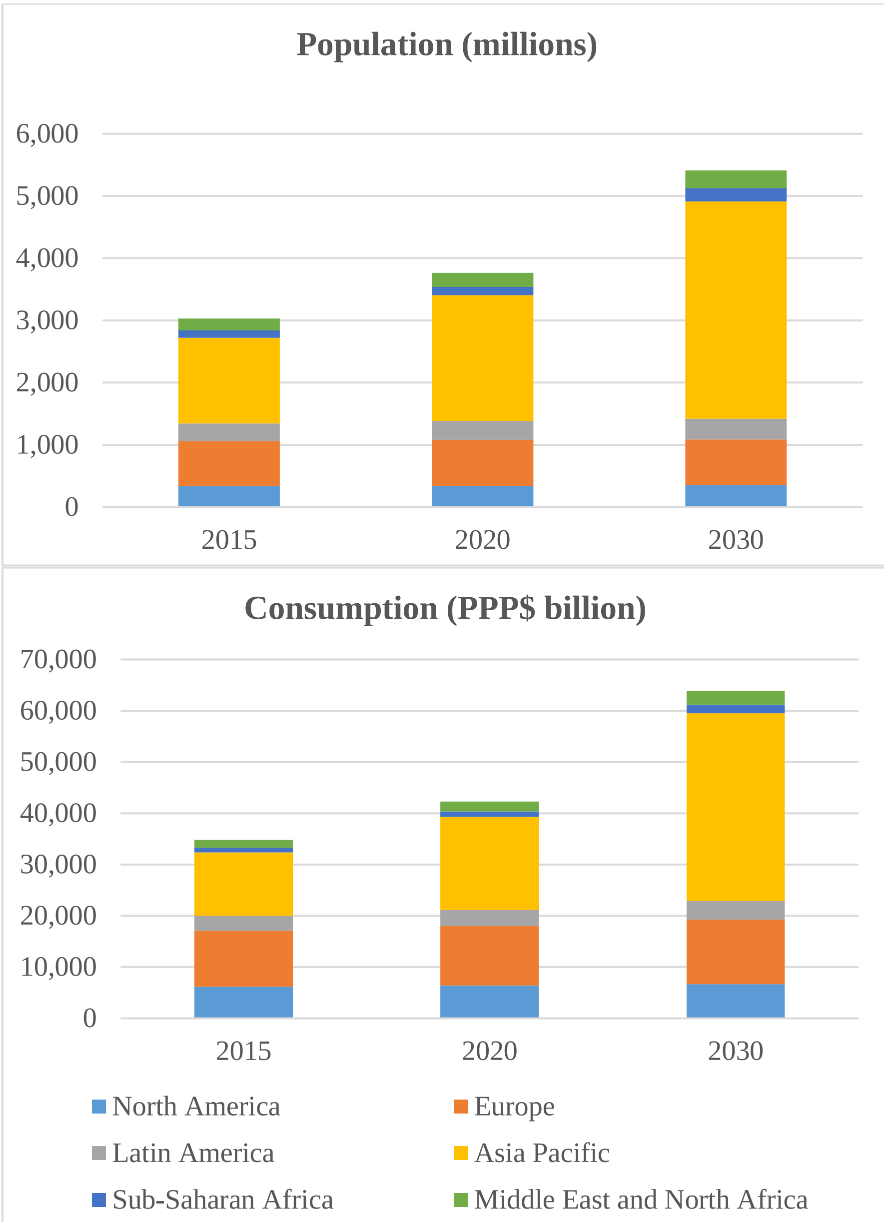
A solid middle class can provide the backbone of more stable societies and sustained welfare. Ecuador's experience, alike that witnessed elsewhere in Latin America, has yet to reach that footing. This chapter analyses the roots of the stark decline of poverty and the commensurate rise of an emerging middle class in Ecuador. These trends happened on the back of a strong rise in real wages and active social policies supported in part by booming international commodity prices. Not being rooted in sustained aggregate productivity growth and structural change towards modern services and industries, the size of the middle-class and its welfare are still highly vulnerable to global market volatility.

1. Introduction

According to an influential study by Homi Kharas (2010), the increase in average incomes and the fall in levels of absolute poverty, in particular during the last decade, suggest that an increasing proportion of the world's population is neither rich nor poor by national standards but finds itself in the middle of the income distribution. This expansion continues. Despite the global economic slowdown following the Great Recession of 2008-2009, in an update, Kharas (2017) foresees a continued expansion of the global middle class from 3 billion in 2015 to 5.4 billion by 2030. The bulk of this growth will come from Asia. By 2030, Asia would represent 65 per cent (or 3.5 billion) of the global middle-class population and 57 per cent (or PPP$ 37 trillion) of middle-class consumption, compared to 46 per cent (1.4 billion) and 36 per cent (PPP$ 12.3 trillion), respectively in 2015, according to the figure below. Latin America's middle classes would expand from 285 million today to 335 million by 2030, while dropping their share in global middle class consumption from 8 per cent to 6 per cent in the same period.

The developing world's "emerging middle class" could be critical for global development, because of its potential as an engine of growth. History tells us that, in the past, those in the middle have vigorously accumulated capital, both physical (plant, equipment, or housing) and human (education and health), more so than the poor or the rich. Consolidating this incipient middle-income group into a stable middle class could provide a solid foundation for economic progress by driving consumption and domestic demand. This becomes evident when contrasting, for instance, the experience of Brazil and South Korea. In the 1960s, the countries had similar income levels and rates of growth. By the 1980s, however, due to high inequality in Brazil, the middle class made up less than 30 per cent of the population, in contrast to South Korea's 53 per cent. Its growing middle class enabled South Korea shift away from its reliance on export-led growth towards a growth path rested on expanding domestic consumption. Brazil did not witness the same growth dynamics and domestic market expansion has been feeble and volatile. Opportunities might be there, still, thanks to the decrease in poverty from 22 per cent to 7 per cent between 2004 and 2014, as 26.5 million Brazilians exited poverty and joined the ranks of the middle class (World Bank, 2016).

Figure 1 Estimates of the projected rise of the global middle class[a], 2015 - 2030



Source: Kharas (2017: Tables 2 and 3).
Note: a. The global middle class is defined here as the population with a per capita income of between $10 and $100 per day in purchasing power parity (PPP) of 2011.

Middle classes not only can act as the engine of consumption and domestic demand, their social role can be equally critical. Middle classes are believed to support democracy and progressive but moderate political platforms. Strong middle classes can influence economic development through more active participation in the political process, expressing support for political programmes, and electoral platforms, in particular, those that promote inclusive growth. Despite having incomes which are above international or national poverty lines, middle classes in many cases remain vulnerable. Their employment (many work in the informal sector), education (often only few have university degrees) and consumer behaviour do not coincide with perceptions of a middle class that drives domestic consumption and growth. For instance, in Bolivia, Brazil, Chile and Mexico there are up to 44 million informal middle-class workers, more than 60 per cent of the total middle-class working population. Not surprisingly, social protection and social insurance systems fail to reach even half of this population, as coverage rates of informal workers are extremely limited. Coverage of some programmes may be larger, such as many of the cash transfer programmes introduced in the late 1990s, but most of those are targeted at the poor.

Thus, Latin America's rising middle class may well be unlike that which became the engine of development in most developed countries. Yet, middle class expectations in emerging and developing countries are rising and evolving as their countries' economic situations improve, following Hirschman's "tunnel effect": they are no longer satisfied with simply having access to public services, but are increasingly concerned with their quality (Hirschman and Rothschild, 1973). Providing the quality services that the middle classes demand is far more complicated than simply providing access to them and can be a source of friction, conflicts, and political upheaval. The new middle classes in Latin America seem to be very vulnerable still, as many lack access to adequate social protection and many could easily fall back into poverty when the next macroeconomic shock arrives.

The rising expectations of the expanding middle class in developing countries contrasts with the stagnating living standards of a shrinking middle class in many developed countries. Today, both middle classes are awakening. Each with its own specificities, the question is will these middle classes be agents of change?

This paper will not speculate about the possible political implications, but assess the drivers underlying the growth of the middle class in Ecuador over the past two decades. Ecuador's middle class, as defined by international standards as those with a per capita income of between PPP$10 and PPP$50 per day, rose from about 10 per cent to near 40 percent of the total population between 1990 and 2015, mostly as a result of declining poverty and rising real wages. Likewise, the income group earning between PPP$4 and PPP$10 per day, defined here as non-poor but vulnerable, increased from around 30 per cent to 40 per cent of the total population in the same period. Hence, about 80 percent of the population is either vulnerable or middle class and a majority among them derive incomes from informal sector activities and are highly vulnerable to economic downswings. Much of poverty reduction was achieved on the back of a thriving economy bolstered by high oil prices and fuelled by expansionary social policies during the 2000s, lasting till around 2015. Weakening primary commodity prices could not be offset by new robust middle-class consumption growth and Ecuador's economy went into a tailspin from 2015, putting the rise of the middle-class status to a halt.

The remainder of this chapter is organized as follows. Section 2 gives an overview of economic and social factors underlying recent trends in inequality and the corresponding rise in middle classes in Ecuador and the broader Latin American context. Section 3 analyses the trends of declining urban and rural poverty and the rising middle class.in Ecuador and compares these with the broader patterns observed throughout Latin America. Section 4 disentangles the sources of income growth of the poor and middle classes, on the basis of which questions are raised regarding the sustainability of the expansion of Ecuador's middle class. Section 5 concludes and draws some lessons for the future.

2. Ecuador's rise and fall in income inequality

As elsewhere in the region, Ecuador experienced notable increases in income inequality during the 1990s, which by and large were undone during the 2000s. Active social transfer policies by successive governments played a role in reducing inequality in the second decade, but the rise and fall in inequality seem to have been associated for most part with swings in macroeconomic conditions.

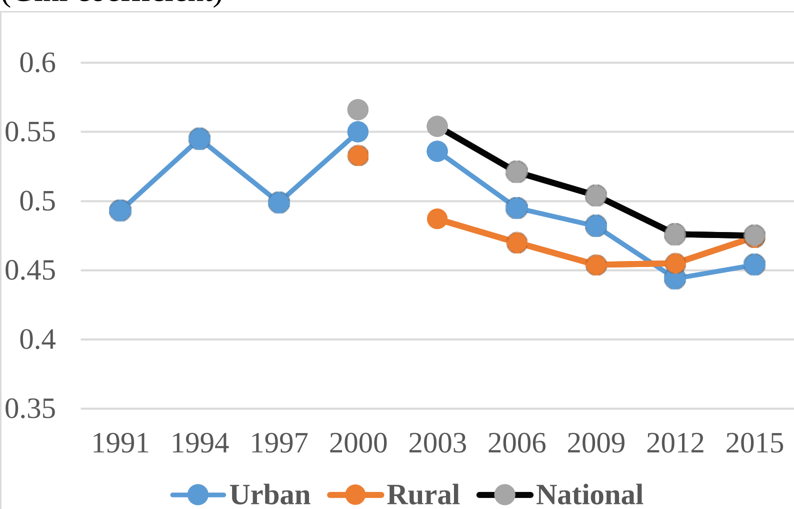
The 1990s were characterized by Washington consensus-type reforms. Trade and financial sectors were liberalized from around 1990 and high inflation of the late 1980s was controlled through a combination of heterodox and orthodox macroeconomic stabilization policies in the early 1990s. The liberalization policies strengthened export growth, especially of more capital-intensive activities (oil, manufacturing, traditional export agriculture), though some of the effect was counteracted by the stabilization policies which cut inflation, caused the exchange rate to appreciate and allowed real (urban) wages to increase. On balance, there was a mild increase in inequality during the first half of the decade (Ponce and Vos, 2014). The adjustment policies and market reforms failed to induce strong employment growth in the modern sector.

The jobs that were created in the formal sector mainly benefited skilled workers. The slack in the labour market was absorbed in traditional agricultural and informal urban sectors. This drove up the wage gap between modern and informal sector workers as well as between skilled and unskilled workers. Lower inflation and aggregate real wage increases dampened these unequalizing forces somewhat.

The influences mitigating inequality disappeared in the second half of the 1990s when the impact of the macroeconomic stabilization policies faded, trade liberalization pushed further for primary export-led growth and the political situation became very unstable. A series of external shocks, including heavy floods caused by the El Niño phenomenon and falling oil prices, put the economy into a tailspin leading towards a full-blown banking and economic crisis in 1999. The economic downturn, accelerating inflation, sharply falling real wages along with accelerated exchange rate depreciation, pushed more and more workers into unemployment and, in particular, into underemployment in informal sectors, pushing up the (urban) Gini coefficient to 0.55 in 2000 (from around 0.49 in the early 1990s; see Figure 2).

Amidst the crisis, large numbers of Ecuadorians started to leave the country, migrating to Europe and the United States in search for better opportunities and many more would follow in subsequent years. The 2000s started with a hasted decision to dollarize the economy amidst major political turmoil. In the first year as an officially dollarized economy (2000), Ecuador witnessed high inflation (peaking at an annual rate of 100 per cent), in large part because of the way the currency change was implemented.[1] Real incomes and wealth declined steeply for most Ecuadorians, which further pushed up inequality as low-income groups were affected the most. The ensuing real exchange rate appreciation and a rebound in international oil and other commodity prices, however, helped stage an economic recovery in subsequent years. Increased government revenue supported a recovery of government spending. As a result, employment levels and real wages rebounded, for unskilled workers included. The broad-based increase in purchasing power helped sustain and expand an already large informal sector, even as the relative share in informal employment declined somewhat during the 2000s (see also further below). This shift by itself contributed to higher labour income inequality, but was more than offset by overall employment growth and a fall in the wage gap between skilled and unskilled workers. The recovery in real education spending during the 1990s (see Vos and de Jong, 2003) started paying off in the next decade with more skilled workers entering the labour market and this trend was sustained with cash transfer programmes introduced at the end of the 1990s which induced higher school retention rates. At the same time, demand for unskilled workers in urban services sectors and traditional agriculture outpaced that for other workers.

Figure 2: Ecuador: Income inequality, 1990-2015
(Gini coefficient)



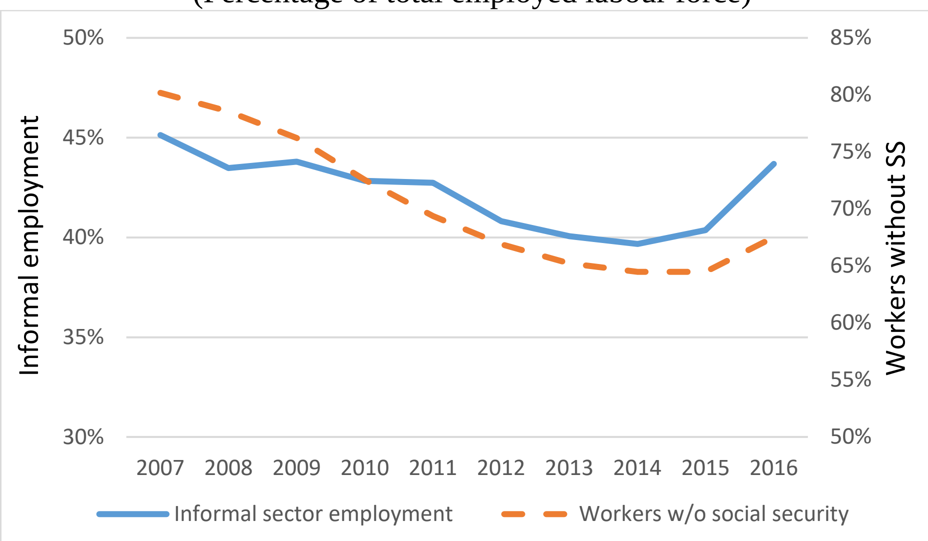
Source: INEC (various years).
Note: Because of a substantial change in survey methodology, no line is shown between 2000 and 2003. The household surveys used here only covered urban areas during the 1990s.

These factors explain much of the fall in per capita household income inequality in the 2000s and early 2010s. The lack of dynamic structural change in the economy, however, does not augur for sustained reductions in labour income inequality. Continued increases in the supply of skilled workers may push further in that direction, but this effect may also not be lasting either lacking a drive towards diversification into more skill-intensive activities. This became evident in the

[1] The high dollar inflation was the result of setting sucre-dollar conversion rate at a level much higher than the peak market exchange rate before dollarization and failure to introduce enough small-denomination dollar coins which pushed up prices for many basic products (by rounding to one dollar). See Vos (2000).

second half of the 2000s. The fact that household income inequality continued to decline (though only slightly), was mainly on account of public transfers and, to a lesser extent, worker remittances. While already in existence from the late 1990s, the cash transfer programme, which mainly benefits poor households, was enhanced substantially under the 'new leftist' government of Rafael Correa along with other social spending. At the same time, worker remittances increased substantially during the 2000s. Initially, they mainly benefited higher-income groups, but became less regressive and even slightly progressive towards the end of the decade. The importance of remittance incomes has tapered off more recently, among others, because many migrants have returned to Ecuador as employment opportunities in the United States and Europe diminished with the Great Recession of 2008-9 and its aftermath. What is more, the decline in income inequality came to a halt around 2012, along with the deceleration of the economy against the backdrop of falling oil prices, stagnant real wages, and a drop in fiscal space to continue with fiscal expansion, which also put further growth of social transfers to a halt.

Figure 3 Ecuador: Informal sector employment, 2007-2016
(Percentage of total employed labour force)



a. Informal sector employment defined here as workers of establishments without tax registration (left axis) and workers without access to (formal) social security (right axis).
Source: INEC (various years).

In sum, the decline in income inequality during the 2000s and early 2010s was initially pushed by the economic rebound following the deep crisis of the late 1990s. A recovery of real wages was a key factor, especially for urban workers, while improving agricultural terms of trade helped push up farm incomes in rural areas (Ponce and Vos, 2014). After 2007, activist labour market policies and social transfers gave a further boost to rising real wages and reductions in poverty and inequality. These in turn gave rise to an expanding domestic market generating employment in service activity in particular. With lower oil prices and the economic slowdown from 2013, these sources of poverty reduction and greater income inequality have come increasingly under strain. Little economic diversification has taken place beyond Ecuador's traditional reliance on primary exports and the continuous expansion of, mostly, service sector activity. A large part of these sectors consists of informal activities (traditional agriculture and petty trade and other services). By the mid-2000s, about half of the country's work force was employed in informal sector activity (defined as employees of economic establishments without tax registration), while 4 of every 5 workers did not have access to the formal (contributory) social security system. Fiscal reform and active social policies pulled a significant number of workers into the formal, tax-paying segment of the economy and reduced the share of workers without access to social security from 80 per cent to 65 per cent between 2007 and 2014 (Figure 3). Minimum wage hikes pulled up average wage levels, but especially for unskilled workers. With the downturn of the economy from 2014, these trends were reversed as visible in the rise of the share of workers in informal employment between 2014 and 2016.

This does not augur for sustained reductions in the still high income inequality and increases the risk to new members of the middle class to fall back into the vulnerable group of those with incomes just above the poverty line or even back into poverty. The following sections will put this hypothesis to a further test.

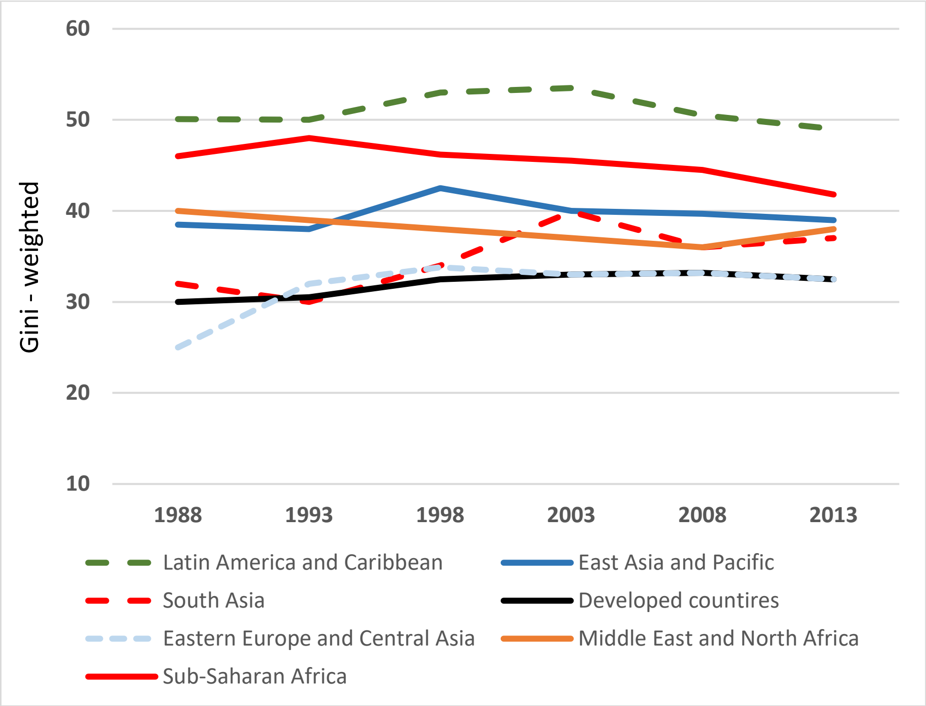
3. Falling poverty and the rise of the middle class

Despite the rise of Latin America's middle classes, the region continues to show the highest levels of income inequality, with a weighted average Gini coefficient hovering around 0.5 (World Bank 2016; and Figure 4 below). In most countries of the region, inequality increased during the period of economic opening and liberalization (Vos, Taylor, and Paes de Barros, 2002), but dropped again during the 2000s to return to levels of the late 1990s. Like Ecuador, also other countries in the region managed to reduce poverty and lift incomes of the bottom 20 per cent of the income distribution during the 2000s. Nonetheless, the top 20 per cent of the income distribution continues to take more than half of all income, leaving between 30 and 40 per cent for the middle 40 per cent, and just over10 per cent for the bottom 40 per cent. This broader distribution pattern is remarkably similar across all countries in the region (Figure 4). Ecuador's middle 40 per cent earns about 35 per cent of total household income, putting it in the mid-range of this ranking of Latin American countries.

There is some debate as to what constitutes the middle class. Statistical definitions vary, but most often refer to those in the middle of the size distribution of income, e.g. the third and fourth quintiles as in Figure 5. Notions of an emerging global middle class, however, are based on internationally comparable income levels. The most often cited studies see the global middle class as those households with per capita incomes between $10 and $100 per person per day in PPP terms (Kharas, 2010, 2017; World Bank, 2007; Ernst & Young, 2013; Bank of America Merrill Lynch, 2016). This implies an annual income for a four-person middle-class household of $14,600 to $146,000. For the case of Ecuador, we consider a similar definition, but taking the range of PPP$10 to PPP$50 of daily per capita income. In nominal 2015 dollars, that translates into a monthly per capita income of between US$ 191 and US$ 954, or, for a family of four, annual household incomes of between US$ 9,000 and US$ 46,000 per year. The reason to put the upper bound for the middle class at PPP$50 per person per day, is that beyond that level only a very small share remains for the richest group.[2]

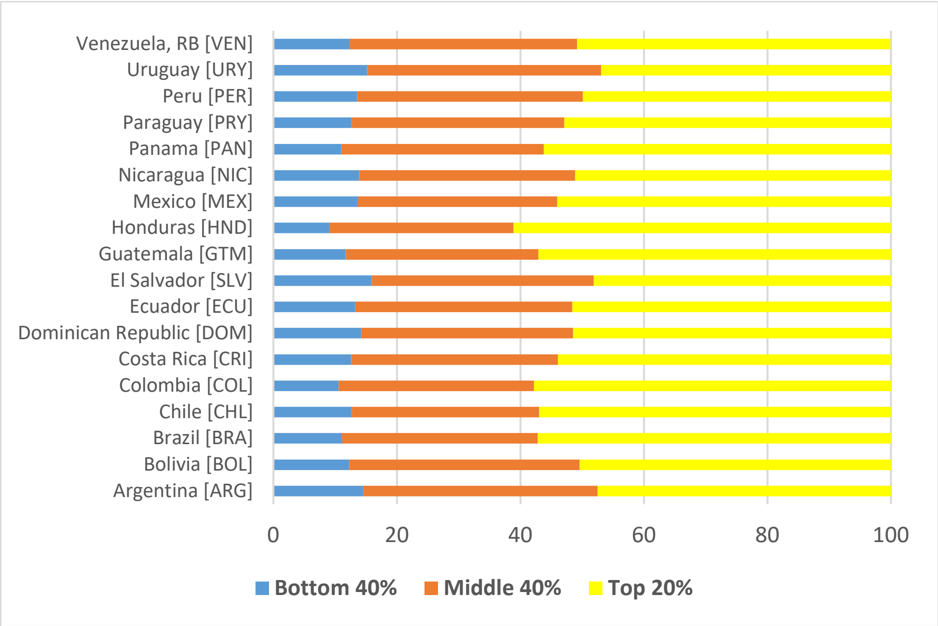
[2] Please note that the size of the upper middle-income and rich household group in Ecuador is probably strongly underestimated because of underreporting of incomes by those households in the household surveys used for the present analysis.

Figure 4 Within-country income inequality by regions, 1988-2013 (Gini – weighted)



Source: Based on World Bank (2016: Figure 4.7).

Figure 5 Latin America's top, middle, and bottom of the income distribution, around 2013 (income shares of bottom 40%, middle 40% and top 20%; ranked by income share of middle class)



Source: World Bank, Poverty and Inequality Database.

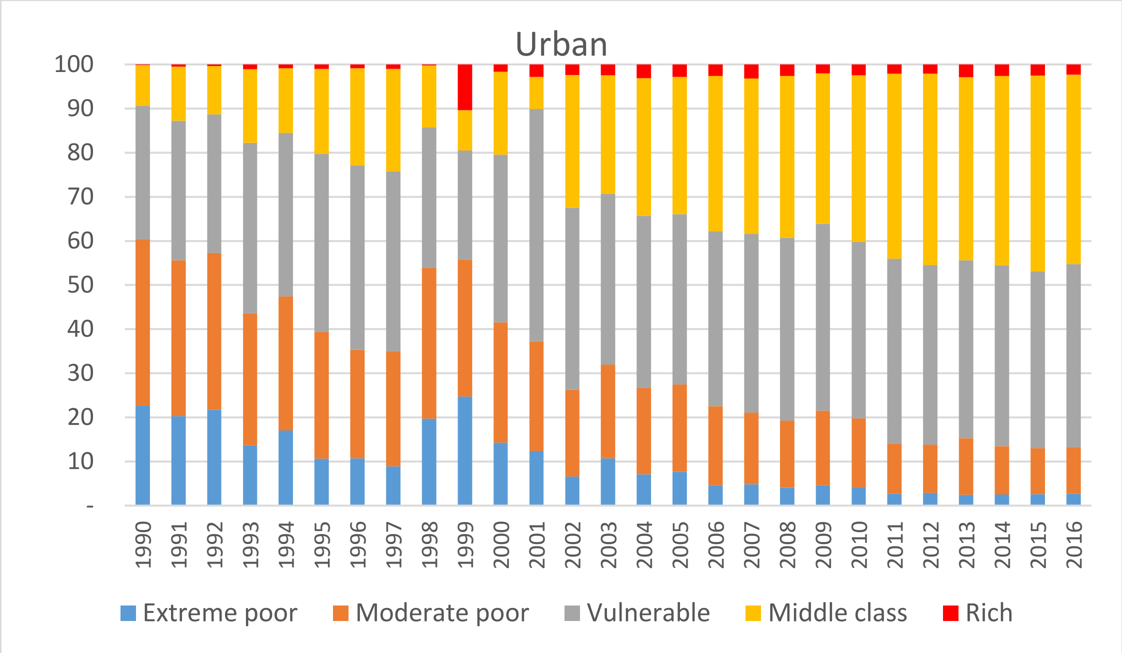
Figures 6a-c show the trends in the size of Ecuador's middle class from the early 1990s for urban areas and nation-wide trends from 2000. We compare its evolution with the prevalence of extreme and moderate poverty (at international poverty lines of, respectively, PPP$ 1.90 and PPP$ 4.00 per person per day), the group of vulnerable households between the poor and the middle class (with PPP$ 4.00 and PPP$ 10.00 per day), and that of rich households with daily per capita incomes above PPP$ 50. By these international standards, Ecuador's urban middle class quadrupled from 9 per cent to 43 per cent of the urban population from 1990 to 2016, increasing from 670,000 to 4.9 million people. Most of the expansion (24 percentage points) took place during the 2000s, however. On the back of rising real wages, the rise of the urban middle class began in the mid-1990s, but many fell back into the group of vulnerable and poor in the late 1990s as the economy went into a tail spin. As discussed in the next section, the recovery of the economy and pro-active labour and social policies supported the stark expansion of Ecuador's urban middle classes in the 2000s and into 2010s. Its expansion stagnated again with the renewed economic slowdown from 2014.

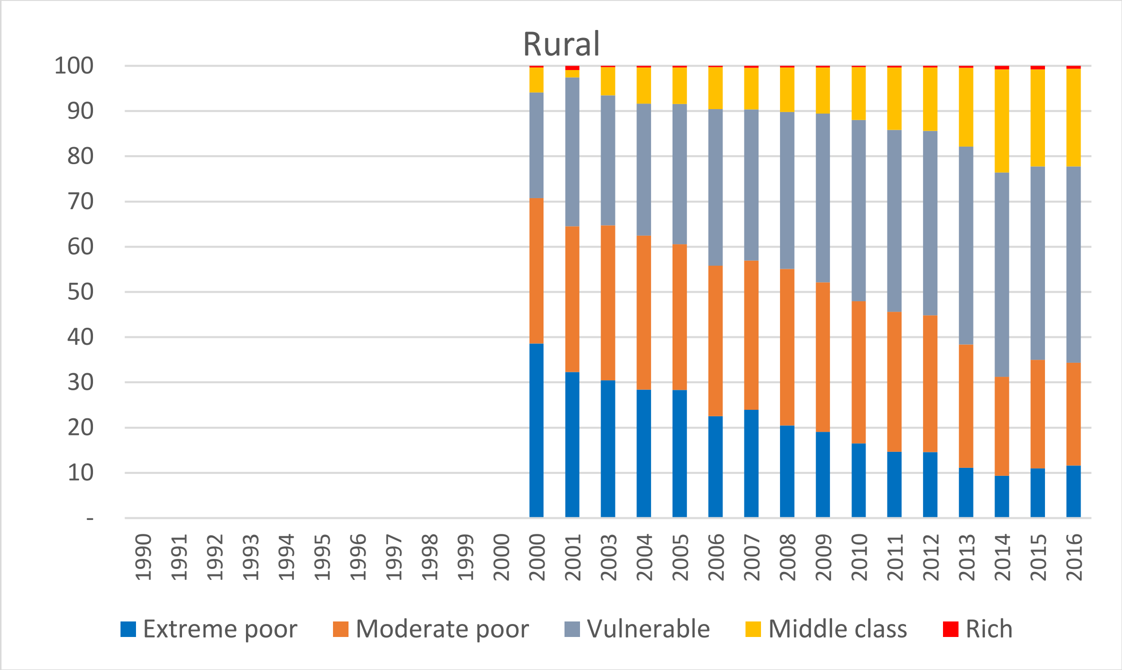
The 2000s also saw the emergence of a rural middle class (by international standards), increasing form virtually non-existent to one fifth of the rural population (or about 1.1 million). Nationwide, the share of Ecuador's "global" middle class almost tripled (from 14 to 36 per cent of the nation's population), representing 6 million by 2016. The nation-wide picture mirrors that of urban areas with further growth of the size of the middle class coming to a halt (and even turning into a slight decline) from 2014, as the economy, real wages, and the agricultural terms of trade went into a tailspin.

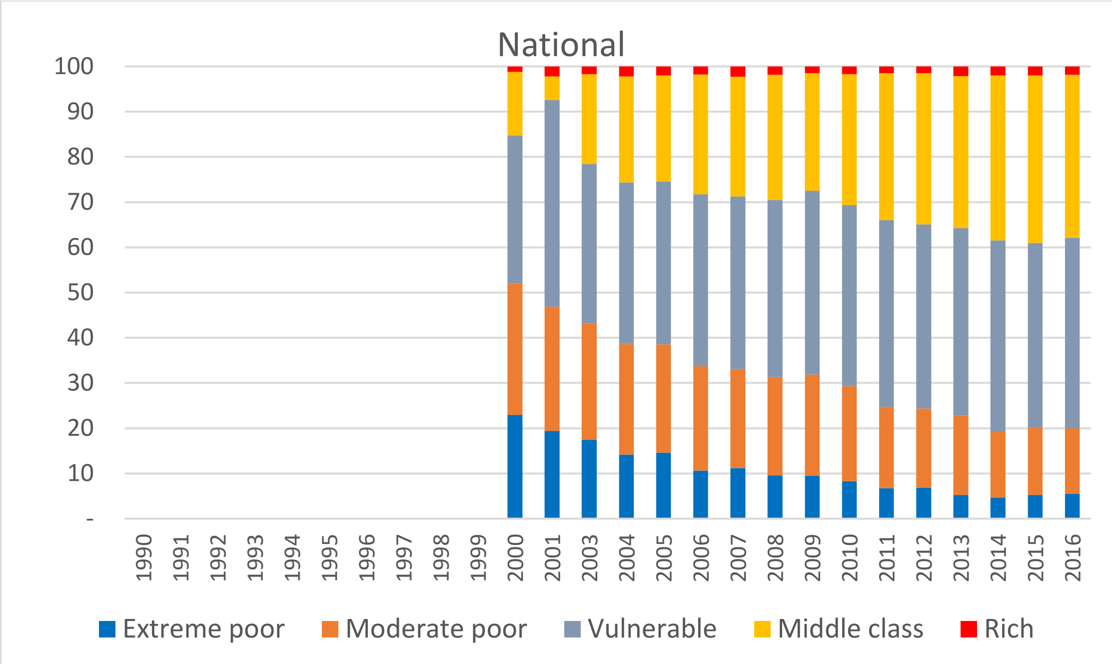
Figures 6a-c further show the staggering decline in extreme and moderate poverty, as measured against international poverty lines of, respectively, PPP$1.90 and PPP$4.00 per day[3]. Between 2000 and 2016, the extreme poverty incidence fell from 23.0 to 5.5 per cent for the country at large. The rural extreme poverty incidence was cut by more than two thirds: from 38.6 per cent in 2000 to 11.6 per cent in 2016. Extreme poverty in urban areas had dropped from almost 23 per cent in 1990 to 9 per cent in 1997, but rose again to initial levels towards the end of the decade as a result of the economic and political crisis. During the 2000s, urban extreme poverty was all but nearly wiped out, dropping to under 5 per cent of the urban population by 2010 and to under 3 per cent by 2016. Declines in moderate poverty (those living on between PPP$1.90 and PPP$4.00 per day) were also substantial, though less dramatic. Many of those lifted out of poverty transited to the group of vulnerable households and many in that category into the middle class. The transition matrices presented in the next section and the decomposition of income changes during the 2000-2015 period disentangle the underlying dynamics.

[3] The results presented in this chapter are based on a new and robust procedure to reconstruct series of poverty and income distribution data for the labour force surveys conducted in Ecuador since 1990. The surveys have gone through several methodological changes in questionnaire design and sampling. Also, the dollarization of the economy in 2000 poses problems in proper deflating nominal incomes for the currency change. The set of deflators for national and international poverty lines used to construct the time-consistent poverty and real income estimates are available from the authors upon request.

Figure 6 Ecuador's rising middle class, 1990–2016 (population shares by income categories)





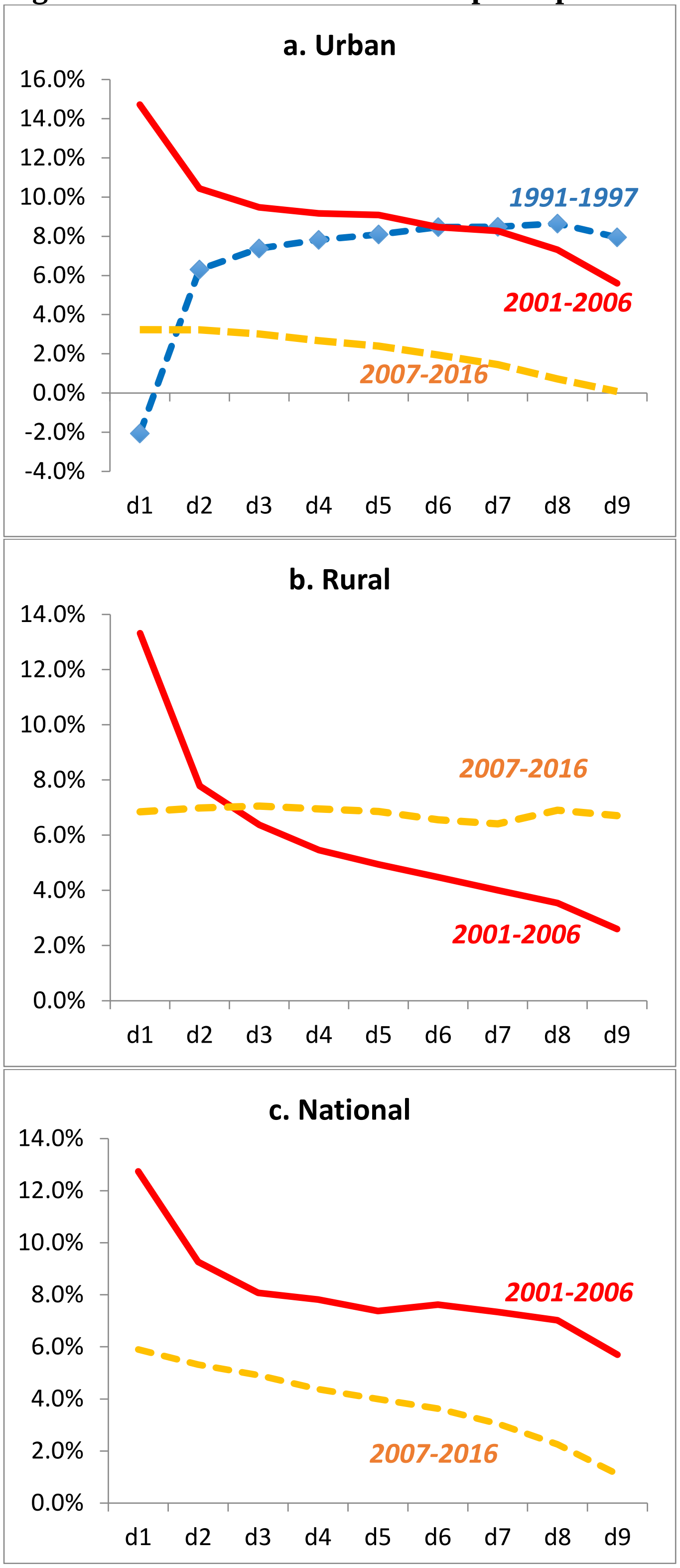


Source: INEC (various years).
Note: See text for the definition of income groups.

4. Will the new middle class stick?

Economic growth during the 2000s and into the 2010s has been strongly pro-poor, in contrast to patterns found in the 1990s. Figures 6a-c show the increase in annual terms of the per capita income of the household. In the period 2001-2006 it grew sharply for all income deciles, significantly more for the lowest deciles as a result of the recovery in real wages and the agricultural terms of trade, as the economy rebounded. Worker remittances and the introduction of the new cash transfer programme targeted at the poor also contributed significantly to this pattern. Pro-poor growth continued during 2007-2016 on the back of the same factors, though the at lower rela income growth than in the immediate recovery in the first half of the 2000s. During the entire period, middle class income growth (deciles 6 and up) was robust but below that of the poorer and vulnerable classes.

Figure 7 Ecuador: Growth of real per capita household income by deciles[a], 1991-2016



a. Only deciles 1-9 are shown here, as incomes measured for the top decile show some volatility owing to significant underreporting.

Source: INEC (various years).

As a result, mostly upward income mobility took place from 2000 onwards. Table 1 shows the pattern for the 2007-2014 sub-period in the form of a transition matrix of mobility across income classes. To compute income mobility, we followed the methodology of non-parametric synthetic panels proposed by Dang, Lanjouw, Luoto, and McKenzie (2011). This method overcomes constraints posed when estimating transition matrices for a sample of households that does not form a panel in a strict sense.[4] The method consists of an econometric model of consumption or income determinants. The model is estimated using survey data for the first year (2007) and the resulting parameters are subsequently used to estimate a new, counterfactual consumption/income distribution for the households of the panel in the last year of the period (2014). This way we obtain for each household of the 2014 panel an observed income for 2014 and an imputed income for 2007. These results are then used to study the probability of households transiting from one income class to the next.

The table shows that poverty fell, on balance, almost exclusively as a result of people moving out of poverty. Relatively few fell back into poverty from vulnerable and/or middle classes during 2007-2014. About 40 per cent of those classified as poor in 2007 had transited upward to the category of vulnerable households by 2014. About 13 per cent of the group considered vulnerable in 2007 had fallen back into poverty by 2014. Over one third of the population belonging to vulnerable households became part of the middle class during 2007-2014 and 6 per cent of those considered poor in 2007 moved upward to middle class status. At the same time, most (83 per cent) of those belonging to the middle class in 2007 had remained in that category by the end of the period.

Table 1: Transition matrix of mobility across income classes, 2007 – 2014

		2014			
		Poor	Vulnerable	Middle class and rich	Total
2007	Poor	55.0%	39.0%	6.0%	100.0%
	Vulnerable	12.6%	52.1%	35.3%	100.0%
	Middle and rich	0.9%	16.4%	82.7%	100.0%

Source: INEC (various years).

These findings would suggest that the growth of Ecuador's middle class has been robust building on upward mobility. However, as indicated much of the reduction of poverty and rise of the middle class was facilitated by an economic expansion fuelled by strong primary export prices, which provided the Ecuadorian government with the fiscal space to underpin expansive labour policies (through minimum wage increases) and social policies (expanding social transfers and public infrastructure). Fiscal reform and a strong government push to expand coverage of the social security system increased the share of workers in formal employment, especially in services and benefitting unskilled workers. As analysed by Ponce and Vos (2014), the boost in purchasing power among broad segments of the population facilitated a further expansion of the market size of an already large informal sector (in agriculture, but especially in urban services),

[4] The results on mobility presented in this chapter follow the same procedure as the study of Pesantez (2014), which also estimates transition matrices based on Ecuador's labour force surveys, but covering the period 2007-2013.

as well as that of modern urban service, generating multiplier effects on employment and real wage and farm income growth. This growth pattern is also reflected in a lowering of the wage premium for skilled labour and a rising wedge between informal and formal sector labour incomes.

Turning first to the decline in the skill premium, existing studies have suggested that much of the increase in income inequality in Latin America during the 1990s was on account of increasing wage differentials between skilled and unskilled workers. The increase would have been produced by more skill-intensive technological change induced by trade and capital account opening.[5] The greater demand for skilled labour would have increased the wage gap between skilled and unskilled workers.[6] During the 2000s, in contrast, the increase in the educational level of the work force would have counteracted the increase in the demand for skilled labour, reducing the wage gap.[7]

To analyse whether this pattern also occurred in Ecuador case, we ran a Mincerian wage regression for the population aged between 25 and 55 years. The estimation model is as follows:

$$Y_i = \alpha + \beta C_i + \gamma X_i + \varepsilon_i$$

Where Y_i is the logarithm of labour income per hour, X_i is a vector of control variables (such as age, age squared, and a dummy for working in the modern sector), and C_i is a dichotomous variable which has a value of 1 if the worker is skilled and 0 if she or he is unskilled. A skilled worker is defined as someone who has at least completed secondary school. ε is the error term, with a normal distribution and a mean of zero. The coefficient of interest is beta (β), which indicates the salary gap between skilled and unskilled workers. Results are reported in Table 2.

Table 2 Ecuador: Skill-based wage premium for urban workers
(Beta coefficients estimated using a Mincerian wage equation)

	Urban area		
	Men	Women	Total
1990	0.534*	0.371*	0.481*
1996	0.627*	0.381*	0.548*
2000	0.789*	0.576*	0.718*
2006	0.637*	0.565*	0.617*
2010	0.574*	0.422*	0.521*
2015	0.515*	0.489*	0.509*

*Significant at 1% confidence level.
Source: INEC, various years.

[5] For the case of Latin America and Ecuador see, respectively, Vos et al. (2006) and Vos and León (2003). The Brazilian case represents an exception in this sense, given that trade liberalization generated a reduction of inequality. See Ferreira et al. (2007)
[6] Critical stances regarding the focus on technological change with a bias towards skilled labor can be found in Card and Di Nardo (2002), Morissette and Drolet (1998), Oosterbeek (1997), and Entorf, Gollac and Kramarz (1999). For Ecuador see Oosterbeek and Ponce (2011).
[7] See, for example, López Calva and Lustig (2010).

The results confirm that trends in Ecuador are no exception to those found elsewhere. During the 1990s, the wage premium for skilled workers increased. After correcting for age (which we used as a proxy for work experience) and type of employment (modern or informal), skilled workers earned around 72 per cent more than unskilled workers in 2000, up from 48 per cent in 1990. The same trend is observed for male and female. These trends were reversed during the 2000s, as the wage gap decreased. The skill premium reduced from 72 to 50 per cent in 2015. The trend is similar for both male and female workers. The improvements in the skill level of the labour force are closely associated with the recovery of real public spending in education during the 1990s and the cash transfer programmes of the 2000s and 2010s, which helped improve access to education. At the same time, the structural change towards an expanding informal sector economy slowed the demand for skilled workers, which does not augur well for sustained productivity and income growth moving forward.

Using the same Mincerian model from above, we also tested the trend in the wage premium for modern sector workers by taking the results for the dummy variable for the sector of employment. The dummy takes the value of 1 if the worker is employed in the modern sector and 0 if employed in the informal sector. The coefficient is indicative of the gap in labour income between modern and informal sector workers, after controlling for skill levels and work experience. As shown in Table 3, the modern sector wage premium for urban workers increased strongly during the 1990s and 2000s.

Table 3 Ecuador: Wage premium for urban workers in the modern sector

(Dummy coefficients for the modern sector)

	Urban area		
Year	Men	Women	Total
1990	0.056*	0.097*	0.066*
1996	0.133*	0.424*	0.226*
2000	0.195*	0.345*	0.241*
2006	0.295*	0.435*	0.344*
2010	0.402*	0.570*	0.458*
2015	0.477*	0.595*	0.523*

*Significant at 1% confidence level.
Source: INEC, various years.

The implications of this finding are not immediately clear, but one inference could be that for further sustained upward mobility towards the middle class, an expanding modern sector in agro-industries and other non-extractive productive sectors would be needed. This would help reduce the vulnerability of the economy to swings in world market commodity prices and in the related fiscal space and it would allow the income growth for the middle classes to be underpinned by higher productivity growth and broader based sector development. Indeed, as shown in section 2, the downturn in the economy affected the services sector activity the most, notably reversing the trend of increased formal sector employment and social security coverage. Alongside, poverty reduction came to a halt and growth of Ecuador's middle class stagnated. On the positive side, the middle class did not collapse under the weight of the economic downturn, as happened during the crisis of the late 1990s. Yet, like the poor and vulnerable, the middle-class welfare position remains highly vulnerable to macroeconomic swings.

5. Conclusions

The strong rise of Ecuador's middle class coincided with a period of economic recovery and growth. Part of the surge had its origins in real wage growth and an increased wage premium for skilled workers associated with trade and financial liberalization of the 1990s. However, during that period, macroeconomic as well as political instability brought about fluctuating trends in real wage growth, as much as in poverty and inequality, mitigating the expansion of the middle class. Both income inequality and poverty saw sustained reductions from the early 2000s onwards. Much of this had to do with the recovery from the El Niño natural disaster and deep economic and financial crisis in the late 1990s. This was reflected in strong real wage increases, improvements in relative prices for farmers and employment, especially in services sectors. This provided an important boost to domestic market growth. Nonetheless, neither the economic liberalization of the 1990s nor the solidarity economy policies enacted by Correa's new leftist government from the mid-2000s did much to alter the economy's reliance on primary exports as the key driver of economic growth. Indeed, during the 2000s, improved international commodity prices helped the recovery and provided space for significant real wage and rural labour income increases, as well as for substantial increases in social spending. The lack of dynamic structural change in the economy, however, does not augur well for further declines in inequality and a continued strengthening of the middle class, as the structural causes of high inequality have not been addressed. The economic downturn that set in after 2014, following declines in international oil and other commodity prices, caused setbacks in real wage improvements and employment opportunities in formal and informal sectors alike, and has put a halt to the rise of the middle class.

A solid middle class can provide the backbone of more stable societies and sustained welfare. Ecuador's experience, alike that witnessed elsewhere in Latin America, has yet to reach that footing. An expanding middle class not rooted in strong aggregate productivity growth and structural change towards modern services and industries may neither be lasting nor become a basis for more balanced and sustained economic growth that is less vulnerable to global market shocks. Ecuador clearly has not entered that stage.

This is not to argue that a solid middle-class is a sufficient condition for sustainable development and political stability. Other things will need to fall into place as well. The changing distribution of middle-class spending toward new entrants will change aggregate demand. Households just entering the middle class will seek to purchase consumer durables, as well as services including tourism, entertainment, health, education, and transport. It will also change food demand towards increased consumption of animal-sourced food products, fruits and vegetables, and processed foods, all of which are more resource- and emission-intensive to produce, as compared with grains and other staple crops (FAO, 2017). More generally, growing middle-class spending will undoubtedly will increase carbon emissions and have a larger ecological footprint, but the size depends on government policies. For instance, if cities are properly planned with energy-efficient buildings and mass transport and food production is made more sustainable, then the carbon footprint of global middle-class expansion can be reduced considerably.

Crafting continued political support for the middle class may present a greater challenge. Unless globalization can be reframed into a win-win for the middle class in each country, the political narrative can be distorted into one of colliding interests between the middle class in emerging economies like Ecuador and those in advanced economies. A new package of “inclusive growth” must be constructed based on the common theme that continued widening of income and opportunity inequality, and the barriers these create to social mobility, must be forcefully tackled while preserving the benefits afforded by globalization and technological change and innovation.

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