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## **The growth-employment-poverty nexus in Latin America in the 2000s**

Cross-country analysis

Guillermo Cruces,<sup>1</sup> Gary S. Fields,<sup>2</sup> David Jaume,<sup>3</sup> and Mariana Viollaz<sup>4</sup>

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**Abstract:** In the great majority of Latin American countries in the 2000s, economic growth took place and brought about improvements in almost all labour market indicators and consequent reductions in poverty rates. Across countries, economic growth was not all that mattered; external factors were particularly important for changes in labour market conditions, while reductions in poverty were strongly related to improvements in earnings and employment indicators. Although the 2008 crisis affected some countries differently from others, nearly all labour market indicators were at least as high or higher by 2012 than immediately before the crisis in all countries but one.

**Keywords:** labour markets, economic growth, poverty, inequality, Latin America

**JEL classification:** J21, J30, O10, O54

**Figures and tables:** Provided at the end of the paper

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<sup>1</sup>CEDLAS, Universidad Nacional de La Plata, CONICET, and IZA; <sup>2</sup>Cornell University, IZA; corresponding author: gsf2@cornell.edu; <sup>3</sup>Cornell University, CEDLAS, Universidad Nacional de La Plata; <sup>4</sup>CEDLAS, Universidad Nacional de La Plata.

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## 1 Introduction and motivation

### 1.1 Context and motivation for the project

This project had its origins in a mid-2013 meeting attended by the director of UNU-WIDER (Finn Tarp) and one of the researchers on this project (Gary Fields). At that time, the United Nations' Millennium Development Goals were nearing their target date for completion, and the number one goal (to halve, between 1990 and 2015, the proportion of people whose income is less than 1 dollar-a-day) had already been achieved. A new Post-2015 Development Agenda was under discussion, and it was clear that it would include further progress towards poverty reduction, and indeed the goal of eliminating extreme poverty within the next 15 years gained a great deal of support.

UNU-WIDER, for its part, had just launched a four-year research programme with the three development challenges of transformation, inclusion, and sustainability. Fields has had a long-term research interest in improving labour market conditions as a means of helping the poor lead better material lives and had just published a book on this topic (Fields 2012). Other important works had just appeared as well—in particular, the World Bank's World Development Report 2013, entitled simply 'Jobs' (World Bank 2013). What struck Tarp and Fields and their colleagues was how much was known about some aspects of the problem, but also how little was known about others. In particular, a priority for deeper analysis was the growth-employment-poverty nexus in the various countries of the world.

By then, the dismal growth-employment-poverty record of the United States (US) and other OECD countries had been well-documented. In the case of the US, Stiglitz (2012, 2015) showed: recent US' economic growth took place primarily in the top 1 per cent of the income distribution; as a result, there was growing inequality; those at the bottom and in the middle are actually worse-off now than they were in 2000; life is particularly harsh at the bottom, and the recession made it much worse; and there has been a hollowing-out of the middle class. Other OECD countries have not done much better. The OECD Employment Outlook (2012, 2015) tells us: economic growth has not been strong enough to make more than a small dent in OECD-wide unemployment; labour market conditions are improving but recovery is far from complete; employment is still growing too slowly to close the jobs gap induced by the crisis any time soon; the jobs mix has shifted towards more part-time work, making it harder for some unemployed to find full time jobs; the OECD average unemployment rate is still 1.6 percentage points above its pre-crisis level; long-term unemployment also remains unacceptably high; and weak real wage growth also remains a concern, particularly in the euro area.

UNU-WIDER had a strong interest in learning about the links between growth, employment, and poverty in poorer regions of the world. It would have been an impossibly ambitious task to analyse the entirety of the rest of the world. Fortunately, though, an exceptional database had been compiled for Latin America and was available for our use. Household data sets have been processed by CEDLAS (Centro de Estudios Distributivos, Laborales y Sociales, Universidad Nacional de La Plata), compiled into the database SEDLAC-Socio-Economic Database for Latin America and the Caribbean (CEDLAS and World Bank 2014), and made available for us

to analyse in this project.<sup>1</sup> The microeconomic data used in this project included more than 150 household surveys, with observations for five million households and 18 million persons for 16 Latin American countries (Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, Honduras, Mexico, Panama, Paraguay, Peru, El Salvador, Uruguay, and Venezuela). Most countries offered annual household surveys, though a few were biennial, with sample sizes typically numbering in the tens of thousands of households.

With this database in hand, we decided to analyse the growth-employment-poverty nexus in Latin America during the 2000s, and UNU-WIDER launched a project to undertake this research. Specifically, our research project answers the following broad questions: Has economic growth resulted in economic development via improved labour market conditions in Latin America in the 2000s, and have these improvements halted or been reversed since the Great Recession of 2008? How do the rate and character of economic growth, changes in the various employment and earnings indicators, and changes in poverty and inequality indicators relate to each other?

From the very outset of the study, we adopted broad conceptualizations of the three key terms: growth, employment, and poverty. *Growth* includes the usual measure: the growth of real gross domestic product (GDP) per capita. But growth goes beyond just the growth rate to include also attention to the type of growth being pursued. Are mechanisms in place making the economic growth inclusive in the sense that ordinary people can share in improved standards of living through the work they do and/or through the social programmes available to them? *Employment and unemployment* also include the usual measures—employed if working even one hour for pay or 15 hours or more not for pay in the reference week, unemployed if not employed but actively looking for work—but in addition other aspects of employment such as the amount earned in a month and the type of work performed. And while *poverty* includes ‘income poverty’, that is not all of poverty, and non-income aspects can and do merit attention.

Part One of our research was a collection of 16 detailed country studies completed in late 2014 and revised early in 2015 (Cruces et al., 2015a–2015p). The evidence reveals heterogeneous stories across countries. Some of them exhibited rapid growth over the 2000s when compared to the average of the region and an improvement in labour market indicators. That was the case for Argentina, Chile, Colombia, Panama, Peru, and Uruguay. The Dominican Republic also experienced rapid economic growth, but the performance of its labour market indicators was mixed. Other countries improved their labour market indicators despite having slow economic growth. That was the case for Brazil, Paraguay, and Venezuela. Other countries, such as Bolivia, Costa Rica, and Ecuador, combined moderate economic growth with an improvement in their labour market indicators, or slow economic growth with mixed results in the labour market. That was the case for El Salvador, Honduras, and Mexico. The range of country experiences is instructive. Some are very good, others less good. Only one (Honduras) might reasonably be called dismal.

The present paper is Part Two of our research. In this second part of the project, we collected up all of the individual country results into a new data set on the rate of economic growth, changes in employment and earnings indicators, and changes in poverty and inequality

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<sup>1</sup> Three of the researchers—Cruces, Jaume, and Viollaz—are affiliates of CEDLAS.

indicators. With this dataset set we performed cross-country analysis of the growth-employment-poverty nexus and provided additional within-country evidence.

Overall, previous studies of individual Latin American countries generally show a positive association between economic growth, improvements in labour market indicators, and reductions in poverty. Just to mention a few prior studies, during the strong growth period from 2003 to 2006, Argentina exhibited large employment gains, increases in labour earnings with higher gains for less skilled workers, and a large reduction in poverty (Gasparini and Cruces 2010). The relatively long period of economic growth in Costa Rica (1976–2000) took place with increases in labour income, a reduction of employment in agriculture, and improvements in education, with a reduction in poverty levels (Fields and Bagg 2003). The 2000–06 period of economic growth in Mexico was accompanied by improvements in employment composition, rising real labour earnings, and falling poverty, although the country also experienced rising unemployment levels in those years (Rangel 2009).

Multi-country studies have also been carried out. We know that in Latin America, as in other low- and middle-income countries, employment as per the standard International Labour Organization (ILO) definition increased *apace* of labour force growth in every country but one (Cho et al. 2012).<sup>2</sup> World Bank (2015) highlights the upward trend in labour incomes as the main driver of poverty reduction in the Latin American region during the period of solid economic growth from 2003 to 2013. The growth in labour incomes has been partly explained by the improvement in the educational level of the population, and more importantly, by the commodity boom. However, the commodity boom had a heterogeneous impact across countries, with countries in the Andean region and the Southern Cone benefiting the most, and countries in Central America and Mexico benefiting less as they face bigger import bills and international competition. It is well known that since 2002, income inequality dropped in the region as a whole and in nearly all individual countries (Alvaredo and Gasparini 2014; Cornia 2014; Gasparini et al. 2011; Gasparini and Lustig 2011; López Calva and Lustig 2010). Cornia (2014) attributes falling Latin American inequality to global economic conditions and growth acceleration, a rapid equitable accumulation of human capital, and new policy approaches including macroeconomic policies, fiscal and monetary policies, trade and financial policies, and labour and social expenditure policies. ECLAC-ILO (2015) relates the remarkable progress in reducing poverty from 2002 to 2012 in the Latin America region to labour market trends: specifically, the strong job creation, especially in wage/salaried positions, and public policies, such as minimum wages increases, formalization of workers, and expanding coverage of social protection systems and education, contributed to poverty reduction. The most important factor was the combined increase in employment and wages, although in general, labour earnings increases had a greater impact than employment growth on household income changes (ECLAC 2014). Regarding non-contributory social protection systems, the resources allocated to conditional cash transfer (CCT) programmes directed to reduce poverty increased as a percentage of GDP from 2000 to 2010, the percentage of population covered by CCTs grew during the same period, and the number of countries in Latin America implementing CCTs also increased (Stampini and Tornarolli, 2012; Cecchini and Madariaga 2011).

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<sup>2</sup> The study does not identify any single country by name, so we do not know which country that was.

Nevertheless, some questions about the associations between changes in labour market indicators on the one hand and potential explanatory variables on the other could not be answered until data had been compiled systematically for a large number of countries. The individual country papers in Part One of this project provide such data, which we now assemble and analyse here and in the statistical Appendix. Using these data, we ask specifically in this paper: Do those countries that grew faster have larger and more widespread improvements in labour market conditions and consequently larger reductions in poverty? How tight is this cross-country relationship? To the extent that substantial variance is left unexplained by countries' rates of economic growth alone, what other factors might be responsible for improving labour market indicators? The other factors to be examined include initial GDP, the initial value of the labour market indicators, and a list of selected macroeconomic variables: agriculture as a percentage of GDP, industry as a percentage of GDP, services as a percentage of GDP, final consumption expenditure as a percentage of GDP, expenditure in education and health as a percentage of GDP, expenditure in social security as a percentage of GDP, terms of trade, foreign investments as a percentage of GDP, revenues from natural resources as a percentage of GDP, and stock of public debt as a percentage of GDP. Other questions we ask in this study are: Are labour market indicators moving together—improving or worsening? Do those countries that enjoyed larger and more widespread improvements in labour market conditions have larger reductions in poverty? Regarding the economic crisis of 2008, how did labour market indicators change during the crisis and its aftermath in Latin America? Finally, we ask additional questions on a country-by-country basis: If a country grows faster, what is the effect on the employment and earnings indicators and on poverty and inequality indicators? What is the relationship between employment and earnings indicators and poverty rates? How did earnings change over all deciles of each country's income distribution during the 2000s?

We turn now to the results. Looking first at a comparison between each country's initial household survey (typically the year 2000) and the final year (typically 2012), we find remarkable progress in all three aspects of the growth-employment-poverty nexus:

*Growth:* National income accounts reveal that all 16 countries achieved positive rates of growth of real GDP per capita. These annualized rates ranged from just below 1 per cent in the case of Mexico to 5.6 per cent in the case of Panama and Peru. The regional average (unweighted) for the 16 Latin American countries was just under 3 per cent, well above the annualized rate of growth of GDP per capita in OECD countries, which was 1.0 per cent.

*Labour market indicators:* The rate of improvement in labour market indicators in Latin America was exceptional. All 16 of the labour market indicators used in this study improved in Bolivia, Brazil and Peru, 15 of the 16 improved in Panama, and the majority of the labour market indicators improved in all of the other countries except for one (Honduras).

*Poverty rates:* Using the 4 dollars-a-day poverty line ('poverty') and the 2.5 dollars-a-day poverty line ('extreme poverty'), we find reduced rates of poverty and extreme poverty in 15 of the 16 countries. Once again, Honduras was the only Latin American country to have registered an increase in its rate of poverty.

In short, the 2000s were a time of strong improvement in the growth-employment-poverty nexus in Latin America.

Of course, like the rest of the world, Latin America suffered from the global economic crisis of 2008. However, the downturns in Latin America were milder and more short-lived. Real GDP per capita in Latin America fell at a 1.5 per cent annual rate in 2008–09, but then grew at a near 3 per cent annual rate from 2009 to 2012. In the labour market, most countries in the region suffered a deterioration in at least some labour market indicators as a consequence of the international crisis of 2008, but the negative effects were reversed very quickly in most countries, with the result that nearly all labour market indicators showed improvements in 2012 compared to where they had been in 2008. And both poverty and extreme poverty rates fell monotonically, even during the global economic crisis.

In sum, in the great majority of Latin American countries, economic growth took place and brought about improvements in almost all labour market indicators and consequent reductions in poverty rates. But not all improvements were equal in size or caused by the same things. To understand why some countries progressed more in some dimensions than others, we performed a number of additional analyses, from which we drew the following lessons:

- For the region as a whole, real GDP per capita grew during the 2000s, all employment and earnings indicators improved, and poverty and inequality fell.
- Country-by-country, real GDP per capita grew during the 2000s in all Latin American countries, the great majority of labour market indicators improved in all countries but one, poverty rates using the 2.5 and 4 dollars-a-day poverty lines fell in all countries but one.
- Looking across countries, faster growth was associated with larger improvements in labour markets indicators, but the relationships were not tight.
- Looking across countries, increases in some macroeconomic factors were associated with changes in labour market conditions in Latin America during the 2000s, some of them always in the welfare-improving direction and some others always in the welfare-reducing direction.
- Looking across countries, larger improvements in employment and earnings were associated with larger reductions in poverty.
- Looking at year-by-year changes within countries, when economic growth was faster employment and earnings indicators and poverty and inequality indicators improved more rapidly, and the faster labour market conditions improved, the faster poverty was reduced. The magnitude of the effect and the pattern over time varied substantially from country to country.
- The patterns of changes in labour market earnings were strongly progressive.

In conclusion, the growth-employment-poverty nexus in Latin America changed much more favourably than was the case in the OECD countries in general and the US in particular. It would be interesting to know about developing economies in other regions of the world. Such studies define the current research frontier.

The balance of this paper proceeds as follows. Following a discussion of the data sources and methodologies used (Section 2), Section 3 of the present paper describes the growth experience and the changes in employment and earnings indicators and poverty and inequality indicators in the Latin American region as a whole and on a country-by-country basis during the 2000s and during the international crisis. Section 4 presents a cross-country analysis of the growth-employment-poverty nexus in Latin America during the 2000s. First, we relate a series of indicators of changing labour market conditions to countries' rates of economic growth and to other potential correlates of changing labour market indicators. Second, we relate changing labour market conditions to changes in the poverty rates. Section 5 introduces a within-country analysis of the growth-employment-poverty nexus through the estimation of labour market indicators' elasticities with respect to GDP per capita growth, poverty indicators' elasticities with respect to employment and earnings indicators, and growth incidence curves. Section 6 concludes.

## **2 Data and methodology**

### **2.1 Data sources**

This study is based on microeconomic data from more than 150 household surveys, five million households and 18 million persons contained in the SEDLAC-Socio Economic Database for Latin American and the Caribbean (CEDLAS and the World Bank 2014). These data cover the following 16 Latin American countries: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Honduras, Mexico, Panama, Paraguay, Peru, Uruguay, and Venezuela. Based on these household surveys and the SEDLAC harmonization methodology, we constructed comparable time series for a wide range of labour market and income inequality indicators. In the following sections, we focus mainly on the changes from the initial to the final year in the period under study, listed for each country in Table 1. We present the indicators' time series for each country in Appendix 1. For some countries, the period under study in this cross-country paper differs from the time period analysed in the corresponding country papers. The reason for using a different time period is the lack of comparability between the initial and final year surveys. That was the case for Costa Rica, where we used 2000–09 as the period of analysis for all the labour market and income inequality indicators in this paper. For other countries, we used a different time period only for some particular indicators. Appendix 1 indicates with a vertical line when the country changed a classification so that it is not possible to use a consistent definition throughout the full time period.

In this paper, we also employ aggregate macroeconomic indicators from two sources: the World Bank's World Development Indicators (WDI) (World Bank 2014) and the United Nations Economic Commission for Latin America and the Caribbean's (UN-ECLAC 2015) database on social expenditure.

#### *Labour market indicators*

The main purposes of the analysis are to determine whether each labour market indicator has improved or deteriorated over time on a country-by-country and cross-country basis, and what are the determinants and correlates of these changes. We use, in total, 16 labour market indicators that we assign to one of two different categories: employment and earnings indicators,



and poverty and income inequality indicators. For the employment and earnings indicators, we judge a welfare improvement to have taken place if we find:

Unemployment:

- A decrease in the unemployment rate.

Occupational composition:

- A decrease in the share of low-earnings occupations.
- An increase in the share of high-earnings occupations.<sup>3</sup>
- An increase in the share of wage/salaried employees.
- A decrease in the share of self-employment.
- A decrease in the share of unpaid family workers.<sup>4</sup>
- A decrease in the share of workers in low-earnings sectors.
- An increase in the share of workers in high-earnings sectors.<sup>5</sup>
- A decrease in the share of workers with low levels of education.
- An increase in the share of workers with high levels of education.<sup>6</sup>
- An increase in the share of workers registered with the social security system.

Labour earnings:

- An increase in mean labour earnings.

For the poverty and income inequality indicators, we judge a welfare improvement to have taken place if we find:

Poverty and inequality:

- A decrease in the 4 dollars-a-day poverty rate.
- A decrease in the 2.5 dollars-a-day poverty rate.
- A decrease in Gini coefficient of household per capita income.
- A decrease in Gini coefficient of labour income.

These indicators are defined as follows.

The unemployment indicator is defined following the ILO guidelines: it represents the share of unemployed persons over the economically active population. A person is unemployed if they are 15 years old or more and during the reference period (usually one month, but it depends on the survey of each country), they were without work, available for work and seeking work. A fall in the unemployment rate is classified as an improvement in the labour market.

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<sup>3</sup> The residual category is the share of medium-earning occupations.

<sup>4</sup> The residual category is the share of employers.

<sup>5</sup> The residual category is the share of medium-earning sectors.

<sup>6</sup> The residual category is the share of medium-educated workers.

Occupational groups are defined by means of a two-step process. First, for each country, we identify the following categories:<sup>7</sup> management; professionals; technicians and associate professionals; clerical; service and sales workers; agricultural, forestry and fishery workers; craft and related trades workers; plant and machine operators and assemblers; elementary and armed forces. Second, we classify them into low-earnings, medium-earnings, and high-earnings occupations. For each country, the low-earnings occupations are defined as the three occupations with the lowest mean earnings during the analysed period, the high-earnings occupations are the three occupations with the highest mean incomes, and the rest are classified as medium-earnings occupations. A fall in the share of low-earnings occupations and an increase in the share of high-earnings occupations imply an improvement in the labour market.

Occupational position is classified into four categories: employer, wage/salaried employee, self-employed, and unpaid worker. Given the nature of labour markets in Latin America, the analysis of the employment structure according to occupational positions identifies as improvements in the labour market the following situations: a decrease of self-employment, a decrease in the share of unpaid family workers, and an increase in the share of wage/salaried employees.

Sector of employment is also classified by means of a two-step procedure. We first identify ten sectors: primary activities; low-tech industry; high-tech industry;<sup>8</sup> construction; commerce; utilities and transportation; skilled services; public administration; education and health; and domestic workers. We further classify the sectors according to the shares of workers in low, medium, and high-earnings sectors, using the same criteria as in the case of the occupational groups. An increase in the share of high-earnings sectors and a decrease in the share of low-earnings sectors represent improvements in the labour market in our analysis.

With respect to the educational level of employed workers, we define three categories for the analysis: low (eight years of schooling or less); medium (from nine to 13 years of schooling); and high (more than 13 years of schooling). An increase in the education of the employed population is considered as an improvement in the labour market, as the share of workers that are expected to receive high levels of earnings increases and the share of workers with low earnings' levels decreases.

We also classify the employed population according to whether they are registered with the social security system or not. In some of the countries, only wage and salaried employees are asked about registration in the social security system. We assume that it is better for employed workers to be registered, and thus an increase in this indicator is classified as an improvement in the labour market.

Labour earnings are expressed on a monthly basis in 2005 purchasing power parity (PPP) dollars. Higher earnings represent an improvement in the labour market.

Poverty and inequality are calculated as follows. Poverty rates are based on the international poverty lines of 4 dollars-a-day and 2.5 dollars-a-day (all in PPP dollars), and represent the

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<sup>7</sup> This is the International Standard Classification of Occupations of 2008 (ISCO-08) at a one digit level. In the case of Argentina, this classification cannot be obtained from household surveys' data. Argentina is then excluded from the analysis of changes in the occupational composition of the employed population.

<sup>8</sup> For Bolivia and Paraguay, we cannot distinguish between low- and high-tech industries.

poverty and extreme poverty levels respectively, often used in Latin America. These poverty indicators are based on household income per capita. Household income is the sum of labour income plus non-labour income, which includes capital income, pensions, public and private transfers, and the imputed rent from own-housing. Income inequality is calculated using the Gini coefficient of household per capita income and of labour earnings among employed workers.

To sum up, changes in labour market indicators in Latin American countries during the 2000s are evaluated using the following criteria. Improvements in labour market conditions are associated with: a decrease in unemployment; increases in the shares of high-earnings occupations, wage/salaried employees, workers in high-earnings sectors, and workers with high levels of education; an increase in monthly labour earnings; declines in the shares of low paid occupations, unpaid family workers, self-employed, low-earnings sectors, and workers with low levels of education; and declines in poverty rates and inequality indicators. Worsenings in labour market conditions are associated with changes in labour indicators in the opposite direction.

#### *Macroeconomic indicators*

We also use data on macroeconomic variables to correlate them to the changes in labour market indicators described above. These data comes from two sources. First, from the World Bank's WDI, we use: GDP per capita in the initial year; agriculture as a percentage of GDP; industry as percentage of GDP; services as a percentage of GDP; final consumption expenditure as a percentage of GDP; exports as a percentage of GDP; terms of trade; foreign direct investment as a percentage of GDP; and revenues from natural resources as a percentage of GDP. Second, from the United Nations Economic Commission for Latin America and the Caribbean (UNECLAC 2015) database on social expenditure, we use: expenditure in education and health as a percentage of GDP; public expenditure in social security as a percentage of GDP; and stock of public debt as a percentage of GDP. For all macroeconomic variables with the exception of GDP per capita in the initial year, we use data on the initial and final years and calculate the annualized change.

#### *Variables and notations*

We denote each of the  $K$  labour market indicators as  $Y_k$  and each of the  $J$  macroeconomic variables as  $X_j$ . In the following analysis, we will use this notation:

$X_{ijt}$ : Macroeconomic variable  $j$  for country  $i$  at time  $t$ .

$Y_{ikt}$ : Labour market indicator  $k$  for country  $i$  at time  $t$ .

$\% \Delta X_{ij}$ : Annualized percentage change of macroeconomic variable  $j$  for country  $i$  from initial to final year.

$\Delta X_{ij}$ : Annualized change in percentage points of macroeconomic variable  $j$  for country  $i$  from initial to final year.

$\% \Delta Y_{ik}$ : Annualized percentage change of labour market indicator  $k$  for country  $i$  from initial to final year.

$\Delta Y_{ik}$ : Annualized change in percentage points in labour market indicator  $k$  for country  $i$  from initial to final year.

$Z_i$ : Percentage of labour market indicators that improved for country  $i$  from initial to final year.

Note that the operator  $\% \Delta$  embodies an annualized percentage change. We calculated annualized percentage changes for GDP per capita, labour earnings, Gini coefficients, and terms of trade. For the rest of the indicators, the operator  $\Delta$  is used, indicating annualized changes in percentage points. For example, annualized changes in percentage points include the change in unemployment, in the share of worker registered with the social security system, or in industry's share of GDP.

We calculate these changes as follows. Let initial year be  $t_0$  and final year be  $t_1$ . Then:

$$\begin{aligned} \% \Delta X_{ij} &= \left[ \left( \frac{X_{ij t_1}}{X_{ij t_0}} \right)^{1/(t_1-t_0)} - 1 \right] * 100, \\ \% \Delta Y_{ik} &= \left[ \left( \frac{Y_{ikt_1}}{Y_{ikt_0}} \right)^{1/(t_1-t_0)} - 1 \right] * 100, \\ \Delta X_{ij} &= \left( \frac{X_{ij t_1} - X_{ij t_0}}{t_1 - t_0} \right), \\ \Delta Y_{ik} &= \left( \frac{Y_{ikt_1} - Y_{ikt_0}}{t_1 - t_0} \right). \end{aligned} \tag{1}$$

As a way to summarize the evolution of the large number of indicators covered in each country study, we devised a measure  $Z_i$  based on the percentage of the available labour market indicators for each country over the period under study which exhibited a statistically significant improvement at the 5 per cent level.<sup>9</sup> We express  $Z_i$  as a percentage instead of the actual number of indicators that increased because not all indicators are available for all countries in every year. This measure provides a general direction of change in the labour market. The costs of this simple synthetic index are that it implicitly assigns an equal weight to each indicator, and it does not take into account the magnitude of the changes (only if the change was statistically significant or not). Nonetheless, this index provides a handy summary indicator of labour market improvements in each country, and so we make extensive use of it in the analysis that follows.

#### *A note on causality versus correlation*

The change in a macroeconomic variable  $j$  ( $\Delta X_j$  or  $\% \Delta X_j$ ) and the change in a labour market indicator  $k$  ( $\Delta Y_k$  or  $\% \Delta Y_k$ ) may be associated with each other either because  $\Delta X_j$  causes  $\Delta Y_k$  or because the two of them are caused by a third factor. An example of  $\Delta X_j$  causing  $\Delta Y_k$  would be a situation in which a shock in terms of trade brings about an increase in the demand for labour and in mean labour earnings. An example of  $\Delta X_j$  and  $\Delta Y_k$  being caused by a third factor would

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<sup>9</sup> The significance of changes is computed as a mean difference test between the initial and the final year for each country in the sample.

be a situation in which training more workers in occupations where shortages exist results in higher exports and an improvement in employment composition in favour of high-earnings occupations.

We implicitly assume throughout the analysis that there is not reverse causation, that is, that changes in labour market indicators do not affect macroeconomic variables (or at least not directly). It is a judgment call whether to make causal interpretations or to be more cautious and choose wording in terms of correlations between variables, and we have done some of each.

### **3 Changing labour market indicators and the rate of economic growth in Latin America during the 2000s**

This section presents the aggregate evidence on changes in labour market indicators, economic growth rates, and on the relationship between the two.

#### **3.1 Economic growth rate and changes in labour market indicators in the Latin American region**

The Latin American region exhibited an outstanding performance in terms of GDP per capita growth and improvements in labour market indicators over the 2000s. Figure 1 provides the evolution over time of the unweighted average (counting each country with a weight of 1 regardless of the size of its population) of GDP per capita at 2005 PPP, and of each of the 16 labour market indicators, from 2000 to 2012.

Between 2000 and 2012, average GDP per capita grew by 35.2 per cent in the Latin American region, a growth rate nearly three times larger than in developed countries. The corresponding figures for OECD countries and the US in particular were 12.4 and 10.7 per cent respectively (WDI 2014). All employment and earnings indicators improved for the average of the region during the 2000s. Just to mention a few examples, the average unemployment rate across the 16 countries fell from 8.7 per cent in 2000 to 5.7 per cent in 2012, the share of registered workers increased from 40.2 to 46.9 per cent over the same period, and the share of unpaid family workers in total employment declined from 6.8 to 5.5 per cent. All poverty and income inequality indicators improved as well. The moderate and extreme poverty rates exhibited sharp reductions from 2000 to 2012. The 4 dollars-a-day poverty rate fell from an average of 40.4 per cent in 2000 to 20.4 per cent in 2012, while the 2.5 dollars-a-day poverty rate decreased from 23.9 to 12.8 per cent over the same period. The Gini coefficient of household per capita income decreased from 0.531 in 2000 to 0.477 in 2012 and the Gini coefficient of labour earnings from 0.515 to 0.468.

In summary, from beginning to end in the region as a whole GDP per capita grew, all employment and earnings indicators improved, and poverty and inequality indicators fell remarkably.

#### **3.2 Economic growth rate and changes in labour market indicators country-by-country**

The growth experience during the 2000s was positive for all Latin American countries: all countries in the region experienced an increase in their GDP per capita. Table 2 presents annualized growth rates of GDP per capita for each country in our sample for the years for

which we have detailed labour market indicators (starting in c.2000 and up to c.2012). The figures in the table indicate positive growth rates overall, with most countries close to the region's average growth rate of 2.9 per cent per year. However, a small number of countries grew at comparatively modest rates (0.8 per cent per year in Mexico, 1.4 per cent per year in El Salvador, and 1.7 per cent per year in Venezuela), while others experienced particularly large growth rates by Latin American standards (5.6 per cent in both Panama and Peru).

Increases in GDP per capita were accompanied by generalized improvements in labour market indicators over time for most countries in our sample. The rest of this section details these improvements: we succinctly describe the evolution of each of the 16 labour market indicators in each country. We do so in two ways, first by presenting the changes in the indicators one by one ( $\% \Delta Y_{ik}$  or  $\Delta Y_{ik}$ ,  $i=AR, BO, \dots, VE$  and  $k=1, \dots, 16$ ) and then by aggregating them into an index  $Z_i$ .

Table 3 presents the qualitative changes over time in each of the 16 selected labour market indicators for each country. We define these changes so that a positive value always signifies a welfare improvement (e.g. decrease in unemployment rate instead of change in the unemployment rate). The '+' sign in a cell indicates that for that indicator and country, there was a change in the welfare-improving direction from the first survey year to the last and this change was statistically significant at the 5 per cent level. The '-' sign indicates the opposite, that is, the labour market indicator changed in the welfare-worsening direction for that country over the years under study, and that change was statistically significant at the 5 per cent level. Finally, the 'NC' in a cell refers to no statistically significant change.

Figure 2, in turn, depicts the evolution over time for each specific labour market indicator in each country. Here, the data are presented untransformed, so that for example the unemployment rate in Argentina first rose and then fell, ending up much lower at the end of the period than at the beginning. Adding yet further detail, we add the underlying time series to each graph; please see Appendix 1 for country-by-country presentations.

#### *Analysis of the labour market indicators one by one ( $Y_k$ )*

Looking at the employment and earnings indicators, here is how they changed over time:

Unemployment rates fell in most of the countries (13 out of 16 countries over the 2000s); they were Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Honduras, Panama, Peru, Paraguay, El Salvador, Uruguay, and Venezuela. However, there were statistically significant increases in unemployment in Costa Rica and Mexico and no significant change in the Dominican Republic.

There was also a generalized improvement in the job mix in most countries in the sample for which these indicators are available (the distributions of workers among occupations, occupational positions, sectors, and educational levels). The most consistent changes in the job mix were the improvement in the educational level of the employed population and in the distribution of employment by economic sector. The educational level of the employed population improved in all countries in the sample: the share of employed workers with low educational levels diminished at the same time that the share of employed workers with high educational levels increased. The sectoral composition of employment improved in 13 countries (Argentina, Bolivia, Brazil, Costa Rica, Dominican Republic, Ecuador, Mexico, Panama, Peru,

Paraguay, El Salvador, Uruguay, and Venezuela): either the share of low-earnings sectors decreased (with no change in the share of high-earnings sectors) or the share of high-earnings sectors increased (with no change in the share of low-earnings sectors) or both. For ten countries (Bolivia, Brazil, Costa Rica, Dominican Republic, Ecuador, Mexico, Panama, Peru, Paraguay, and Venezuela), there was both a decline in the share of low-earnings sectors and an increase in the share of high-earnings sectors. For two countries, only the share of low-earnings sectors improved (El Salvador and Uruguay), and for one country (Argentina), there was only an increase in the share of high-earnings sectors. For the remaining three countries that did not follow the general trend, the changes were ambiguous for Chile and Colombia (where there were increases in both shares), and there was a deterioration for Honduras (there was an increase in the share of low-earnings sectors and no change in the share of high-earnings sectors).

The distribution of employment by occupation improved in 11 countries (Bolivia, Brazil, Colombia, Costa Rica, Ecuador, Mexico, Panama, Peru, Paraguay, Uruguay, and Venezuela): either the share of low-earnings occupations decreased (with no change in the share of high-earnings occupations) or the share of high-earnings occupations increased (with no change in the share of low-earnings occupations) or both. For ten countries (Bolivia, Brazil, Colombia, Costa Rica, Ecuador, Mexico, Panama, Peru, Uruguay, and Venezuela), there was both a decline in the share of low-earnings occupations and an increase in the share of high-earnings occupations. For only one country (Paraguay) did the share of low-earnings occupations decrease with no change in the share of high-earnings occupations. For the remaining four countries, three exhibited a mixed change (Chile, Dominican Republic, and El Salvador), i.e. an improvement in one of the indicators jointly with deterioration in the other one, while in only one country (Honduras) there were no significant changes in the employment composition by occupation during the period.

The distribution of the employed population by occupational position improved significantly in ten countries in our sample (Argentina, Bolivia, Brazil, Chile, Costa Rica, Panama, Peru, Paraguay, Uruguay, and Venezuela): the share of wage/salaried employees increased and the shares of self-employed and unpaid family workers fell or did not change significantly. The distribution by occupational position deteriorated in four countries, with a fall in the share of wage/salaried employees and an increase (or no significant change) in the shares of the self-employed and of unpaid family workers (Colombia, Dominican Republic, Ecuador, and Honduras). The pattern of change was ambiguous for El Salvador, where the change in the share of wage/salaried employees was not statistically significant, the share of the self-employed fell, and that of unpaid family workers increased, and for Mexico where the share of wage/salaried employees increased, the share of unpaid family workers fell, but the share of self-employment grew.

In most of the countries in our sample (12 out of 16 countries: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, Panama, Peru, Paraguay, and Uruguay), there was also an increase in the share of workers registered with the social security system. The evolution of this indicator, however, was negative in three countries in our sample—the registration of workers fell significantly in Honduras, Mexico, and El Salvador—and we do not observe a statistically significant change for Venezuela.

Average labour earnings increased in 11 out of 16 countries, although they fell significantly for the remaining five. Increases in labour earnings took place in Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, Panama, Peru, Paraguay, and Venezuela, with decreases in

labour earnings taking place in the Dominican Republic, Honduras, Mexico, El Salvador, and Uruguay. It should be noted, however, that this indicator evolved differently over time in different countries. For instance, average earnings fell at the beginning of the period under study and then grew steadily in Argentina, Chile, Costa Rica, Panama, Paraguay, Peru, and Uruguay, but the overall change was positive for all except Uruguay. On the other hand, labour earnings grew over most of the period in Bolivia, Brazil, Colombia, and Ecuador, and fell steadily in El Salvador. Finally, labour earnings moved erratically over the period in Dominican Republic, Honduras, Mexico, and Venezuela.

Turning now to the poverty and income inequality indicators, poverty rates measured by both the 2.5 and 4 dollars-a-day international lines declined in 15 out of 16 countries in our sample, with the sole exception of Honduras, where both indicators increased.

The poverty-reducing pattern in the region goes hand-in-hand with the upward trend in labour earnings and with the reduction in the unemployment rate in most countries. Interestingly, the reduction in poverty indicators occurred also in countries where mean labour earnings fell (Dominican Republic, Mexico, El Salvador, and Uruguay) and/or unemployment increased (Costa Rica and Mexico). This finding brings the role of public expenditure in social security systems as a potential factor to explain the reduction in poverty in Latin America. The relationship between changes in public expenditure in social security and in education and health, and changes in poverty indicators are analysed in Section 4. In the same section, a detailed analysis of the relationship between changes in poverty and changes in employment and earnings indicators is also presented.

Inequality of household per capita income and of labour income fell in 14 out of 16 countries in our sample (Argentina, Bolivia, Brazil, Chile, Colombia, Dominican Republic, Ecuador, Mexico, Panama, Peru, Paraguay, El Salvador, Uruguay, and Venezuela). All countries exhibited significant reductions in the Gini coefficient of household per capita income and labour earnings with the exceptions of Costa Rica (where inequality of labour earnings increased and inequality of household per capita income remained unchanged) and Honduras (where both inequality indicators grew). The inequality-reducing pattern that took place in most countries indicates that increases in labour earnings, the main source of income of households in Latin America (as in other parts of the world), were accompanied by welfare-improving inequality changes.

In sum, in the 2000s, in most of the countries nearly all labour market indicators improved, Honduras being the exception to this general trend. Unemployment rates fell in the majority of the countries, as did poverty and inequality. The job mix and labour earnings also improved in the great majority of countries.

*Analysis of the percentage of labour market indicators that changed in the welfare-improving direction (Z)*

As a way to summarize the evolution of the large number of indicators covered in each country study, we devised a measure based on how many of these indicators exhibited a statistically significant improvement, calculated as a percentage of the available indicators for each country



over the period of study.<sup>10</sup> This measure provides a general direction of change in the labour market. The calculations using this measure are presented in the bottom row of Table 3. Our results indicate that 75 per cent or more of our selected labour market indicators improved in the following 13 countries: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, Mexico, Panama, Peru, Paraguay, Uruguay, and Venezuela. Of the remaining countries, 62.5 per cent of indicators improved in the Dominican Republic and El Salvador. Honduras is the only Latin American country that experienced a generalized worsening of labour market indicators (an improvement in only three out of 16 available indicators).<sup>11</sup>

### *Summary*

In sum, our systematic evidence reveals that all countries in the region experienced an increase in their GDP per capita during the 2000s, and nearly all countries experienced substantial improvements over time in most labour market indicators.

### **3.3 The 2008 economic crisis and changes in labour market indicators**

Up to now, we have analysed changes in GDP per capita and labour market indicators between the start of our data series (the year 2000 in most countries) and the end (most commonly, 2012). Of course, this period includes the international crisis of 2008. In this section, we analyse how this crisis affected labour markets in Latin American countries, whether they recovered fully or partially, and how speedy was the recovery (or how long-lasting was the crisis).

Throughout the world, the international economic crisis brought about negative economic growth of greater or lesser severity, followed by recovery. Focusing on a comparison between Latin America and some developed countries, the countries in our study suffered a reduction, on average, of 1.5 per cent in GDP per capita between 2008 and 2009. The average fall for the group of OECD countries was 3.95 per cent in GDP per capita, whereas the loss for the US was 3.65 per cent over the same period (World Bank 2014). The OECD countries as a whole and the US in particular recovered the pre-crisis GDP per capita level in 2012.

The impact of the economic crisis on labour markets was heterogeneous across developed countries. In some European countries, such as Luxemburg, Denmark, and Germany, the effects were short-lived, while in others, such as Spain, Cyprus, Greece, and Ireland, dramatic losses of employment and increases in unemployment rates were observed, and by 2012 data tended to show a re-intensification of the negative effects of the crisis (ECB 2012). The US exhibited larger employment losses compared to Europe despite the similar reduction in GDP. In fact, the unemployment rate more than doubled in the US during the crisis with a considerable increase in long-term unemployment (Elwell 2013). The increase in the unemployment rate in the US was long-lived: it recovered its pre-crisis level only by 2015 (Bureau of Labour Statistics 2015). Additionally, following the international crisis, labour

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<sup>10</sup> We express this as a percentage instead of the actual number of indicators that increased because not all indicators are available for all countries in every year.

<sup>11</sup> Most of the worsening changes in Honduras took place during and after the international crisis and coincided with a military coup. See the Cruces et al. (2015j) for more details and references.

markets became increasingly polarized with low-earnings occupations' share increasing by more than the share of high-earnings occupations (Autor and Dorn 2013).

In Latin America too, economic growth turned negative in 2008–09 (Table 2). The crisis reduced GDP per capita, on average, by 1.5 per cent in the region, less than half of the reduction in the OECD countries. The impact of the crisis was heterogeneous across countries in Latin America. Paraguay, Venezuela, Honduras, Mexico, and El Salvador were all severely affected, with reductions in GDP per capita of 4 to 6 per cent. GDP per capita fell by 1 to 3 per cent in Brazil, Chile, Costa Rica, and Ecuador; it virtually remained unchanged in Argentina, Colombia, and Peru, while it still increased by about 2 per cent in Bolivia, the Dominican Republic, Panama, and Uruguay.

After 2008–09, recovery quickly ensued. In the post-crisis period, all countries once again achieved positive economic growth rates and recovered their pre-crisis GDP per capita levels by 2010, two years earlier than most of the OECD countries. Table 2 shows that the annualized growth rates in the post-crisis period were positive for all Latin American countries, and for seven of the 16 countries in our sample, the annualized growth rate in the post-crisis period (2009–12) was larger than in the pre-crisis period (2000–08).

How did labour market indicators change during the crisis and its aftermath in Latin America? As shown above, we know from studies from other regions that labour market indicators worsened and then recovered to a greater or lesser degree.

In Latin America, starting with the crisis period, labour markets in most countries of the region were affected adversely by the international crisis, with a great deal of heterogeneity across countries in the number of labour market indicators that worsened during the crisis. Table 4 summarizes the changes in indicators for each country between 2008 and 2009, using again the '+', '-' and 'NC' signs to denote changes in the welfare-improving direction, changes in the welfare-worsening direction, and non-significant changes, as in previous tables. The most widespread negative change was the increase in the unemployment rate (for 12 out of 16 countries), followed by a fall in the share of wage/salaried employees (seven out of 16 countries) and an increase in self-employment (seven out of 16 countries).

The evidence in Table 4 indicates that Colombia and Honduras were the most affected with negative changes in ten labour market indicators. In Bolivia, Peru, and Uruguay, we do not observe a deterioration in any of the labour market indicators, although they experienced a slowdown in the improving trend in most of them. The rest of the countries suffered a deterioration in at least one labour market indicator during the international crisis, with different degrees of exposure. For instance, in Brazil only the unemployment rate increased substantially, whereas Ecuador experienced negative changes in several other indicators.

Figure 3 illustrates the relationship between the percentage of labour market indicators that worsened during the crisis and the change in GDP per capita between 2008 and 2009. There is a negative relationship (reductions in GDP per capita are associated with a larger percentage of indicators moving in the worsening direction) between the two variables, with an R-squared of 0.18. The patterns are, again, heterogeneous across countries. Two of the countries in which labour market indicators were not affected by the crises (Bolivia and Uruguay) experienced positive levels of growth. The Dominican Republic and Panama grew at similar rates, but

suffered a deterioration of some labour market indicators during the crisis. At the other extreme, the countries with the largest fall in GDP per capita (Mexico, Paraguay, and Venezuela) suffered a deterioration in about the same number of labour market indicators as the Dominican Republic, but far from the generalized deterioration in Colombia, with almost no change in GDP per capita during the crisis.

Paying particular attention to the growth-employment-poverty nexus, it is interesting to observe that poverty rates increased in only a few countries during the crisis: moderate poverty (computed with the 4 dollars-a-day poverty line) increased in five countries, and extreme poverty (computed with the 2.5 dollars-a-day poverty line) increased in only one country. The small effect of the crisis on poverty rates can be related to the small effect the crisis had on labour earnings. Table 4 shows that only four countries suffered a reduction in labour earnings during the crisis (Ecuador, Honduras, Mexico, and Venezuela). To see more clearly the connection between labour earnings and poverty, of the four countries where labour earnings fell during the crisis, three also exhibited increases in their poverty rates (Ecuador, Mexico, and Venezuela). However, unemployment rates increased in 12 out of 16 countries, indicating that during the crisis, employment declined with a small effect on wages. Section 4 below presents a more in-depth analysis of the relationship between poverty indicators and employment and earnings indicators. Most countries reacted quickly during the crisis, implementing or expanding cash transfers and emergency programmes, thereby mitigating the effect of the increase in unemployment on poverty (Cechinni and Madariaga 2011; Veras Soares 2009). The accompanying country case studies describe some of the interventions of the governments in the region during the aftermath of the crisis. Just to mention a few of them: Argentina increased social expenditure during and after the international crisis through the creation (and subsequent rise in levels) of the *Asignación Universal por Hijo* cash transfer programme, and also increased public works and public employment; Costa Rica expanded the coverage of the cash transfer programme *Avancemos* and also increased non-contributory pensions; El Salvador implemented cash and in-kind transfers and financial support to local producers; Mexico introduced and expanded employment programmes such as *Programa de Preservación del Empleo* and *Programa Temporal de Empleo*, and also expanded the *Oportunidades* cash transfer programme. The only two countries which did not implement any countercyclical policy during the international crisis were Honduras (which was facing political instability) and Venezuela (which suffered reduced oil revenues during the crisis).

Turning now to the post-crisis period, labour market indicators fully or partially recovered in most countries. Table 5 presents the post-crisis evolution of the labour market indicators that deteriorated during the crisis. We distinguish between total and partial recoveries: total recoveries ('++' sign in the table) signify that the indicator surpassed its pre-crisis level; partial recovery ('+') indicates that the indicator improved from the worst year of the crisis, but not by enough to achieve its pre-crisis level. Figure 4 shows for each country the distribution of labour market indicators that were affected and not affected during the crisis.<sup>12</sup> Most labour market indicators had fully or partially recovered in most countries by 2012–13. The share of low-earnings occupations, the share of low-educated workers, and the moderate and extreme poverty

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<sup>12</sup> Some labour market indicators improved during the crisis and deteriorated in the post-crises period. Since the purpose of this section is to assess the impact of the crisis and the ensuing recovery, in Figure 4 we classified these cases as indicators that were not affected by the crisis.

rates recovered fully or partially in all countries which suffered a deterioration in these indicators during the crisis. Other labour market indicators recovered in at least half of the countries that faced a worsening during the crisis. These indicators were the unemployment rate, the share of high-earnings occupations, the shares of wage/salaried employees, self-employment, and unpaid family workers, the share of low-earnings sectors, the share of high educated workers, the share of registered workers, mean labour earnings, and the Gini coefficient of labour earnings. The only labour market indicator that did not recover in the aftermath of the crisis was the share of workers in high-earnings sectors.

Besides the three countries whose labour market indicators were not affected by the crisis (Bolivia, Peru, and Uruguay), three other countries (Argentina, Brazil, and Paraguay) recovered completely from the deterioration suffered during the crisis (i.e. the indicators were better in the final year than in the pre-crisis year). Chile and Colombia experienced a mix of total and partial recoveries in their indicators (i.e. the situation was better than during the crisis but not always better than in the pre-crisis year). Honduras continued to have a generalized deterioration in its labour market indicators following the crisis. The bad performance of Honduras during and after the crisis was related to the political instability (the country suffered a military coup in 2009) that prevented the country from adopting the measures needed to counteract the effects of the global recession. The remaining seven countries experienced a mixed evolution, with a deterioration and some partial or total recoveries in different indicators.

In sum, most of the countries in the region experienced a reduction or a stagnation in their GDP per capita during 2008-09 and a recovery thereafter. Following an initial worsening of labour market indicators in most Latin American countries, the majority recovered or surpassed their pre-crisis levels by the end of the period for which we have data (typically 2012).<sup>13</sup> In the majority of countries, poverty rates did *not* increase, even during the crisis period; changes in labour market earnings and the introduction or expansion of government transfer programmes to mitigate the temporary increases in unemployment were related to the small effect on poverty indicators. Thus, contrary to the experiences of the OECD countries, the effects of the crisis in Latin America were generally short-lived.

### **3.4 In summary**

Summing up, the review of our aggregate evidence reveals three main results. First, GDP per capita grew in the Latin American region as a whole during the 2000s, all employment and earnings indicators improved, and poverty and inequality indicators fell.

Second, on a country-by-country basis, all Latin American countries exhibited positive GDP per capita growth rates during the 2000s. Most countries experienced substantial improvements in labour market conditions over the period, Honduras being the only exception to this general pattern. The unemployment rate fell in 13 out of 16 countries. There was a generalized improvement in the distribution of employed workers by occupations, occupational positions, sectors, and educational levels. The share of workers registered with the social security system increased in 12 out of 16 countries. Labour earnings increased in 11 out of 16 countries,

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<sup>13</sup> The limited impact of the international crisis on Latin American labour markets was also reported in World Bank (2012) and ECLAC-ILO (2012).

although they fell significantly for the remaining five. Poverty and extreme poverty fell significantly in all countries but one. Inequality of household per capita income and of labour income also fell in 14 out of 16 countries.

Finally, the growth rates of most countries in the region were negatively affected by the economic crisis of 2008, which also affected several labour market indicators in the worsening direction: most notably, a generalized increase in the unemployment rate, a fall in the share of wage/salaried workers, and an increase in self-employment. A remarkable finding about the crisis is that poverty rates increased in only five of the 16 countries, and extreme poverty rates in only one. In light of the evidence presented in this section and in the country studies, the small effect of the crisis on poverty rates can be related, first, to the small effect of the crisis on labour earnings. In fact, three of the countries that suffered an increase in the moderate poverty rate during the crisis are among the four countries in our sample that exhibited a reduction in labour earnings (Ecuador, Mexico, and Venezuela). Second, most of the countries in the region implemented countercyclical policies to reduce the negative impacts of the crisis, including the implementation and expansion of cash transfers programmes, mitigating the adverse effect on poverty of the increase in unemployment. The effect of the crisis on labour market indicators was short-lived: most countries' labour market indicators had fully or partially recovered by 2012–13.

#### **4 Cross-country analysis of the growth-employment-poverty nexus**

This section presents a cross-country analysis of the growth-employment-poverty nexus. First, we analyse the relationship between the economic growth rate and changes in labour market conditions. Second, we investigate the role of macroeconomic variables other than the rate of economic growth in determining changes in labour market indicators. Finally, we focus on the labour market-poverty nexus.

##### **4.1 Economic growth rate and changes in labour market indicators**

Section 3.2 showed that the improvements in labour market indicators during the 2000s were remarkably widespread in the Latin American countries. In this sub-section, we analyse whether the improvements in labour market indicators were directly related to the rate of economic growth across countries.

*Analysis of the percentage of labour market indicators that changed in the welfare-improving direction (Z)*

What is the relationship between improvements in labour market indicators and the rate of economic growth? Figure 5 presents a scatterplot. We see in the figure that over the 2000s, GDP per capita increased in every country and that more than 60 per cent of the labour market indicators increased in every country except for Honduras, which suffered a generalized worsening of labour market conditions. Across these countries, does a higher economic growth rate result in a higher percentage of labour market indicators improving? Let  $Z_i$  be the percentage of labour market indicators with a statistically significant improvement in country  $i$ , and  $\% \Delta GDPpc_i$  be the annualized percentage change of GDP per capita in country  $i$ . To quantify the association between the two variables in the figure, we estimate the following regression:

$$Z_i = C + \beta \% \Delta GDPpc_i + \mu_i. \quad (2)$$

We observe a positive but weak relationship (R-squared of 0.112 and statistically insignificant) between the percentage of labour market indicators that improved during the 2000s and the rate of economic growth. Upon removing Honduras, which is the only country in our sample with a generalized worsening in labour market indicators over the period, the R-squared increases slightly to 0.120, but the slope coefficient is smaller and still not statistically significant. The reason for the lack of relationship between the percentage of improving indicators and the rate of economic growth is the limited variation in the evolution of labour market indicators, since for most countries in our sample and regardless of their annualized rates of economic growth we observe that 75 per cent or more of these indicators improved during the period under study.

*Analysis of the labour market indicators one by one ( $Y_k$ )*

The weak relationship between the percentage of labour market indicators that improved in each country ( $Z_i$ ) and the rate of economic growth ( $\% \Delta GDPpc_i$ ) may be due to the type of aggregation implicit in our index of the percentage of labour market indicators that improved over the period. Rather than constructing alternative indices, which would also be arbitrary in terms of the indicators included, the weight assigned to each one, etc., we can instead extend this analysis beyond our aggregate measure of improvement of labour markets and study the relationship between economic growth and each of the underlying indicators one by one.

Our results indicate that faster growth is associated with larger improvements in labour market indicators, but the goodness of fit of most of the relationships analysed is generally low. This conclusion is based on Figure 6, which displays the scatterplots for each country's annualized change in the  $k$ 'th labour market indicator and its rate of economic growth (one plot for each labour market indicator). Let  $GDPpc_i$  be GDP per capita in country  $i$ ,  $Y_{ik}$  be the labour market indicator  $k$  for country  $i$ ,  $\Delta$  be the annualized change in percentage points, and  $\% \Delta$  be the annualized percentage change. We quantify the underlying relationship between the variables in the plots by estimating one of the following regressions, depending on the units of the indicators:

$$\Delta Y_{ik} = C + \beta \% \Delta GDPpc_i + \varepsilon_{ik} \text{ or } \% \Delta Y_{ik} = C + \beta \% \Delta GDPpc_i + \varepsilon_{ik}. \quad (3)$$

We consider a relationship to be tight if the R-squared is above the arbitrary threshold of 0.15. The R-squared was chosen instead of other commonly used statistics, as the slope or an F test of statistical significance, since we wanted to capture how much of the variation in  $Y_k$  can be explained by changes in GDP per capita.

Among the employment and earnings indicators, only three exhibited a relatively tight relationship between their changes during the 2000s and the rate of economic growth. These indicators were the share of registered workers, the share of high-earnings occupations, and the share of low-earnings occupations. There thus seems to be a significant relationship between the rate of economic growth and different aspects of the occupational mix. More specifically, countries that grew faster experienced larger declines in the share of low-earnings occupations, and higher increases in the share of highly paid occupations in total employment (R-squareds of 0.15 and 0.33, respectively). Moreover, the share of workers registered with social security tended to increase more in countries with stronger economic growth, and this is the tightest of

the relationships we computed (R-squared of 0.44). The increase in the share of registered workers is a manifestation of the pro-cyclicality of registered employment, which has been extensively documented and discussed before for the region as a whole, and for most countries in the region over time (Gasparini and Tornarolli 2009).

For the remaining employment and earnings indicators, as well as for the poverty and inequality indicators, we find no statistically significant relationship or only a weak relationship between the annualized change in the labour market indicators and the rate of economic growth (R-squared lower than 0.15). For instance, there is a weak positive relationship between growth and the change in the share of wage/salaried employees (R-squared of 0.09). There are also weak negative relationships between the rate of economic growth and the changes in the unemployment rate, in the moderate poverty rate, and in the shares of unpaid workers and of low-earnings sectors.

These mostly weak relationships between the rate of economic growth and the substantial majority of indicators of labour market performance seem to be driven by the experiences of the countries which grew at moderate rates by Latin American standards. The two fastest growing economies (Panama and Peru) exhibited widespread and large improvements in their labour market indicators, and the two slowest growing economies (Mexico and El Salvador) showed among the smallest improvements (and even some deteriorations) in labour market indicators over the 2000s. However, these changes and deteriorations were not extreme, which accounts partially for the modest slopes of the aggregate relationships across all 16 countries. Moreover, the other 12 countries in the middle of the growth scale exhibited a large degree of variability in the magnitudes of the changes in labour market indicators despite having similar economic growth rates. For instance, Bolivia, Brazil, and Honduras had nearly the same economic growth and, while in Bolivia and Brazil all labour market indicators improved and in some cases the improvements were larger than for Panama or Peru (the two fastest growing economies), Honduras had by far the worst performance among the 16 countries (Table 3 and Figure 4). Some other countries exhibited larger economic growth rates when compared to Bolivia and Brazil, but smaller improvement in labour market indicators. That was the case of Dominican Republic.

## 4.2 Changing labour market indicators: beyond economic growth

The analysis in the previous sub-sections revealed that labour market conditions improved substantially in all but one of the 16 Latin American countries covered in this study. These improvements, though widespread, occurred in countries with high and low rates of economic growth. This lack of a systematic cross-country relationship between economic growth and improvements in the labour market as measured either by the aggregate index  $Z$  or by the individual labour market indicators  $Y_k$  motivates the analysis in this paper, in which we attempt to move beyond aggregated indicators such as economic growth and delve into more detailed macroeconomic variables.

The analysis of the role of macroeconomic variables other than the rate of economic growth in determining changes in labour market indicators proceeds as follows. To determine whether the richer Latin American countries differed from the poorer ones in terms of their labour market trajectories, we first study the relationship between countries' changes in labour market conditions and their initial level of GDP. Next, we study the changes in each labour market

indicator as a function of the country's initial level of this indicator, to uncover any potential convergence effect in these indicators. Then we analyse a number of other macroeconomic variables which might be significant correlates of changes in labour market conditions. These variables are changes in: agriculture as a percentage of GDP; industry as a percentage of GDP; services as a percentage of GDP; domestic consumption expenditure as a percentage of GDP; exports as a percentage of GDP; terms of trade; foreign direct investment as a percentage of GDP; revenues from natural resources as a percentage of GDP; expenditure in education and health as a percentage of GDP; public expenditure in social security as a percentage of GDP; and the stock of public debt as a percentage of GDP. Finally, we look to see whether the changes in certain labour market indicators are linked systematically to the changes in others, for example, whether countries with more rapidly rising real wages are those with more rapidly rising unemployment or whether real earnings and employment move together.

### *Initial GDP per capita*

An ongoing debate in the modern theory of economic growth is whether there is convergence or divergence in growth rates, that is, whether poorer countries tend to grow at higher rates than richer ones (and thus tending to converge in terms of GDP) or not. We start our analysis with the related question of whether the improvement in labour market indicators over the period under study was correlated with each country's initial GDP per capita. This relationship could be either positive or negative: poorer economies could have more room to improve in the labour market, so that these countries might exhibit larger improvements in related indicators, or alternatively initially richer economies may have better conditions to channel the economic growth during the period under study in the direction of improved conditions in the labour market.

Examining these competing views empirically, we find that there is no important cross-country relationship between initial GDP per capita and aggregate changes in labour market conditions. Figure 7 plots initial GDP per capita in 2005 PPP dollars and the percentage of improving labour market indicators for each country. Let  $GDP_{it_0}$  be the GDP per capita at 2005 PPP in the first period under study for country  $i$ , and  $Z_i$  be the percentage of labour market indicators that experienced an improvement in the period under study. To quantify the cross-country relationship, we estimate the following regression:

$$Z_i = C + \beta GDP_{it_0} + \mu_i. \quad (4)$$

The relationship is positive, indicating that initially richer countries enjoyed larger improvements in labour market indicators measured by  $Z$ , but weak (R-squared of 0.11). However, even this low association is entirely driven by Honduras, which is a clear outlier: without Honduras, the R-squared and slope of the fitted line are virtually equal to zero.

Our finding of lack of relationship between initial GDP per capita level and labour market conditions across countries means that there were substantial improvements in labour markets both in initially poorer and in initially richer countries, and that countries with similar initial levels of GDP per capita exhibited very different patterns in the number of labour market indicators that improved over the period under study. For instance, Peru and the Dominican Republic had almost the same level of initial GDP per capita, but the Peruvian experience was



markedly more successful: all 16 labour market indicators improved in Peru, but only ten improved in the Dominican Republic.

While there does not seem to be a relationship between initial GDP per capita and the percentage of indicators that improved, there could still be a relationship between the magnitude of changes in some of the individual labour market indicators and the initial level of GDP per capita. In Figure 8, we present this relationship for each of the 16 labour market indicators. Let  $GDP_{it_0}$  be the GDP per capita at 2005 PPP in the initial year under study for country  $i$ ,  $Y_{ik}$  be the labour market indicator  $k$  for country  $i$ ,  $\Delta$  be the annualized change in percentage points, and let  $\% \Delta$  be the annualized percentage change. We quantify these relationships estimating regressions of the form:

$$\Delta Y_{ik} = C + \beta GDP_{it_0} + \varepsilon_{ik} \text{ or } \% \Delta Y_{ik} = C + \beta GDP_{it_0} + \varepsilon_{ik}. \quad (5)$$

Using the preceding equation, we also fail to find a relationship between initial GDP per capita and changes in individual labour market indicators. The results displayed in Figure 8 indicate that we can reject the hypothesis of an association between the initial level of GDP per capita and the changes in each of the labour market indicators. All the R-squareds are lower than 0.06, and the slopes are practically equal to 0. In brief, initial GDP per capita does not make an important difference for the rate of change of any of the labour market indicators.

#### *Convergence/divergence patterns in labour market indicators*

In this section, we study how, across countries, the change in each of the 16 labour market indicators is related to the initial level of that indicator. In order to do that, let  $Y_{ikt_0}$  be the value of the labour market indicator  $k$  in the initial year under study for country  $i$ ,  $Y_{ik}$  be the labour market indicator  $k$  for country  $i$ , and let  $\Delta$  be the annualized change in percentage points, and  $\% \Delta$  be the annualized percentage change. We estimate regressions of the form:

$$\Delta Y_{ik} = C + \beta Y_{ikt_0} + \varepsilon_{ik} \text{ or } \% \Delta Y_{ik} = C + \beta Y_{ikt_0} + \varepsilon_{ik}. \quad (6)$$

We define convergence and divergence as follows: given the initial value of the  $k$ 'th labour market indicator, a convergent (divergent) relationship is one where the countries with worse (better) initial values tend to have larger subsequent improvements. Convergent patterns would reflect some sort of decreasing marginal returns to growth or to improvements in a given indicator, i.e. it is harder to achieve large improvements when the labour market indicator is already high (in a welfare-increasing direction). Alternatively, divergent patterns would signal the presence of 'traps' or absorbent states in that once the labour market indicator is at a low level, it is hard for the country to bring it up.

Figure 9 presents the relationship between the changes in each labour market indicator and its initial value. There seems to be convergence for about a third (five out of 16) of our selected indicators, namely: the unemployment rate, the share of unpaid family workers, the poverty and extreme poverty rates, and the inequality of household per capita income. The relationships are especially tight for the unemployment rate, and for the share of unpaid family workers (R-squareds of about 0.73 and about 0.5, respectively). That is, countries with higher initial unemployment rates and higher shares of unpaid family workers exhibited much larger

reductions in these indicators than other countries; these countries are not stuck with high unemployment rates or high shares of workers in unpaid family jobs. The results in Figure 9 also reveal some weak convergent patterns: for example, the share of low-earnings occupations and the share of workers with low levels of education converged, but not as much as the unemployment rate and the share of unpaid family workers did (R-squareds of 0.06 and 0.09). For the other indicators, no discernible convergence/divergence patterns appeared.

*Other potential macroeconomic correlates of changing labour market indicators*

In this section, we turn to other macroeconomic variables besides the rate of economic growth and the initial level of national income and study which, if any, are significantly correlated with improvements in the labour market. The macroeconomic variables analysed here fall into two categories. Most have to do with the composition of GDP. These variables, expressed as changing percentages of GDP, include the share of agriculture, the share of industry, the share of service, the share of domestic consumption expenditure, the share of expenditure in education and health, the share of expenditure in social security, the share of exports, the share of foreign direct investments, the share of revenues of natural resources, and the share of the stock of public debt. We also consider the changes in the country's terms of trade; this variable is not a share of GDP. We present the macroeconomic variables' time series for each country in Appendix 3. Let  $Z_i$  be the share of improving labour market indicators for country  $i$ , and  $X_{ij}$  be the macroeconomic variable  $j$  in country  $i$ . To quantify the association between the two variables we estimate the following regression:

$$Z_i = C + \beta \Delta X_{ij} + \varepsilon_{ik} \text{ or } Z_i = C + \beta \% \Delta X_{ij} + \varepsilon_{ik}. \quad (7)$$

These bivariate tests yield several strong relationships. Most notably, the share of labour market indicators that improved was larger in countries with larger increases in exports as a percentage of GDP, larger reductions in domestic consumption expenditure as a percentage of GDP, and larger falls in the stock of public debt as a percentage of GDP (when excluding Honduras, an outlier as discussed above) (Figure 10). There appear to be some weak positive relationships also between the share of labour markets indicators that improved and the change in terms of trade and in revenues from natural resources as a percentage of GDP.

Besides these relationships between changes in these macroeconomic aggregates and the share of labour market indicators that improved over the period under study, we can also study the relationship between these macroeconomic variables and the 16 individual labour market indicators. To gauge their importance, we perform a series of regressions between the change in labour market indicator and the changes in the macroeconomic variables. Let  $Y_{ik}$  be the labour market indicators  $k$  for country  $i$ , and  $X_{ij}$  be the macroeconomic variable  $j$  in country  $i$ . To quantify the association between the two variables we estimate the following regression:

$$\Delta Y_{ik} = C + \beta \Delta X_{ij} + \varepsilon_{ik} \text{ or } \% \Delta Y_{ik} = C + \beta \Delta X_{ij} + \varepsilon_{ik} \quad \text{and}, \quad (8)$$

$$\Delta Y_{ik} = C + \beta \% \Delta X_{ij} + \varepsilon_{ik} \text{ or } \% \Delta Y_{ik} = C + \beta \% \Delta X_{ij} + \varepsilon_{ik}. \quad (9)$$

With 16 indicators and 11 macroeconomic variables, we have 176 regressions to estimate. The results are summarized in Table 6. In the table, *Positive* indicates that the R-squared is above 0.15 and that an increase in the macroeconomic variable is associated with an improvement in the

labour indicator; and similarly *Negative* indicates that the relationship is also significant, but an increase in the macro variable is related with a deterioration in the indicator; *NR* (No relationship) indicates a regression with an R-squared of less than 0.15. In Table 7, we present the R-squared for each regression, and Appendix 2 presents the figures corresponding to each of these individual regressions.

The results are mixed, with some robust positive and negative relationships and several instances of no clear pattern of association. The change in the share of industry in GDP has a positive association with a number of indicators—an increase in labour earnings, a decline in the unemployment rate, and better distributional indicators (i.e., lower levels of poverty, extreme poverty, and inequality of household per capita income and labour earnings)—and no statistically discernible association with other labour market indicators. The change in exports as a percentage of GDP is positively associated with an increase in mean earnings and in improvements in the labour mix (decline in the share of low-earnings occupations, increase in the share of wage/salaried employees, fall in the share of self-employment and unpaid family workers), as well as improved distributional indicators. The change in terms of trade and the change in revenues from natural resources as a percentage of GDP have a similar pattern of relationships with labour market indicators as the change in exports.

Other macroeconomic variables appear to have a negative association with some of our selected labour market indicators (i.e. increases in the macroeconomic variables seem related to worsenings in these indicators). This is the case for the change in the share of services in GDP, the change in domestic expenditure as a percentage of GDP, and the change in the stock of public debt as a percentage of GDP. Increases in the share of services in GDP are associated with smaller increases/declines in mean labour earnings, smaller declines/increases in the unemployment rate, and a worsening in distributional indicators (i.e. higher levels of poverty and inequality). Similarly, increases in domestic expenditure as a percentage of GDP are associated with smaller increases/declines in mean labour earnings, smaller declines/increases in unemployment, and a worsening in distributive indicators. Increases in the stock of public debt are associated with a general worsening in labour market outcomes (with the exception of the unemployment rate, the share of registered workers, and levels of inequality).

We find little or no consistent pattern of association of labour market indicators with the following macroeconomic variables: change in the share of agriculture in GDP, change in public expenditure on education and health as a percentage of GDP, change in public expenditure on social security as a percentage of GDP, and change on foreign direct investment as a percentage of GDP.

Looking at the experiences of countries with widespread labour market improvements in Latin America, we find that there is no unique configuration of macroeconomic factors associated with the number of welfare-improving changes in labour market indicators. On the one hand, there is a group of countries which benefited from better external conditions mainly related to the commodity boom: higher terms of trade, increased exports, and related to that, increasing revenues from natural resources, and increasing share of industry in GDP. That was the case, for example, for Bolivia and Peru. For these countries, increases in exports seem to have resulted in a shift to the right of the labour demand for high-earnings occupations and wage/salaried employees (improving the mix of jobs), raising labour earnings, and reducing poverty. Some of these countries took advantage of the favourable external conditions, and translated them into

higher levels of investment (proxied by the reduction in consumption's share of GDP) and to an improved fiscal balance (as indicated by the fall in the stock of public debt as a percentage of GDP). On the other hand, there is a group of countries where increases in commodity prices were not relevant, but the labour market conditions also improved. That was the case of Panama and Costa Rica, which exhibited some of the largest increases in the share of services in GDP and some of the largest reductions in terms of trade and in the stock of public debt as a percentage of GDP. These countries were successful in increasing the labour demand in the service sector, the driving force of these economies.

Our next step is to add the GDP per capita growth rate as a second explanatory variable in the previous models. Our objective is to test the robustness of some of the results obtained in this section: 1) faster growth is associated with larger improvements in labour markets indicators, but the relationship is weak; and 2) some macroeconomic variables were associated with changes in labour market conditions always in the welfare-improving direction and some others always in the welfare-reducing direction. The reason for adding the GDP per capita growth rate as an additional regressor to the bivariate models where the explanatory factor is a macroeconomic variable is that the two variables (GDP per capita growth rate and macroeconomic variable) could be correlated, e.g. countries with larger increases in terms of trade enjoy larger increases in GDP per capita. Including the two of them as regressors allows us to separate, at least partially, the effect of the GDP per capita growth rate on the change in labour market indicators from the effect of macroeconomic factors.

We perform a series of regressions for the change in labour market indicators on the changes in the macroeconomic variables and the change in GDP per capita. Let  $Y_{ik}$  be the labour market indicators  $k$  for country  $i$ ,  $X_{ij}$  be the macroeconomic variable  $j$  in country  $i$ , and  $GDPpc_i$  be GDP per capita in country  $i$ . We estimate the following regression for two employment and earnings indicators (the change in the unemployment rate and the change in mean labour income), and two poverty indicators (changes in the 2.5 and 4 dollars-a-day poverty rates):

$$\Delta Y_{ik} = C + \beta \Delta X_{ij} + \gamma \% \Delta GDPpc_i + \varepsilon_{ik} \text{ or } \% \Delta Y_{ik} = C + \beta \Delta X_{ij} + \gamma \% \Delta GDPpc_i + \varepsilon_{ik} \text{ and,} \quad (10)$$

$$\Delta Y_{ik} = C + \beta \% \Delta X_{ij} + \gamma \% \Delta GDPpc_i + \varepsilon_{ik} \text{ or } \% \Delta Y_{ik} = C + \beta \% \Delta X_{ij} + \gamma \% \Delta GDPpc_i + \varepsilon_{ik}. \quad (11)$$

Our results are presented in Table 8. Model 1 uses GDP per capita growth rate as the only regressor and replicates the results obtained in Section 4.1. Model 2 uses the changes in macroeconomic variables as regressors (one at a time) and replicates the results obtained previously in this sub-section. Finally, Model 3 includes both the GDP per capita growth rate and the changes in macroeconomic variables as explanatory factors. In general, the magnitudes of the coefficients and standard errors of the estimations in the multivariate model (Model 3) are similar to those obtained in the bivariate models (Models 1 and 2). The details of these findings are as follows: First, from the 44 regressions (11 macroeconomic variables x 4 labour market indicators), in only four cases did the macroeconomic variables move from being not statistically significant in the bivariate model (Model 2) to being significant at the 5 per cent level in the multivariate model (Model 3). In all four cases, the sign of the relationship remained the same when moving from the bivariate model to the model that also includes the change in GDP per

capita as a control variable. Second, in no case did a macroeconomic variable that was significant in statistical terms in the bivariate model (Model 2) turn to insignificance in the multivariate model (Model 3). Third, out of the 44 regressions, in only six cases was the GDP per capita growth rate a significant factor explaining changes in labour market indicators across countries in the multivariate model (Model 3) when it was not in the bivariate model (Model 1), and the sign of the relationship was always the same as the one obtained in the bivariate regression. In conclusion, the weakness of the relationship between changes in labour market indicators and the GDP per capita growth rate across countries is not related to the effect of macroeconomic variables added one at a time. Similarly, the finding of a tight relationship between changes in labour market indicators and changes in some macroeconomic factors is not related to the rate of GDP per capita growth.

In summary, increases in some macroeconomic variables were associated with changes in labour market conditions in Latin America during the 2000s, some of them always in the welfare-improving direction and some others always in the welfare-reducing direction. There is no unique configuration of macroeconomic variables that was associated with the several successful experiences among our sample of 16 countries. Finally, the correlation between the change in GDP per capita and the change in macroeconomic variables seemed to be small enough so as not to affect in general the magnitudes of the coefficients and standard errors in the estimations of the relationships between changes in labour market indicators and the rate of GDP per capita growth on the one hand, and changes in macroeconomic variables on the other hand.

#### *Relationship between labour market indicators*

Another question is whether the labour market indicators tend to improve or worsen together, or whether there are pairs of indicators such that a higher rate of improvement in one is associated with a lower rate of improvement or a worsening of the other. For example, a higher rate of earnings growth could be associated with a higher increase in unemployment due to employers moving up along a single downward-sloping labour demand curve.

Our findings indicate that labour market indicators either improved jointly or worsened jointly. Table 9 displays the cross-country correlations between the changes or percentage changes in each of our 16 labour market indicators. In particular, we estimate the following sets of correlations:

$$\begin{aligned}
 & \text{Corr}(\Delta Y_{ik}, \Delta Y_{im}) \text{ or } \text{Corr}(\Delta Y_{ik}, \% \Delta Y_{im}) \\
 & \text{or } \text{Corr}(\% \Delta Y_{ik}, \% \Delta Y_{im}) \\
 & \text{for } k \neq m. \tag{12}
 \end{aligned}$$

A correlation coefficient between 0.4 and 1 implies that, in a regression of the annualized changes in two labour market indicators, the R-squared is larger than 0.15 (which corresponds with the cut-off value we used previously), and that the association between the two variables is positive. Conversely, a coefficient between -1 and -0.4 indicates a negative relationship. The shaded cells in Table 9 indicate a strong relationship between two labour market indicators.

We find that most of our labour market indicators tend to move together and not even one instance of a substantial trade-off between changes in our selected labour market indicators, i.e. improvements in one do not come at the cost of worsening in others. Specifically: of the 120 correlations we computed, we find that 71 (59 per cent of the total) of the pairs of indicators have a positive and significant association, while for the 49 remaining pairs we found only weak but generally positive associations. Finally, there is not even a single value in the matrix with a negative sign and above (in absolute value) our cut-off value equal to -0.4, which will indicate a trade-off between two labour market indicators: the lower value is equal to -0.16.

Several labour market indicators are highly correlated among them, with a few exceptions (Table 9). On the one hand, labour earnings, the sectoral and educational composition of employment, and the distributive indicators have a significant correlation with at least ten other labour market indicators. On the other hand, the unemployment rate, the share of self-employed, the share of registered workers, the Gini of household per capita income, and the share of high-earnings occupations do not co-vary as much with other indicators (they are significantly correlated with six or fewer of the others).

Some clear patterns of correlations appear from this evidence. The results from Table 9 and Figure 11 indicate that changes in labour earnings tend to be highly correlated with changes in the job mix (i.e., the occupational, position, sectoral, and educational composition of the employed population). There may be a simple explanation for these relationships: a rightward shift of the labour demand curve, such that in order to attract more workers into the better job categories, employers must raise wages. Average earnings may also increase just by a composition effect: in a context of high unemployment, a rightward shift of the labour demand curve may lead to an increase in the share of better paying occupations, and thus in average earnings, with fixed hourly wages. As expected, increases in labour earnings are also highly correlated with reductions in poverty: countries in which labour earnings increased were generally ones in which poverty fell, which indicates the importance of labour earnings in the total income of the household. Increases in labour earnings are also related to reductions in the inequality of their distribution, indicating that the process of growth was also inequality-reducing. The evidence of improvements in the job mix, of increases in labour earnings, and of reductions in earnings inequality suggests that workers moved on average to better paying jobs.

We now turn to analyse the relationship between the share of wage/salaried employees and some selected indicators, illustrated in Figure 12. An increase in the share of wage/salaried employees is associated with a general improvement in the labour market. Not only is the share of wage/salaried employees related to reductions in moderate and extreme poverty, but also with increases in the shares of high-earnings occupations and high-earnings sectors, as well as reductions in the shares of low-earnings occupations and sectors. These findings are also consistent with a rightward shift of labour demand in wage/salaried jobs, which seem to have a high incidence in high-earnings occupations and sectors, increasing their shares of employment and reducing poverty.

### 4.3 Changing employment and earnings indicators and changes in poverty

The previous results in Section 3 indicated that real GDP per capita grew substantially in all Latin American countries in the 2000s, with an average per capita growth rate of approximately 3 per cent a year. We also reported that poverty, extreme poverty, and inequality also fell substantially in all but one of the 16 countries in the region in the 2000s. At the same time, while employment and earnings indicators also improved in most countries, they did so more in some countries than in others. In this sub-section, we analyse in more detail the relationship between changes in employment and earnings indicators, and changes in poverty indicators. We aim to establish whether larger improvements in employment and earnings are associated with larger reductions in poverty, over and above the rate of economic growth. We present here a cross-country analysis of the employment and earnings-poverty relationships based on 16 data points (one for each country) representing the annualized changes between the initial and the final years for each country.

Our evidence reveals a strong and consistent cross-country pattern of association between reductions in poverty and extreme poverty, and improvements in earnings and employment indicators. These relationships are illustrated in the scatter plots presented in Figure 13 (for poverty based on the 2.5 dollars-a-day poverty line) and Figure 14 (for poverty based on the 4 dollars-a-day poverty line). We find that 11 out of 14 of the associations in Figure 13 and 12 out of 14 of the associations in Figure 14 (excluding the relationship between the two poverty indicators in both cases) present an R-squared above a 0.15 threshold, and in almost all cases, whether the relationships are above this threshold or not, the sign of correlation is in the expected direction i.e. improvements in earnings and employment indicators are associated with reductions in poverty rates.

Among employment and earnings indicators, there is a very strong negative cross-country correlation between changes in mean earnings and changes in moderate and extreme poverty rates during the period under study, with a stronger relationship for moderate poverty, that is, mean earnings rose faster while poverty fell faster. The relationships between changes in the two poverty rates and the percentage change in mean labour earnings are the strongest in both Figures 13 and 14. In both cases, larger increases in labour earnings are associated with larger reductions in poverty levels, with a somewhat stronger relationship for moderate poverty in Figure 13 (R-squared of 0.78), than for extreme poverty in Figure 14 (R-squared of 0.68). The correlations between percentage changes in mean labour earnings and changes in the two poverty measures, however, are both very strong, and the difference between the two is only a matter of degree. This result is consistent with the discussion in the literature for Latin America stressing that the extreme poor do not benefit as much as those closer to the moderate poverty line from the trickle down of economic growth (and the subsequent increase in labour earnings), which implies that improving the living conditions of those harder to reach need more government-based redistribution than those relatively better off among the poor (see for instance Cruces and Gasparini 2013, and references therein). This is also apparent in the weaker relationship between poverty rates and unemployment.

There is a positive but relatively weak correlation between changes in moderate and extreme poverty rates and changes in the unemployment rate, with a somewhat stronger relationship for moderate poverty. Whereas we found a very strong and tight association between changes in labour earnings and changes in poverty rates, the scatter plots in Figures 13 and 14 for the

unemployment rate evidence a much weaker relationship. For the extreme poverty rate, the R-squared is only about 0.13, and this weak relationship is evident in the figure: for instance, Argentina, Colombia, Panama, Uruguay, and Venezuela all experienced an annualized reduction in unemployment of about 0.5 percentage points a year, but the changes in extreme poverty differed vastly between these countries, with almost no change for Uruguay and reductions from about 0.75 (Argentina) to about 1.5 percentage points (Colombia, Panama, Venezuela). Moreover, countries with about the same change in extreme poverty also experienced quite dissimilar changes in unemployment, for instance Argentina, Costa Rica, El Salvador, and Mexico all saw annualized reductions in extreme poverty of about 0.75 percentage points, but unemployment fell by about 0.6 percentage points a year in Argentina, remained mostly unchanged in El Salvador, and increased by about 0.2 percentage points a year in Costa Rica and Mexico. The R-squared for the relationship between changes in unemployment and changes in moderate poverty (Figure 14) is higher, at about 0.17, but there is a similar dispersion of countries around the regression line, evidencing a weaker relationship.

There is a consistent and relatively strong cross-country pattern of association between reductions in poverty and extreme poverty, and improvements in the job mix (distributions of workers among occupations, employment positions, sectors, and educational levels). The correlations in Figures 13 and 14 are qualitatively and quantitatively similar for moderate and extreme poverty, although slightly tighter for the moderate poverty rate. We thus report them together, citing the R-squared for extreme poverty (Figure 13) first and then that for moderate poverty (Figure 14). Specifically, we find a clear pattern of a positive correlation between changes in poverty and changes in the share of low-earnings occupations (R-squared of 0.36 for extreme poverty and of 0.43 for moderate poverty), and a corresponding negative correlation between changes in poverty and changes in the share of high-earnings occupations (R-squared of 0.26 and 0.29). Similarly, reductions in the share of low-earnings sectors are associated with reductions in the poverty rates (R-squared of 0.38 and 0.34), whereas increases in the share of high-earnings sectors over the period are correlated negatively with changes in the poverty rates (R-squared of 0.37 and 0.38). The share of workers with low educational levels tended to fall over this period, while that of workers with high educational levels tended to increase, and both changes were associated with reductions in the poverty rates (R-squared of 0.26 and 0.28 for the share of workers with low educational levels and R-squared of 0.40 and 0.31 for the share of workers with high educational levels). Finally, the pattern for occupational position is not as clear as in the cases of occupations, sectors, and education. We observe a negative correlation between poverty changes and changes in the share of wage/salaried employees over the period (R-squared of 0.31 and 0.35), and also a relatively strong positive correlation between poverty changes and changes in the share of unpaid workers (R-squared of 0.33 and 0.37). However, we do not find a meaningful pattern between poverty changes and changes in the share of self-employed workers, with positive but weak correlations (R-squared of 0.08 in both cases). The same is true, perhaps surprisingly, for the changes in the share of workers registered with social security. While the correlations between changes in this indicator and changes in poverty measures are negative as expected, the relationships are relatively flat and not very tight (R-squared of 0.11 in both cases).

Moving now to the inequality indicators, there is a strong positive cross-country correlation between changes in poverty rates and changes in household per capita income and labour earnings inequality. Figures 13 and 14 present the scatter plots of changes in extreme and moderate poverty and percentage changes in the Gini coefficient of household per capita



income and in the Gini coefficient of labour earnings. Both correlations appear to be stronger for the Gini of labour earnings (R-squared of 0.60 for extreme poverty and 0.57 for moderate poverty) than for the Gini of household per capita income (R-squared of 0.49 and 0.38, respectively). While there is a mechanical component, which implies that other incomes remaining equal, reductions in poverty imply reductions in inequality, the strong associations illustrate the overall improvement in the income distribution (besides poverty only) in Latin America during the 2000s.

The negative cross-country correlation between percentage changes in mean earnings and changes in moderate and extreme poverty rates in Latin America in the 2000s is robust: it is still present after controlling for changes in unemployment and changes in GDP per capita. We check the robustness of the bivariate relationship between changes in mean earnings and changes in poverty performing multivariate regressions. We regress the percentage changes in extreme and moderate poverty rates on the percentage changes in labour earnings, GDP per capita, and unemployment. The analysis is limited since we only have 16 observations when studying cross-country correlations over the 2000s, but we can still probe whether the correlation between changes in the poverty rates and in mean earnings holds conditional on one or two other relevant variables.

The top panel of Table 10 presents the results of these regressions for the extreme poverty rate. In line with the previous discussion about the lack of trickle-down effects of growth at the very bottom of the income distribution and the results in sub-Section 4.1, the relationship between changes in GDP per capita and changes in extreme poverty is not statistically significant (column 1 of Table 10). According to the results in column 2 of Table 10, there seems to be a negative and statistically significant elasticity between extreme poverty and unemployment (in contrast with the regression in changes instead of percentage changes in unemployment in Figure 13) of about 0.32, with a relatively low R-squared of 0.17. However, these relationships do not seem to be very robust: when including both variables in the same regression (column 4), the two are not statistically significant. Finally, and as expected from previous results, the labour-earnings extreme-poverty elasticity is strongly significant, with regression coefficient of -1.55 and R-squared of about 0.64 (column 3). The results in columns 5 to 7 in the top panel of Table 10 confirm the robustness of this elasticity: controlling for percentage changes in GDP per capita (column 5), for percentage changes in unemployment (column 6), or for both, none of the additional variables is statistically significant, and the labour earnings elasticity remains virtually unchanged around -1.5, and still strongly significant (which is all the more remarkable again with the limited number of observations available).

The corresponding results for the moderate poverty elasticities are presented in the bottom panel of Table 10. The elasticity with respect to labour earnings is again strongly significant but somewhat lower in absolute value (between -1.22 and -1.32), and also robust to the inclusion of percentage changes in GDP per capita and unemployment as conditioning variables. The elasticity between moderate poverty and unemployment is again significant when unconditional (column 2), but not statistically significant when either change in GDP per capita or change in labour earnings or both are included (columns 4, 6, and 7). The main difference with respect to the results for the extreme-poverty elasticities, is the elasticity coefficient between moderate poverty and GDP per capita: the coefficient for this variable is significant when included on its own (column 1), but also when controlling for labour earnings (column 5) and labour earnings and unemployment (column 7). The unconditional elasticity is -0.890, and it is reduced to -0.625

when including the additional controls. The elasticity with respect to labour earnings also falls (although only slightly) when including the additional controls. The fact that the two variables are jointly statistically significant in the conditional regression presented in column 7 suggests that while related, the two operate also through separate channels. In other words, poverty seems to fall when labour earnings increase over and above the effect of GDP per capita growth, and vice versa. Besides the robustness of the effect of the percentage change in labour earnings on moderate and extreme poverty, the pattern of results suggests that GDP per capita growth reaches the bottom of the distribution through its effect on mean labour earnings but not through other channels.

#### **4.4 In summary**

In this section, we looked at the cross-country link between growth, employment, and poverty. First, we found that faster growth is associated with larger improvements in employment and earnings indicators, and poverty and inequality indicators, but the relationships were in general weak. For only three out of 16 indicators did we obtain a strong relationship between the rate of improvement of the indicator and the rate of economic growth. They were the share of low-earnings occupations, the share of high-earnings occupations, and the share of registered workers, all of which moved in the welfare-improving direction significantly more in countries that experienced higher rates of growth.

Second, we looked at four correlates of cross-country changes in labour market indicators beyond economic growth. The first question was, were the changes in labour market indicators across countries related to initial GDP per capita? We found no substantial relationship between either the share of labour market indicators that improved nor the change in individual labour market indicators on the one hand and initial GDP per capita on the other. The second was whether other macroeconomic factors could help explain the differences across countries in labour market indicators. We found that increases in seven macroeconomic factors were related to changes in labour market indicators, some in the welfare-improving direction (exports as a percentage of GDP, terms of trade, revenues from natural resources as a percentage of GDP, and the share of industry in GDP) and some in the welfare-reducing direction (stock of public debt as a percentage of GDP, domestic consumption as a percentage of GDP, and the share of services in GDP). The third issue was whether changes in individual labour market indicators were related to their initial level. For five indicators (the unemployment rate, the share of unpaid family workers, the poverty and extreme poverty rates, and the inequality of household per capita income), we found that worse initial levels were associated with larger improvements. For the other indicators, no relationship surfaced. The fourth issue was whether some labour market indicators tended to move together with others and, if so, in which direction. We found that 59 per cent of the pairs improved significantly together and no significant relationship appeared between the other 41 per cent of the pairs; no indicator improved while another one worsened.

Finally, we studied the cross-country relationship between improvements in employment and earnings indicators and poverty changes. Our evidence revealed a generally strong and consistent cross-country pattern of association between reductions in poverty and extreme poverty on the one hand, and improvements in earnings and employment indicators on the other. From a multivariate analysis we concluded: 1) poverty, measured by the 4 dollars-a-day poverty line, fell when labour earnings increased over and above the effect of GDP per capita growth, and vice versa; and 2) GDP per capita growth did not reach the bottom of the distribution beyond its

effects on labour earnings.

## 5 Within-country analysis of the growth-employment-poverty nexus: additional evidence

During the 2000s, there was a clear correlation over time between poverty and GDP per capita, labour earnings, and unemployment in the Latin American region: in general, poverty fell when GDP per capita increased, labour earnings increased, and unemployment decreased. This is clearly apparent in Figure 1, which shows the evolution of the unweighted averages for the 16 Latin American countries of the 16 labour market indicators and GDP per capita over the period 2000–12. Average GDP per capita in the region was stagnant from 2000 to 2003, but then increased every year afterwards except for the 2008 international crisis. Mean labour earnings among the employed decreased from 2000 to 2003 but then increased every year after that, even during the international crisis, ending about 10 per cent higher in 2012 than in 2000. Unemployment increased from 2000 to 2002 and then fell every year afterwards except for an increase during the international crisis. The 4 dollars-a-day poverty rate at first increased from 40.4 per cent in 2000 to 43.0 per cent in 2002, but then poverty declined in every year, reaching 25.4 per cent in 2012. Notably, the average poverty rate among Latin American countries did *not* increase during the international crisis of 2008, which is consistent with our previous finding of an increase in poverty in only five out of the 16 countries during the crisis, while poverty fell during the crisis in eight countries (Table 4).

Sub-Sections 5.1 and 5.2 use year-by-year data for each country in contrast to previous sections where we used the annualized changes between the initial and the final years for each country. This procedure means moving from using 16 data points (1 for each country) to 169 data points (an average of 11 per country) when we compute the average year-by-year elasticities for the region. This calls for a note on interpretation of the results from these different procedures. For instance, we might find with the year-by-year results a negative and statistically significant poverty-growth elasticity, which might seem to contradict our previous evidence of weak cross-country association between GDP growth rates and changes in the poverty rate between the initial and the final year. However, the two results are complementary. In our calculations in Section 4, the question we answered was: across countries, were differences in progress in reducing poverty between 2000 and 2012/2013 linked to differences across countries in economic growth rates? Our answer, according to the evidence in that section, was no. On the other hand, the calculation of poverty-growth elasticities in this section answers a different question: if a country grows faster, what is the effect of faster growth on the change in its poverty rate? Our answer, based on the year-by-year regressions presented below, is that economic growth reduces poverty but at a different rate in different countries.

## 5.1 Response of labour market indicators to growth

In this section, we analyse in more detail the nexus between growth, on the one hand, and labour market indicators—employment and earnings indicators and poverty and inequality indicators—on the other. Our analysis is based on the estimation of labour market indicators’ elasticities with respect to GDP per capita growth using year-by-year data for each country in our sample and for the Latin American region as a whole. We compute the elasticities by regressing the year-by-year percentage change in the relevant dependent variable on the year-by-year percentage change in GDP per capita. Let  $\% \Delta Y_{ikt}$  be the year-by-year percentage change in indicator  $k$  for country  $i$  in period  $t$ . Let  $GDP_{it}$  be GDP per capita for country  $i$  at time  $t$ . Let  $C_i$  be country fixed effects which are included only in aggregate regressions for the region, but not in country-specific regressions; we call these aggregate regressions ‘stacked regressions’ which means that all the observations for all the countries are stacked. And let  $e_{it}$  be the error term. We estimate the growth elasticity  $\eta_k$  for indicator  $k$  in the stacked regressions as follows:

$$\Delta\% Y_{ikt} = C_i + \eta_k \Delta\% GDP_{it} + e_{it},$$

$$\begin{aligned} \text{with:} \quad & i = \{AR, BO, \dots, VE\}. \\ & k = \{\text{labour earnings, unemployment rate, etc.}\}. \\ & t = 2001, \dots, 2012/2013. \end{aligned} \tag{13}$$

For country  $i$  ( $i = \{AR, BO, \dots, VE\}$ ) we estimate the country-specific growth elasticity  $\eta_k$  for indicator  $k$  as:

$$\Delta\% Y_{kt} = C + \eta_k \Delta\% GDP_t + e_t,$$

$$\begin{aligned} \text{with:} \quad & k = \{\text{labour earnings, unemployment rate, etc.}\}. \\ & t = 2001, \dots, 2012/2013. \end{aligned} \tag{14}$$

We present the results from these growth elasticities in Table 11, with the aggregate elasticity from the stacked regression in the first column (for a total of 169 country-year observations from 16 countries), and then in the following columns, we present the time series regression for each country, with a more limited number of observations (11 on average for each country).

### *Response of employment and earnings to growth*

We start by analysing the aggregate elasticity of labour earnings with respect to GDP per capita (stacked regression column in Table 11 and mean labour earnings row). We find that mean labour earnings increased more than proportionately as GDP per capita grew. The labour earnings elasticity with respect to GDP per capita is 1.13: a 1 per cent increase in GDP per capita from one year to the next is associated with an average increase of 1.13 per cent in mean labour earnings. This relationship is also statistically significant for nine countries in the region (columns 2 to 17 in Table 11 and mean labour earnings row): Argentina, Bolivia, Colombia, Dominican Republic, Honduras, Mexico, Paraguay, Uruguay, and Venezuela. For all but one of these nine countries the elasticities are higher than 1, whereas the elasticities for the countries for

which we find no significant coefficients, the elasticities are all below 0.6 but still positive (with the exception of Chile, with a negative coefficient).

We find a strong negative and significant aggregate year-by-year elasticity of unemployment with respect to GDP per capita of around -2 (stacked regression column in Table 11 and unemployment row). We find again, however, a high degree of heterogeneity when looking at the country-specific elasticities (columns 2 to 17 in Table 11 and unemployment row). While the estimated coefficients are all negative, they are significant and about -3 or larger in absolute value in Brazil, Chile, Costa Rica, Dominican Republic, Mexico, and El Salvador, substantially closer to the aggregate elasticity and significant for Uruguay and Venezuela, and not significant but still negative and large for the remaining countries except for Colombia and Peru where the estimates are closer to zero.

We also find significant aggregate year-by-year elasticities of labour market indicators broadly associated with the job mix and quality of employment with respect to GDP per capita (stacked regression column in Table 11 and corresponding indicator row): the share of workers registered with social security, the share of wage/salaried employees (both positive), and the share of self-employment (negative). Specifically, these results indicate that the share of registered workers increased by 0.54 per cent for each 1 per cent increase in GDP per capita, whereas the elasticity for the share of wage/salaried employees is substantially smaller (0.16). At the same time, an increase of 1 per cent in GDP is related to a decrease in the share of self-employment of about 0.34 per cent. As with the previously discussed indicators, there is a large degree of heterogeneity when looking at the estimates by country (columns 2 to 17 in Table 11 and corresponding indicator row).

We found insignificant aggregate year-by-year growth elasticities for a series of labour market indicators (stacked regression column in Table 11 and corresponding indicator row). Some of these results were not as expected ex-ante, for instance, the lack of a significant aggregate relationship between percentage changes in GDP per capita and percentage changes in the share of high- and low-earnings occupations, in the share of workers in low- and high-earning sectors, and in the share of unpaid family workers.

#### *Response of poverty and inequality to growth*

Now we turn to the analysis of the poverty and inequality indicators elasticities with respect to GDP per capita. The aggregate year-by-year changes in poverty and in extreme poverty are found to be strongly negatively correlated with changes in GDP per capita (stacked regression column in Table 11 and 2.5 and 4 dollars-a-day poverty rows). This means that for each 1 per cent increase in GDP per capita from one year to the next, poverty decreases, on average, by 1.43 per cent, and extreme poverty decreases by 2.1 per cent. Expressing these estimates in terms of percentage points rather than percentages, we find that an increase of GDP per capita of 1 per cent implies a fall of about 0.58 percentage points in moderate poverty, and of about 0.50 percentage points in extreme poverty (with respect to the unweighted average of the

moderate and extreme poverty rates of the year 2000 in Figure 1). These values are in line with those obtained in the literature for developing countries.<sup>14</sup>

Table 11 also includes poverty-growth elasticities country-by-country (columns 2 to 17 in Table 11 and 2.5 and 4 dollars-a-day poverty rows). We find a large degree of heterogeneity across countries. In only four of the 16 countries in our sample do we find a statistically significant (at 5 per cent level) moderate poverty-growth or extreme poverty-growth elasticity (Argentina, Chile, Uruguay, and Venezuela). It should be noted that all but three of the estimated elasticities for all countries are negative, and that the country analysis is less robust since we only have between six and 13 observations in each case. The larger (in absolute value) and most significant elasticities are those found for countries which suffered domestic crisis at the beginning of the 2000s and, then, have larger variability in their year-by-year data. That was the case for Argentina (elasticities of -3.87 for extreme poverty and -2.58 for poverty), Uruguay (-3.58 and -2.95 respectively), and Venezuela (-2.03 and -1.32 respectively).

With respect to inequality indicators, we find small negative and not significant aggregate growth elasticities for the Gini of household per capita income (HPCI) and the Gini of labour earnings (LI) (stacked regression column in Table 11 and Gini of household per capita income and Gini of labour earnings rows) because of great heterogeneity in country experiences (columns 2 to 17 in Table 11 and Gini of household per capita income and Gini of labour earnings rows). The country elasticities are negative and significant for Argentina (HPCI and LI), Brazil (HPCI and LI), Chile (HPCI), El Salvador (HPCI), and Uruguay (HPCI and LI), and positive and significant only for Mexico (HPCI).

Now we illustrate in Figure 15 some of the country-specific elasticities with respect to GDP per capita showing the year-by-year changes for some selected labour market indicators (mean labour earnings, extreme and moderate poverty rates) for some illustrative countries: Honduras, the Dominican Republic, Bolivia, and Brazil. The four countries experienced positive GDP per capita growth rates in most of the years and had relatively similar annualized growth rates: 2.1 per cent for Honduras, 3.6 for the Dominican Republic, 2.2 for Bolivia, and 2.4 for Brazil. However, their labour market experiences were dissimilar. Honduras and the Dominican Republic are relatively bad performers in terms of the evolution of poverty and labour market indicators in the 2000s, while Bolivia and Brazil present much better patterns for these variables over time (see Section 3). With this exercise we want to look deeper into the year-by-year changes that underlie our elasticities estimations.

The top row in Figure 15 presents the relationship between annual percentage changes in mean labour earnings and annual percentage changes in GDP per capita. The elasticities of labour earnings with respect to GDP per capita (slope coefficient of the regression line in the bottom

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<sup>14</sup> In a recent review of poverty-growth elasticities, Alvaredo and Gasparini (2014: 784) present evidence on these elasticities for 114 developing countries over the period 1981–2010. They find that the change in poverty is closely negatively related to economic growth, either in per capita gross national income (from national accounts) or per capita consumption/income growth (as measured in household surveys). In fact, their estimation of the poverty elasticity with respect to per capita gross national income over the period 1999–2010 is very similar to our calculations: 1.2 and 1.9 for moderate and extreme poverty respectively. This finding is consistent with previous studies, which find that poverty generally falls when economic growth takes place, and that poverty tends not to fall in countries where economic growth has not taken place (Fields 2001).

of each figure) are quite similar in Honduras, the Dominican Republic, and Bolivia (between 1.36 and 1.74). However, the figure allows us to discern the different evolution of labour earnings over time in each country. For both Honduras and the Dominican Republic, we observe negative percentage changes in mean labour earnings with respect to the previous year for most of the years (evidenced by the fact that many of the points are below the zero horizontal line). Moreover, these losses in average earnings occurred even in years with positive GDP per capita growth rates. On the contrary, the figure indicates that average earnings in Bolivia and Brazil increased with respect to the previous year for most of the years we analyse (e.g. most of the points are above the zero horizontal line), even in periods with no growth in GDP per capita. In conclusion, Bolivia and Brazil were more effective than Honduras and the Dominican Republic in translating GDP per capita growth into labour earnings increases. This can be clearly seen by comparing the height of the regression lines in the top row of Figure 15 which we reproduce for Honduras and Bolivia in the first graph of Figure 16.

Turning now from labour earnings to poverty, in the second row of Figure 15, we observe that the extreme poverty-growth elasticities were very similar in Honduras and the Dominican Republic (slope coefficient of the regression lines at the bottom of each figure: -0.48 and -0.44 respectively), but while in the Dominican Republic the poverty rate measured by the 2.5 dollars-a-day line fell in most of the years (most of the points are below the zero horizontal line), in Honduras it increased most of the time, even in times of positive GDP per capita growth rates. In Bolivia, the percentage changes in the extreme poverty rate were not significantly associated with GDP per capita growth. Bolivia exhibited similar reductions in the extreme poverty rate in years of low and high GDP per capita growth. Finally, in Brazil the extreme poverty rate fell most of the time and the reductions were larger the higher the GDP per capita growth, producing an estimated elasticity of -0.9. The Dominican Republic, Bolivia, and Brazil were more successful than Honduras in reducing extreme poverty (the regression lines were always below the zero horizontal line for the Dominican Republic, Bolivia, and Brazil, and always above zero for Honduras). While the Dominican Republic and Brazil seem to have translated GDP per capita growth into lower extreme poverty rates, Bolivia managed to reduce extreme poverty in both high-growth and low-growth years. The second graph in Figure 16 provides a clear comparison of the regression lines for Honduras and Bolivia.

Turning to moderate poverty (third row of Figure 15), the figures for the moderate poverty-elasticity are very similar to the ones of extreme poverty-growth, Bolivia being the only exception. In Bolivia, the moderate poverty rate fell most of the time and the reductions were larger when the GDP per capita grew the most.

To sum up, in the Latin American region, the year-by-year percentage changes in some employment and earnings indicators (unemployment, share of wage/salaried employees, share of self-employed, mean earnings) and poverty indicators (2.5 and 4 dollars-a-day poverty rates) were related in the welfare-improving direction to GDP per capita growth (stacked regression column of Table 11). The same was true for most of the countries, but the magnitudes of the effect and the patterns over time varied substantially from country to country (remaining columns of Table 11). The heterogeneity among countries explains why in sub-Section 4.1 we found a weak relationship across countries between improvements in the labour indicators and the rate of economic growth. It *is not* the case that economic growth was unimportant for improvements in labour market indicators. It *is* the case that more rapid economic growth

improved labour markets indicators in all the countries, but at a different rate in each one of them.

## 5.2 Response of poverty to employment and earnings changes

In this sub-section, we analyse in more detail the link between employment and earnings indicators and poverty. Our analysis is based on the estimation of moderate and extreme poverty elasticities with respect to employment and earnings indicators. We compute these elasticities using year-by-year data for each country in our sample as in sub-Section 5.1 and in contrast to previous sections where we used the annualized changes between the initial and the final years for each country.

Let  $P(l)_{it}$  be the poverty rate measured using the poverty line  $l$ , for country  $i$  in period  $t$ . Let  $K_{it}$  be either labour earnings, the unemployment rate, or any other employment and earnings indicator for country  $i$  at time  $t$ . Let  $C_i$  be country fixed effects which are included only in aggregate regressions (stacked regressions) for the region, but not in country-specific regressions as in the previous sub-section. And let  $e_{it}$  be the error terms. We estimate the elasticity of poverty with respect to the labour market indicator  $k$  ( $\delta_k$ ) in the stacked regression as follows:

$$\Delta\% P(l)_{it} = C_i + \delta_k \Delta\% K_{it} + e_{it},$$

*with :*

- $l = 2.5$  or  $4$  dollars-a-day poverty lines.
- $i = \{AR, BO, \dots, VE\}$ .
- $t = 2001, \dots, 2012/2013$ .
- $k = \{\text{labour earnings, unemployment rate, etc.}\}$ .

(15)

For country  $i$  ( $i = \{AR, BO, \dots, VE\}$ ) we estimate the country-specific elasticity of poverty with respect to the labour market indicator  $k$  ( $\delta_k$ ) as follows:

$$\Delta\% P(l)_t = C + \delta_k \Delta\% K_t + e_t,$$

*with :*

- $l = 2.5$  or  $4$  dollars-a-day poverty lines.
- $t = 2001, \dots, 2012/2013$ .
- $k = \{\text{labour earnings, unemployment rate, etc.}\}$ .

(16)

We present the results from these estimations in Tables 12 and 13 for extreme poverty and for moderate poverty, respectively.

We start by analysing poverty-labour earnings elasticities. We see in the stacked regressions (stacked regression column in Tables 12 and 13 and mean labour earnings row) that the percentage changes in poverty and in extreme poverty are strongly correlated with the evolution of labour earnings in the expected direction, i.e. higher increases in labour earnings being associated with larger poverty reductions. The aggregate extreme poverty-labour earnings elasticity is -1.23, and the elasticity for moderate poverty is -0.95 (both significant at the 1 per cent level). These poverty-labour earnings elasticities are substantially smaller in absolute magnitude than the poverty-growth elasticities we estimated in the previous sub-section (Table 11). This could be expected from the trends observed in Figure 1, which shows that labour earnings and GDP per capita followed similar trends, but changes in labour earnings were more attenuated than those in GDP per capita.



The poverty-labour earnings elasticities differ between countries (columns 2 to 17 in Table 12 and Table 13 and mean labour earnings row). The magnitudes of the moderate poverty-earnings elasticities go from -2.0 in Uruguay to -0.09 in Mexico, while the values of the extreme poverty-earnings elasticities vary from -2.2 in Uruguay to 0.23 in Bolivia. At least one of the two elasticities (poverty or extreme poverty) is statistically significant at standard levels for nine out of 16 countries (Argentina, Brazil, Chile, Colombia, Dominican Republic, Honduras, Paraguay, Uruguay, and Venezuela). As in the case of the poverty-growth elasticities, the poverty-labour earnings elasticities are large and highly significant for Argentina (-1.10 for moderate poverty and -1.55 for extreme poverty), Uruguay (-1.92 and -2.14 respectively), and Venezuela (-1.20 and -1.75 respectively). The results are also large and significant for Brazil (-1.07 for moderate poverty and -1.74 for extreme poverty), for which the poverty-growth elasticities were not statistically different from zero.

Turning now to the elasticity of poverty with respect to unemployment in the stacked regression, we find a strong and significant correlation between reductions in the unemployment rate and reductions in poverty and extreme poverty. Earlier we found a clear positive correlation between the unweighted averages of the unemployment rate and the poverty rates (Figure 1). Consistent with this, we find here significant and positive aggregate elasticities of moderate and extreme poverty rates with respect to unemployment (stacked regression column in Tables 12 and 13 and unemployment row) of 0.19 for moderate poverty (Table 13) and 0.33 for extreme poverty (Table 12), both significant at the 1 per cent level. This implies that, on average, for each 10 per cent reduction in the unemployment rate (for example, from approximately 9 per cent, the average for all 16 countries at the beginning of the period, to 8.1 per cent), poverty falls by 1.9 per cent and extreme poverty by 3.3 per cent. Looking at the country level, as with the other elasticities discussed above, the poverty-unemployment elasticities are highly variable between countries (columns 2 to 17 in Table 12 and Table 13 and unemployment row). One or both of these elasticities (poverty or extreme poverty) are significant for Argentina, Brazil, Costa Rica, Dominican Republic, Peru, Paraguay, Uruguay, and Venezuela. The magnitudes of the elasticities are large and strongly significant for Argentina (0.67 for moderate poverty and 1.16 for extreme poverty), Paraguay (0.55 and 0.87 respectively), and Venezuela (0.72 and 1.14 respectively).

We also find a strong correlation between percentage changes in moderate and extreme poverty and percentage changes in the three labour market indicators related to the occupational position in the stacked regression (stacked regression column in Tables 12 and 13 and the corresponding indicator row). First, we find a negative and significant aggregate elasticity between extreme and moderate poverty and the share of wage/salaried employees, with a substantially higher coefficient (in absolute terms) for extreme poverty (-1.50) than for moderate poverty (about 0.97). The elasticities of poverty with respect to the occupational positions that we identified as signals of worse labour market outcomes, the share of self-employment (second) and the share of unpaid family workers (third), are positive, and substantially larger for the share of self-employment (1.12 for extreme poverty and 0.80 for moderate poverty), than for the share of unpaid workers (0.23 for extreme poverty and 0.17 for moderate poverty). As with the previous indicators, there is a high degree of heterogeneity in the magnitude of the elasticities between countries, although the signs seem to be mostly consistent among them (columns 2 to 17 in Table 12 and Table 13 and the corresponding indicator row).

We find a strong and significant correlation between reductions in per capita household income and labour earnings inequality and reductions in poverty and extreme poverty in the stacked

regression (stacked regression column in Tables 12 and 13 and the corresponding indicator row). The coefficients are higher for extreme poverty (2.1 for the Gini of household per capita income and 1.3 for the Gini of labour earnings) than for moderate poverty (1.2 and 0.9 respectively). Similarly to the previous indicators, there is a high degree of heterogeneity in the magnitude of the elasticities between countries, although the signs are positive most of the time (columns 2 to 17 in Table 12 and Table 13 and the corresponding indicator row).

We did not find a significant average year-by-year poverty elasticity for the remaining employment and earnings indicators, such as the share of high- and low-earnings occupations, the share of workers registered with social security, and the share of workers in low- and high-earnings sectors.

In Figures 17 and 18 we present some of the elasticities of poverty with respect to mean labour earnings and unemployment for four countries in our sample: Honduras, the Dominican Republic, Bolivia, and Brazil. In Honduras, the extreme and moderate poverty rates increased in about half of the years under study, and the increases took place even with reductions in the unemployment rate (top row of Figure 17 for the extreme poverty rate and Figure 18 for the moderate poverty rate). That determines very small positive elasticities of moderate and extreme poverty (0.06 and 0.07 respectively) with respect to the unemployment rate, and very small R-squareds (0.02 and 0.01 respectively) (regression details in the bottom of each figure). The Dominican Republic is the only country among the four where the poverty-unemployment elasticities are negative (slope coefficient of the regression line in the bottom of each figure: -0.08 for moderate poverty and -0.07 for extreme poverty). This result is determined mainly by one year that had a large increase in the unemployment rate jointly with a large reduction in the poverty rates. In Bolivia and Brazil, both poverty rates fell most of the time, and continued to decline when the unemployment rate increased (most of the points are below the zero horizontal line). The poverty-unemployment elasticities are similar in magnitude in both countries (about 0.4 for moderate poverty and 0.2 for extreme poverty).

The analysis of the relationship between percentage changes in poverty and percentage changes in mean earnings (second row of Figure 17 for the extreme poverty rate and Figure 18 for the moderate poverty rate) reveals that in Honduras and the Dominican Republic mean earnings fell most of the time (most of the points are to the left of the zero vertical line). In Honduras, the moderate and extreme poverty rates tended to increase when mean earnings fell and to decrease when mean earnings grew, determining a negative elasticity (slope coefficient of the regression line in the bottom of each figure: -0.54 for moderate poverty and -0.91 for extreme poverty). In the Dominican Republic, the poverty-earnings elasticities were also negative, but in this country the poverty rates continued to decrease when labour earnings fell. This specificity of the Dominican Republic case determined a regression line that is below the one for Honduras. In Bolivia, mean earnings increased most of the time, but in some of the years the poverty rates increased. This determined a negative and small moderate poverty-earnings elasticity (-0.2) and a very small R-squared (0.02). The extreme poverty-earnings elasticity was positive (0.2) with an R-squared of zero. Finally, in Brazil both poverty rates fell most of the time and mean earnings increased. The poverty reductions were larger the larger the increases in mean labour earnings. Thus, the poverty-earnings elasticities are negative (-0.96 for extreme poverty and -1.3 for moderate poverty) and the relationships very tight (R-squareds of 0.73 for extreme poverty and 0.89 for moderate poverty).

To sum up, in the Latin American region and in most of the countries, the year-by-year percentage changes in both poverty measures (2.5 and 4 dollars-a-day poverty rates) were related in the welfare-improving direction with percentage changes in some employment and earnings indicators (unemployment, share of wage/salaried employees, share of self-employed, share of unpaid workers, mean earnings), but the magnitude of the effect and the pattern over time varied substantially from country to country.

### **5.3 Changes of labour earnings across the earnings distribution within each country: growth incidence curves**

Now we extend the analysis of the within-country growth-employment-poverty nexus focusing on proportional and dollar changes in labour earnings along the earnings distribution in each country. The reason for having a sub-section completely devoted to the analysis of labour earnings changes is that earnings are the main source of income for Latin American households, and increases in the earnings at the bottom of the income distribution have been shown to be the most important contributor to the observed decline in household per capita income inequality in the region (Azevedo et al. 2013).

We base our analysis on the construction of Growth Incidence Curves (GICs) for labour earnings. GICs show the change in an income variable (labour earnings in our case) in percentage terms or in dollars, between two years (initial and final year in our case) by quantiles of the distribution of that income variable (deciles in our case). We expect from this section to learn about the changes in labour earnings over all deciles of each country's income distribution during the 2000s.<sup>15</sup>

We found earlier that mean real earnings grew in most of the countries in our sample. Here, we uncover two additional findings: that the percentage gain tended to be larger for the poorer deciles, while the gain in dollars tended to be larger for the richest deciles.

Figures 19 and 20 display, for each country, the GICs for employed workers with positive earnings between the initial year and the final year. Figure 19 presents the percentage changes of labour earnings, while Figure 20 shows the dollar changes. Four main results emerge from these figures. First, as observed in Section 3, comparing the earliest survey year with the latest, mean real labour earnings (the change in this variable is displayed as the dashed horizontal line in the figures) increased in 11 countries and decreased in five (with very similar patterns for median labour earnings). Second, for more than half the countries (Brazil, Chile, Colombia, Costa Rica, Ecuador, Panama, Peru, Paraguay, and Venezuela), the GICs based on percentage earnings change are always above zero, that is, all deciles register positive earnings changes. For Argentina and Bolivia, all deciles except the top ones in each case are above zero. For Mexico and Uruguay, most deciles did not experience changes in average incomes, with reductions in the top and bottom deciles in both countries. For the remaining three countries (Dominican Republic, Honduras, and El Salvador), all or nearly all of the deciles are below zero. Overall, then, most deciles in most countries experienced an increase in labour earnings. From the 160 deciles under

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<sup>15</sup> For more on the GIC approach, see Ravallion and Chen (2003), Bourguignon (2011), and the references cited therein. As is most common in the literature, we are presenting here anonymous GICs, that is, changes in earnings for whichever individuals are in the bottom 10 per cent of the earnings distribution, next 10 per cent, and so on. We do this because so-called non-anonymous GICs require panel data, which we do not have.

study (10 deciles by 16 countries), 113 (70 per cent) presented increases in labour earnings from the initial year to the final year. Note that 47 (30 per cent) of the country-decile cells did not experience positive earnings growth, of which 45 belong to the five countries where mean labour earnings fell, and the remaining two to the top decile in Argentina and Bolivia. Labour earnings did not fall for the first 9 deciles in any country that experienced increases in mean labour earnings. Third, in more than half of the countries, the changes in labour earnings in percentage terms were largest for the poorer deciles. In most of the remaining countries, the changes in labour earnings benefited the middle deciles the most. In only one case (Costa Rica), the percentage changes in labour earnings were largest for the richest deciles. Finally, in ten out of 16 countries, the largest dollar increases in labour earnings took place either in the 9<sup>th</sup> or the 10<sup>th</sup> decile (i.e. the two richest). In five of the 16, there were losses in dollars overall, and the largest losses were in the richest decile. In one country (Argentina), the largest increase in dollars took place in the middle of the distribution. At the low end of the earnings distribution, earnings were essentially unchanged in dollars for the poorest decile in all 16 countries. What makes these minimal dollar changes for the poor consistent with the higher percentage changes for the poor than for others is that the poor have so few dollars of earnings to begin with.

#### **5.4 In summary**

In this section, we analysed the within-country growth-employment-poverty nexus in three parts. First, we studied the response of labour market indicators to economic growth. Second, we investigated the response of poverty to employment and earnings changes. Finally, we presented evidence on changes of labour earnings across the earnings distribution within each country.

The first part of the section used year-by-year data to examine whether employment and earnings indicators and poverty and inequality indicators changed in the welfare-improving direction when GDP per capita grows. We found that in the Latin American region as a whole and in most of the countries, the year-by-year percentage changes in some employment and earnings indicators (unemployment, share of wage/salaried employees, share of self-employed, and mean earnings) and poverty indicators (2.5 and 4 dollars-a-day poverty rates) improved with increases in GDP per capita, but the magnitude of the effect and the pattern over time varied substantially from country to country.

In the second part of the section, we examined the year-by-year response of the moderate and extreme poverty rates to changes in employment and earnings indicators and to changes in inequality indicators. We found that in the Latin American region and in most of the countries, the year-by-year percentage changes in both poverty measures (2.5 and 4 dollars-a-day poverty rates) were related in the welfare-improving direction with percentage changes in some employment and earnings indicators (unemployment, share of wage/salaried employees, share of self-employed, share of unpaid workers, and mean earnings). Again, the poverty rates were differentially responsive to changes in employment and earnings indicators in different countries. The pattern of poverty changes over time was also different across countries.

Finally, we analysed the patterns of earnings changes across different deciles of the earnings distributions in each of the countries. We used anonymous GICs to compare initial earnings (typically 2000) with final earnings (typically 2012) by decile, calculating both percentage changes and dollar changes. We found that 70 per cent of the country-decile cells exhibited positive earnings changes while the other 30 per cent either stagnated or decreased. The largest

percentage increases were for the lowest deciles but the highest increases in dollars took place in the richest deciles.

## 6 Conclusion

In the 2000s, the Latin American region has witnessed an unprecedented period of growth with poverty and inequality reduction (Alvaredo and Gasparini 2014). The region also suffered from the 2008 economic crisis in Europe and the US.

This paper has synthesized the results from individual studies of 16 Latin American countries (Cruces et al. 2015a-2015p) and conducted extensive new analysis, both across countries and within them. We have aimed to answer the following broad questions: Has economic growth (defined as increased output of goods and services) resulted in economic development (defined as widespread improvements in standards of living) via improved conditions in labour markets? Have these improvements halted or been reversed since the Great Recession? How do the rate and character of economic growth, changes in the various labour market indicators, and changes in poverty relate to each other?

When we embarked upon this research project, we were optimistic that we would be able to answer a wide range of questions but we were sceptical about what the results would show. Latin American income inequality is the highest in the world, higher even than sub-Saharan Africa (Ortiz and Cummins 2011). The literature offers ample evidence that high inequality often begets even higher income inequality, possibly leading to stagnation of incomes for all but those at the very top (see, for example, Stiglitz (2015), Atkinson (2015), and Bourguignon (2015)). Nor is the experience of countries such as the US at all reassuring: economic growth took place in the 2000s except for the Great Recession and yet a wide range of indicators have not improved. The official poverty rate, median household income in real dollars, and median labour earnings in real dollars have stagnated or worsened. The official unemployment rate has only now (2015) fallen to what it was seven years ago before the Great Recession, but, of course, the official unemployment rate excludes discouraged workers and workers working part-time involuntarily, the numbers of which are at record highs in the US. And so it seemed plausible to hypothesize that at least some Latin American countries would have followed a similar course: stagnating or worsening labour market conditions and constant or rising poverty rates despite economic growth taking place.

The positive result is that labour market conditions in 15 of the 16 Latin American countries followed a much more positive course from 2000 to the latest year for which data were available, typically 2012. In 13 of the 16 countries, 75 per cent or more of the labour market indicators improved, and in two other countries, 62.5 per cent of the labour market indicators improved. Only in Honduras did the great majority of labour market indicators *not* improve.

In all Latin American countries, economic growth rates fell as a consequence of the international crisis of 2008, some turning negative. A number of key labour market indicators—the unemployment rate, the share of wage/salaried workers in total employment, and the extent of self-employment—changed in the worsening direction for the most part. Remarkably, though, poverty rates increased in only five of the 16 countries and extreme poverty rates in only one during the international crisis. But then, as their economies recovered, so too did these labour

market indicators, so that by 2012–13, most countries' labour market indicators had recovered at least in part and in some cases in full. This newfound resilience of labour market conditions contrasts sharply with the experience of the region in the second half of the 20<sup>th</sup> century, during which the process of 'stop and go' implied that labour markets deteriorated and economies lost most of the gains from the growth periods in the aftermath of the crises (Edwards 2008).

Looking across countries, we investigated whether the number of improvements in labour market indicators was related to the rate of economic growth, and we found no robust relationship. Some of the countries exhibited rapid economic growth over the 2000s when compared to the average of the region and an improvement in labour market indicators. One other country also experienced rapid economic growth, but the performance of its labour market indicators was mixed. Other countries improved their labour market indicators despite having moderate economic growth. Other countries experienced slow economic growth with mixed results in the labour market.

Continuing with the cross-country analysis, we then investigated the role of other potential correlates of changing labour market indicators beyond the rate of economic growth. First, we examined whether initial GDP per capita makes an important difference for the rate of change of any of the labour market indicators and found that it did not. Second, we asked for each labour market indicator whether its rate of improvement is related to its initial level. We found that five of the 16 indicators converged in the sense that those countries with the worst initial values of these indicators experienced larger subsequent improvements than did countries with better initial values; the five convergent indicators were the unemployment rate, the share of unpaid family workers, the moderate poverty rate, the extreme poverty rate, and the inequality of household per capita income. Third, we studied a number of macroeconomic variables and found that improvements in labour market indicators were related to better external factors—specifically, improving terms of trade, increasing exports, increasing revenues from natural resources, and an increase in the share of industry in GDP—and to countries' success in translating those changes into export-led improvements in labour market conditions. And finally, we explored whether the changes in labour market indicators are linked systematically to other indicators across countries—for example, whether real earnings and employment move together, and if so, in which direction. We found that 59 per cent of the pairs moved together in the positive direction, for example real earnings rising and unemployment falling, 41 per cent of the pairs did not move together in a significant way, and not even one pair of indicators moved in such a manner that one improved while the other worsened.

Our last step in the cross-country study of the growth-employment-poverty nexus was the analysis of the relationship between improvements in employment and earnings indicators and poverty changes. Our evidence revealed a generally strong and consistent cross-country pattern of association between reductions in poverty and extreme poverty on the one hand, and improvements in earnings and employment indicators on the other.

Looking within countries, we generated additional findings on the growth-employment-poverty nexus. We first used year-to-year data and found that in the Latin American region as a whole and in most of the countries, some employment and earnings indicators (unemployment, share of wage/salaried employees, share of self-employed, and mean earnings) and poverty indicators (2.5 and 4 dollars-a-day poverty rates) improved as GDP per capita increased, but the magnitudes of the effect and the pattern over time varied substantially from country to country.

Second, year-by-year percentage changes in both poverty measures (2.5 and 4 dollars-a-day poverty rates) were related in the welfare-improving direction with percentage changes in some employment and earnings indicators (unemployment, share of wage/salaried employees, share of self-employed, share of unpaid workers, and mean earnings). Again, the poverty rates were differentially responsive to changes in employment and earnings indicators in different countries. Finally, we analysed the patterns of earnings changes across different deciles of the earnings distributions in each of the countries. We used anonymous GICs to compare initial earnings (typically 2000) with final earnings (typically 2012) by decile, calculating both percentage changes and dollar changes. We found that 70 per cent of the country-decile cells exhibited positive earnings changes while the other 30 per cent either stagnated or decreased. The largest percentage increases were for the lowest deciles but the highest increases in dollars took place in the richest deciles.

In brief, these results tell us two main findings: first, changes in labour market conditions are related to economic growth but they are related to more than economic growth. Second, improvements in labour market conditions are strongly related to reductions in poverty. These findings suggest that on the margin, for the anti-poverty objective, research should focus less on the rate of economic growth and more on improving employment and earnings conditions in jobs where the poor are or where the poor might move to.

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## Tables

Table 1: Latin American household surveys and period under study by country

Country	Isocode (two digits)	Initial year	Final year	Name of household survey
Argentina	AR	2000	2012	Encuesta Permanente de Hogares (2000-2002) Encuesta Permanente de Hogares-Continua (2003-2012)
Bolivia	BO	2000	2012	Encuesta de Hogares - MECOVI
Brazil	BR	2001	2012	Pesquisa Nacional por Amostra de Domicilios
Chile	CL	2000	2011	Encuesta de Caracterización Socioeconómica Nacional
Colombia	CO	2002	2013	Encuesta Continua de Hogares (2000-2005) Gran Encuesta Integrada de Hogares (2008-2013)
Costa Rica	CR	2001	2009	Encuesta de Hogares de Propósitos Múltiples
Dominican Republic	DO	2000	2012	Encuesta Nacional de Fuerza de Trabajo
Ecuador	EC	2003	2012	Encuesta de Empleo, Desempleo y Subempleo
Honduras	HN	2001	2012	Encuesta Permanente de Hogares de Propósitos Múltiples
Mexico	MX	2000	2012	Encuesta Nacional de Ingresos y Gastos de los Hogares
Panama	PA	2001	2012	Encuesta de Hogares
Peru	PE	2003	2012	Encuesta Nacional de Hogares
Paraguay	PY	2001	2013	Encuesta Integrada de Hogares (2001) Encuesta Permanente de Hogares (2002-2013)
El Salvador	SV	2000	2012	Encuesta de Hogares de Propósitos Múltiples
Uruguay	UY	2000	2012	Encuesta Continua de Hogares
Venezuela	VE	2000	2012	Encuesta de Hogares Por Muestreo

Note: Venezuela's surveys from 2000 to 2006 are part of SEDLAC. From 2007 onwards, we carried out our own processing.

Source: SEDLAC (CEDLAS and World Bank 2014).

Table 2: Annualized growth rates of GDP per capita (at PPP 2005) for different time periods by country

Country	Initial year	Final year	Annualized growth rate of GDP per capita				
			Initial-final	2000-2012	2000-2008	2008-2009	2009-2012
AR	2000	2012	3.57	3.57	3.25	-0.03	4.22
BO	2000	2012	2.24	2.24	1.98	1.71	2.33
BR	2001	2012	2.41	2.20	2.42	-1.22	2.07
CL	2000	2011	2.96	3.10	3.13	-1.97	3.55
CO	2002	2013	3.18	2.76	2.79	0.21	2.63
CR	2001	2009	2.92	2.69	3.11	-2.49	2.49
DO	2000	2012	3.62	3.62	3.68	2.05	2.99
EC	2003	2012	2.96	2.63	2.74	-1.10	2.68
HN	2001	2012	2.14	2.01	2.94	-4.36	1.30
MX	2000	2012	0.85	0.85	0.92	-5.89	2.23
PA	2001	2012	5.59	5.12	4.50	2.06	5.81
PE	2003	2012	5.56	4.58	4.63	-0.15	4.51
PY	2001	2013	2.40	1.22	1.29	-5.65	2.56
SV	2000	2012	1.45	1.45	2.19	-3.63	0.91
UY	2000	2012	3.13	3.13	2.19	1.89	4.53
VE	2000	2012	1.67	1.67	2.71	-4.77	0.85
<b>Average</b>			<b>2.92</b>	<b>2.68</b>	<b>2.78</b>	<b>-1.46</b>	<b>2.85</b>

Note: The column Initial-Final shows the annualized growth rate for the period we have household surveys' data available for each country. The following columns provide the annualized growth rate for comparable periods across countries.

Source: Authors' calculations based on World Development Indicators (WDI) (World Bank 2014).

Table 3: Qualitative changes in labour market indicators from initial to final year by country

Indicator	AR	BO	BR	CL	CO	CR	DO	EC	HN	MX	PA	PE	PY	SV	UY	VE
<i>Unemployment</i>																
Decrease in the unemployment rate	+	+	+	+	+	-	NC	+	+	-	+	+	+	+	+	+
<i>Occupations</i>																
Decrease in the share of low-earnings occupations		+	+	-	+	+	-	+	NC	+	+	+	+	+	+	+
Increase in the share of high-earnings occupations		+	+	+	+	+	+	+	NC	+	+	+	NC	-	+	+
<i>Occupational position</i>																
Increase in the share of wage/salaried employees	+	+	+	+	-	+	-	-	-	+	+	+	+	NC	+	+
Decrease in the share of self-employment	+	+	+	NC	-	+	-	-	NC	-	+	+	+	+	+	NC
Decrease in the share of unpaid family workers	+	+	+	+	NC	+	NC	NC	-	+	NC	+	+	-	+	+
<i>Economic Sector</i>																
Decrease in the share of workers in low-earnings sectors	NC	+	+	-	-	+	+	+	-	+	+	+	+	+	+	+
Increase in the share of workers in high-earnings sectors	+	+	+	+	+	+	+	+	NC	+	+	+	+	NC	NC	+
<i>Education</i>																
Decrease in the share of low educated workers	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Increase in the share of high educated workers	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
<i>Workers registered with SS</i>																
Increase in the share of workers registered with SS	+	+	+	+	+	+	+	+	-	-	+	+	+	-	+	NC
<i>Earnings</i>																
Increase in mean labor earnings	+	+	+	+	+	+	-	+	-	-	+	+	+	-	-	+
<i>Poverty</i>																
Decrease in 4 dollars-a-day poverty	+	+	+	+	+	+	+	+	-	+	+	+	+	+	+	+
Decrease in 2.5 dollars-a-day poverty	+	+	+	+	+	+	+	+	-	+	+	+	+	+	+	+
<i>Inequality</i>																
Decrease in GINI of household per capita income	+	+	+	+	+	NC	+	+	-	+	+	+	+	+	+	+
Decrease in GINI of labor earnings	+	+	+	+	+	-	+	+	-	+	+	+	+	+	+	+
<b>Number of improving indicators</b>	<b>13</b>	<b>16</b>	<b>16</b>	<b>13</b>	<b>12</b>	<b>13</b>	<b>10</b>	<b>13</b>	<b>3</b>	<b>12</b>	<b>15</b>	<b>16</b>	<b>15</b>	<b>10</b>	<b>14</b>	<b>14</b>
<b>Total number of indicators</b>	<b>14</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>16</b>
<b>% of improving indicators</b>	<b>92.9</b>	<b>100.0</b>	<b>100.0</b>	<b>81.3</b>	<b>75.0</b>	<b>81.3</b>	<b>62.5</b>	<b>81.3</b>	<b>18.8</b>	<b>75.0</b>	<b>93.8</b>	<b>100.0</b>	<b>93.8</b>	<b>62.5</b>	<b>87.5</b>	<b>87.5</b>

Note: The table summarizes the changes in each labour market indicator from initial to final year of the period indicated in Table 2, except for some countries where the classification of occupations and/or the definition of registered workers are not comparable over the entire period. See each country paper for more details. References: + denotes improvement; - denotes worsening; NC denotes no changes. All the improvements and worsenings are statistically significant at 5 per cent level.

Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014).

Table 4: Qualitative changes in labour market indicators during the international crisis of 2008 by country

Indicator	AR	BO	BR	CL	CO	CR	DO	EC	HN	MX	PA	PE	PY	SV	UY	VE
<i>Unemployment</i>																
Decrease in the unemployment rate	-	NC	-	-	-	-	-	-	NC	-	-	NC	-	-	+	-
<i>Occupations</i>																
Decrease in the share of low-earnings occupations		+	NC	-	-	NC	-	-	-		+	+	NC	NC	+	NC
Increase in the share of high-earnings occupations		NC	+	+	-	NC	NC	-	-		+	+	-	NC	+	+
<i>Occupational position</i>																
Increase in the share of wage/salaried employees	NC	+	+	+	-	NC	NC	-	-		-	NC	-	-	NC	-
Decrease in the share of self-employment	-	NC	NC	NC	NC	NC	-	-	-		-	NC	NC	-	NC	-
Decrease in the share of unpaid family workers	-	+	+	+	-	NC	+	-	NC		NC	NC	NC	-	NC	+
<i>Economic Sector</i>																
Decrease in the share of workers in low-earnings sectors	NC	NC	NC	NC	-	NC	+	NC	-	NC	NC	+	NC	NC	+	NC
Increase in the share of workers in high-earnings sectors	+	NC	NC	+	NC	NC	-	NC	-	+	+	+	NC	NC	NC	NC
<i>Education</i>																
Decrease in the share of low educated workers	+	+	+	+	-	+	+	NC	-	+	NC	NC	+	NC	+	+
Increase in the share of high educated workers	+	+	+	+	-	NC	-	NC	-	+	NC	NC	NC	NC	+	+
<i>Workers registered with SS</i>																
Increase in the share of workers registered with SS	+	NC	+	-	-	NC	+	NC	-	-	+	+	NC	-	+	+
<i>Earnings</i>																
Increase in mean labor earnings	+	NC	+	+	+	+	+	-	-	-	NC	+	NC	NC	+	-
<i>Poverty</i>																
Decrease in 4 dollars-a-day poverty	NC	+	+	+	+	-	+	-	+	-	+	+	-	+	+	-
Decrease in 2.5 dollars-a-day poverty	+	+	+	+	+	NC	+	+	+	-	+	+	+	+	+	NC
<i>Inequality</i>																
Decrease in GINI of household per capita income	+	+	NC	NC	NC	-	NC	+	+	+	NC	NC	+	+	NC	NC
Decrease in GINI of labor earnings	NC	+	NC	+	-	NC	NC	+	+	+	NC	NC	+	NC	+	+
<b>Number of worsening indicators</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>3</b>	<b>10</b>	<b>3</b>	<b>5</b>	<b>8</b>	<b>10</b>	<b>5</b>	<b>3</b>	<b>0</b>	<b>4</b>	<b>5</b>	<b>0</b>	<b>5</b>
<b>Total number of indicators</b>	<b>14</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>11</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>16</b>
<b>% of worsening indicators</b>	<b>21.4</b>	<b>0.0</b>	<b>6.3</b>	<b>18.8</b>	<b>62.5</b>	<b>18.8</b>	<b>31.3</b>	<b>50.0</b>	<b>62.5</b>	<b>45.5</b>	<b>18.8</b>	<b>0.0</b>	<b>25.0</b>	<b>31.3</b>	<b>0.0</b>	<b>31.3</b>

Note: The table summarizes the changes in each labour market indicator during 2008-2009 except for Chile (2006-2009) and Mexico (2006-2010). In the case of Chile, there is no household survey in between the years 2006 and 2009. Mexico was already in recession in the year 2008, so we considered 2006 as the base year (there was no survey in 2007).

References: + denotes improvement; - denotes worsening; NC denotes no changes. All the improvements and worsenings are statistically significant at 5 per cent.

Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014).

Table 5: Qualitative changes after the international crisis of 2008 in labour market indicators which worsened during the crisis by country

Indicator	AR	BO	BR	CL	CO	DO	EC	HN	MX	PA	PE	PY	SV	UY	VE
<i>Unemployment</i>															
Decrease in the unemployment rate	++		++	+	++	-	++		+	++		++	+		+
<i>Occupations</i>															
Decrease in the share of low-earnings occupations				++	+	+	++	+							
Increase in the share of high-earnings occupations					++		++	-							
<i>Occupational position</i>															
Increase in the share of wage/salaried employees					+		-	-		++		++	+		++
Decrease in the share of self-employment	++					+	-	-		++			+		-
Decrease in the share of unpaid family workers	++				+		++			++			-		
<i>Economic Sector</i>															
Decrease in the share of workers in low-earnings sectors					+			-							
Increase in the share of workers in high-earnings sectors						-		-							
<i>Education</i>															
Decrease in the share of low educated workers					++			++							
Increase in the share of high educated workers					++	-		+							
<i>Workers registered with SS</i>															
Increase in the share of workers registered with SS				++	++			+	-				-		
<i>Earnings</i>															
Increase in mean labor earnings							++	-	+						++
<i>Poverty</i>															
Decrease in 4 dollars-a-day poverty							++		++			++			++
Decrease in 2.5 dollars-a-day poverty									+						
<i>Inequality</i>															
Decrease in GINI of household per capita income															
Decrease in GINI of labor earnings					++					-					
Total number of indicators affected by the crises	3	0	1	3	10	5	8	10	5	5	0	3	5	0	5
Number of continue deterioration	0	0	0	0	0	3	2	6	1	1	0	0	2	0	1
Number of partial recoveries	0	0	0	1	4	2	0	3	3	0	0	0	3	0	1
Number of total recoveries	3	0	1	2	6	0	6	1	1	4	0	3	0	0	3
<b>% of total recoveries</b>	<b>100.0</b>	<b>-</b>	<b>100.0</b>	<b>66.7</b>	<b>60.0</b>	<b>0.0</b>	<b>75.0</b>	<b>10.0</b>	<b>20.0</b>	<b>80.0</b>	<b>-</b>	<b>100.0</b>	<b>0.0</b>	<b>-</b>	<b>60.0</b>

Note: The table summarizes the changes in labour market indicators that worsened during the crisis according to Table 4. Estimations correspond to: Argentina 2008–12, Bolivia 2008–12, Brazil 2008–12, Chile 2006–11, Colombia 2008–13, Dominican Republic 2008–12, Ecuador 2008–12, Honduras 2008–12, Mexico 2006–12, Panama 2008–12, Peru 2008–12, Paraguay 2008–13, El Salvador 2008–12, Uruguay 2008–12, and Venezuela 2008–12. In Paraguay, the classification of occupations during 2010–13 cannot be compared with the classification before 2010. Costa Rica does not appear in this table since from 2010 onwards household surveys are not comparable to previous surveys.

References: ++ denotes total recovery: the indicator improved after 2009 above the pre-crisis level of 2008; + denotes partial recovery: the indicator improved after 2009 but it did not recover its pre-crisis level of 2008; - denotes continued deterioration: the indicator continued worsening after 2009. All the improvements and worsenings are statistically significant at 5 per cent.

Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014).



Table 6: Direction of the cross-country relationship between annualized changes in macroeconomic variables and annualized changes in labour market indicators and GDP per capita growth during the 2000s

Indicator	Share of agriculture in GDP	Share of industry in GDP	Share of services in GDP	Domestic expenditure (% of GDP)	Public expend. in education and health (% of GDP)	Public expend. in social security (% of GDP)	Exports (% of GDP)	Terms of trade	Foreign direct investment (% of GDP)	Revenues from natural resources (% of GDP)	Stock of public debt (% of GDP)
<i>Unemployment</i>											
Decrease in the unemployment rate	NR	Positive	Negative	Negative	NR	NR	NR	Negative	NR	NR	NR
<i>Occupations</i>											
Decrease in the share of low-earnings occupations	NR	NR	NR	Negative	NR	NR	Positive	NR	NR	Positive	Negative
Increase in the share of high-earnings occupations	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	Negative
<i>Occupational position</i>											
Increase in the share of wage/salaried employees	NR	NR	NR	NR	NR	NR	Positive	NR	NR	NR	Negative
Decrease in the share of self-employment	NR	NR	NR	NR	NR	NR	Positive	NR	NR	NR	Negative
Decrease in the share of unpaid family workers	NR	NR	NR	Negative	NR	NR	Positive	Positive	NR	Positive	Negative
<i>Economic Sector</i>											
Decrease in the share of workers in low-earnings sectors	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	Negative
Increase in the share of workers in high-earnings sectors	NR	NR	NR	NR	NR	Positive	NR	NR	NR	NR	Negative
<i>Education</i>											
Decrease in the share of low educated workers	NR	NR	NR	NR	NR	Positive	NR	NR	Negative	NR	Negative
Increase in the share of high educated workers	NR	NR	NR	NR	NR	Positive	NR	NR	NR	NR	Negative
<i>Workers registered with SS</i>											
Increase in the share of workers registered with SS	NR	NR	NR	NR	NR	NR	NR	NR	Positive	NR	NR
<i>Earnings</i>											
Increase in mean labor earnings	NR	Positive	Negative	Negative	NR	NR	Positive	Positive	NR	Positive	Negative
<i>Poverty</i>											
Decrease in 4 dollars-a-day poverty	NR	Positive	Negative	Negative	NR	NR	Positive	Positive	NR	Positive	Negative
Decrease in 2.5 dollars-a-day poverty	NR	Positive	Negative	Negative	NR	NR	Positive	Positive	NR	Positive	Negative
<i>Inequality</i>											
Decrease in GINI of household per capita income	NR	Positive	Negative	Negative	NR	NR	Positive	Positive	Negative	Positive	NR
Decrease in GINI of labor earnings	NR	Positive	Negative	Negative	NR	NR	Positive	Positive	Negative	Positive	NR
<i>Economic growth</i>											
Increase in GDPpc at PPP 2005	NR	NR	NR	Negative	NR	Negative	NR	NR	Positive	NR	Negative
<b>Number of relationships with Labor Market indicators</b>	<b>0</b>	<b>6</b>	<b>6</b>	<b>8</b>	<b>0</b>	<b>3</b>	<b>9</b>	<b>7</b>	<b>4</b>	<b>7</b>	<b>12</b>
<b>Percentage of total indicators</b>	<b>0.0</b>	<b>37.5</b>	<b>37.5</b>	<b>50.0</b>	<b>0.0</b>	<b>18.8</b>	<b>56.3</b>	<b>43.8</b>	<b>25.0</b>	<b>43.8</b>	<b>75.0</b>

Note: Positive denotes an increase of the macroeconomic variable is associated with a change in the labour market indicator in the welfare-improving direction. Negative denotes an increase of the macroeconomic variable is associated with a change in the labour market indicator in the welfare-worsening direction. NR denotes no relationship, that is the R-squared of a linear regression is smaller than 0.15.

Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014), WDI (World Bank 2014), and CEPALSTAT (UN-ECLAC 2015).

Table 7: Tightness of the cross-country relationship (R-squared) between annualized changes in macroeconomic variables and annualized changes in labour market indicators and GDP per capita growth during the 2000s

Indicator	Share of agriculture in GDP	Share of industry in GDP	Share of services in GDP	Domestic expenditure (% of GDP)	Public expend. in education and health (% of GDP)	Public expend. in social security (% of GDP)	Exports (% of GDP)	Terms of trade	Foreign direct investment (% of GDP)	Revenues from natural resources (% of GDP)	Stock of public debt (% of GDP)
<i>Unemployment</i>											
Decrease in the unemployment rate	0.00	<b>0.21</b>	<b>0.32</b>	<b>0.20</b>	0.02	0.02	0.11	<b>0.15</b>	0.01	0.03	0.02
<i>Occupations</i>											
Decrease in the share of low-earnings occupations	0.00	0.06	0.09	<b>0.19</b>	0.01	0.01	<b>0.18</b>	0.10	0.00	0.01	<b>0.55</b>
Increase in the share of high-earnings occupations	0.09	0.02	0.01	0.11	0.08	0.03	0.06	0.03	0.01	<b>0.04</b>	<b>0.27</b>
<i>Occupational position</i>											
Increase in the share of wage/salaried employees	0.08	0.01	0.00	0.12	0.00	0.01	<b>0.23</b>	0.02	0.00	0.04	<b>0.28</b>
Decrease in the share of self-employment	0.11	0.08	0.02	0.06	0.00	0.01	<b>0.24</b>	0.04	0.00	0.02	<b>0.19</b>
Decrease in the share of unpaid family workers	0.00	0.07	0.10	<b>0.27</b>	0.00	0.01	<b>0.20</b>	<b>0.18</b>	0.00	<b>0.29</b>	<b>0.28</b>
<i>Economic Sector</i>											
Decrease in the share of workers in low-earnings sectors	0.01	0.00	0.00	0.11	0.02	0.04	0.03	0.02	0.00	0.03	<b>0.15</b>
Increase in the share of workers in high-earnings sectors	0.05	0.00	0.00	0.01	0.00	<b>0.36</b>	0.02	0.12	0.11	0.01	<b>0.25</b>
<i>Education</i>											
Decrease in the share of low educated workers	0.05	0.02	0.00	0.00	0.00	<b>0.37</b>	0.01	0.02	<b>0.20</b>	0.01	<b>0.18</b>
Increase in the share of high educated workers	0.07	0.00	0.04	0.06	0.02	<b>0.17</b>	0.07	0.14	0.04	0.00	<b>0.22</b>
<i>Workers registered with SS</i>											
Increase in the share of workers registered with SS	0.12	0.05	0.00	0.06	0.00	0.06	0.00	0.00	<b>0.16</b>	0.04	0.06
<i>Earnings</i>											
Increase in mean labor earnings	0.06	<b>0.30</b>	<b>0.25</b>	<b>0.29</b>	0.00	0.06	<b>0.21</b>	<b>0.40</b>	0.09	<b>0.24</b>	<b>0.53</b>
<i>Poverty</i>											
Decrease in 4 dollars-a-day poverty	0.07	<b>0.34</b>	<b>0.26</b>	<b>0.39</b>	0.09	0.02	<b>0.33</b>	<b>0.41</b>	0.12	<b>0.38</b>	<b>0.31</b>
Decrease in 2.5 dollars-a-day poverty	0.05	<b>0.36</b>	<b>0.31</b>	<b>0.41</b>	0.05	0.02	<b>0.31</b>	<b>0.46</b>	0.07	<b>0.38</b>	<b>0.38</b>
<i>Inequality</i>											
Decrease in GINI of household per capita income	0.00	<b>0.16</b>	<b>0.23</b>	<b>0.27</b>	0.09	0.01	<b>0.23</b>	<b>0.16</b>	<b>0.19</b>	<b>0.24</b>	0.03
Decrease in GINI of labor earnings	0.00	<b>0.29</b>	<b>0.39</b>	<b>0.28</b>	0.00	0.08	<b>0.15</b>	<b>0.36</b>	<b>0.30</b>	<b>0.19</b>	0.09
<i>Economic growth</i>											
Increase in GDPpc at PPP 2005	0.08	0.02	0.00	<b>0.25</b>	0.08	<b>0.15</b>	0.04	0.00	<b>0.42</b>	0.06	<b>0.21</b>

Note: Blue shadow implies that the R-squared is higher than 0.15 and the relationship is Positive according to Table 6. Pink shadow implies that the R-squared is larger than 0.15 and the relationship is Negative according to Table 6.

Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014), WDI (World Bank 2014), and CEPALSTAT (UN-ECLAC 2015).

Table 8: Cross-country relationship between annualized changes in labour market indicators and annualized changes in macroeconomic variables and in GDP per capita during the 2000s

	Δ Unemployment rate						Δ% Mean labor earnings							
	(1)		(2)		(3)		(1)		(2)		(3)			
	GDPpc growth rate coeff.	R-squared	ΔX variable coeff.	R-squared	ΔX variable coeff.	GDPpc growth rate coeff.	R-squared	GDPpc growth rate coeff.	R-squared	ΔX variable coeff.	R-squared	ΔX variable coeff.	GDPpc growth rate coeff.	R-squared
Δ% GDP per capita	-0.075 (0.05)	0.090						0.228 (0.254)	0.032					
Δ Exports (% of GDP)			-0.143 (0.108)	0.105	-0.121 (0.108)	-0.061 (0.058)	0.162			1.033 (0.505)**	0.209	0.992 (0.546)*	0.114 (0.259)	0.217
Δ% Terms of trade			-0.039 (0.022)	0.151	-0.040 (0.022)	-0.078 (0.063)	0.248			0.322 (0.109)**	0.398	0.325 (0.107)**	0.254 (0.19)	0.437
Δ Share of services in GDP			0.467 (0.197)*	0.316	0.466 (0.187)*	-0.075 (0.068)	0.405			-2.124 (1.019)*	0.249	-2.123 (1.056)*	0.228 (0.217)	0.281
Δ Share of industry in GDP			-0.313 (0.166)	0.205	-0.287 (0.176)	-0.058 (0.059)	0.259			1.938 (0.908)*	0.300	1.885 (0.954)*	0.122 (0.215)	0.309
Δ Share of agriculture in GDP			-0.070 (0.316)	0.003	-0.208 (0.318)	-0.086 (0.057)	0.110			-1.665 (1.374)	0.055	-1.417 (1.39)	0.154 (0.27)	0.068
Δ Public expend. in education and health (% of GDP)			-0.313 (0.651)	0.024	-0.522 (0.625)	-0.093 (0.057)	0.150			0.389 (2.341)	0.001	0.983 (2.68)	0.262 (0.289)	0.040
Δ Public expend. in social security (% of GDP)			-0.223 (0.298)	0.018	-0.493 (0.395)	-0.104 (0.045)*	0.165			2.013 (1.394)	0.056	3.082 (1.533)**	0.411 (0.274)	0.144
Δ Domestic expenditure (% of GDP)			0.204 (0.12)	0.198	0.180 (0.148)	-0.025 (0.073)	0.205			-1.255 (0.547)*	0.286	-1.398 (0.602)*	-0.155 (0.26)	0.297
Δ Foreign direct investment (% of GDP)			0.108 (0.327)	0.008	0.599 (0.517)	-0.152 (0.076)*	0.223			-1.945 (1.312)	0.092	-4.596 (1.216)**	0.820 (0.292)**	0.332
Δ Revenues from natural resources (% of GDP)			-0.138 (0.215)	0.029	-0.086 (0.243)	-0.068 (0.057)	0.100			2.025 (0.859)*	0.238	1.959 (0.926)*	0.087 (0.268)	0.242
Δ Stock of public debt (% of GDP)			0.033 (0.055)	0.022	0.003 (0.069)	-0.073 (0.064)	0.090			-0.813 (0.177)**	0.527	-0.914 (0.21)**	-0.252 (0.235)	0.558

Note: \*\* significant at 1% level, \* significant at 5% level.

Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014), WDI (World Bank 2014), and CEPALSTAT (UN-ECLAC 2015).

Table 8 (cont.): Cross-country relationship between annualized changes in labour market indicators and annualized changes in macroeconomic variables and in GDP per capita during the 2000s

	Δ 2.5 dollars-a-day poverty						Δ 4 dollars-a-day poverty							
	(1)		(2)		(3)		(1)		(2)		(3)			
	GDPpc growth rate coeff.	R-squared	ΔX variable coeff.	R-squared	ΔX variable coeff.	GDPpc growth rate coeff.	R-squared	GDPpc growth rate coeff.	R-squared	ΔX variable coeff.	R-squared	ΔX variable coeff.	GDPpc growth rate coeff.	R-squared
Δ% GDP per capita	-0.138 (0.097)	0.056						-0.249 (0.138)	0.105					
Δ Exports (% of GDP)			-0.589 (0.191)**	0.325	-0.563 (0.193)**	-0.073 (0.081)	0.340			-0.753 (0.26)**	0.308	-0.692 (0.266)***	-0.170 (0.123)	0.355
Δ% Terms of trade			-0.149 (0.051)**	0.410	-0.151 (0.045)**	-0.150 (0.095)	0.475			-0.208 (0.065)**	0.462	-0.212 (0.053)**	-0.266 (0.105)*	0.582
Δ Share of services in GDP			0.991 (0.423)*	0.260	0.991 (0.427)*	-0.138 (0.095)	0.315			1.409 (0.527)**	0.305	1.408 (0.51)**	-0.249 (0.116)*	0.410
Δ Share of industry in GDP			-0.947 (0.391)*	0.343	-0.910 (0.413)*	-0.087 (0.088)	0.365			-1.276 (0.499)*	0.361	-1.197 (0.524)*	-0.182 (0.113)	0.416
Δ Share of agriculture in GDP			0.826 (0.601)	0.065	0.659 (0.707)	-0.103 (0.122)	0.093			0.936 (0.739)	0.048	0.583 (0.819)	-0.219 (0.163)	0.123
Δ Public expend. in education and health (% of GDP)			1.400 (1.063)	0.086	1.178 (1.202)	-0.098 (0.114)	0.112			1.380 (1.354)	0.049	0.884 (1.523)	-0.219 (0.158)	0.124
Δ Public expend. in social security (% of GDP)			-0.579 (0.783)	0.022	-1.109 (0.877)	-0.204 (0.126)	0.125			-0.748 (1.099)	0.022	-1.650 (1.096)	-0.347 (0.162)*	0.194
Δ Domestic expenditure (% of GDP)			0.668 (0.226)**	0.388	0.724 (0.23)**	0.060 (0.081)	0.396			0.899 (0.3)**	0.407	0.896 (0.314)**	-0.004 (0.109)	0.408
Δ Foreign direct investment (% of GDP)			1.003 (0.767)	0.117	2.481 (0.639)**	-0.457 (0.141)**	0.475			1.045 (1.019)	0.074	3.169 (0.708)**	-0.657 (0.166)**	0.502
Δ Revenues from natural resources (% of GDP)			-1.176 (0.36)**	0.384	-1.133 (0.401)**	-0.056 (0.115)	0.393			-1.543 (0.458)**	0.383	-1.432 (0.484)**	-0.146 (0.137)	0.418
Δ Stock of public debt (% of GDP)			0.287 (0.089)**	0.314	0.293 (0.136)*	0.016 (0.141)	0.314			0.413 (0.105)**	0.378	0.397 (0.162)*	-0.041 (0.179)	0.381

Note: \*\* significant at 1% level, \* significant at 5% level.

Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014), WDI (World Bank 2014), and CEPALSTAT (UN-ECLAC 2015).

Table 9: Cross-country correlation matrix between the annualized changes in labour market indicators during the 2000s

Part A

	Occupations		Occupational position			Economic Sector		
	Decline in Unemployment	Declined in share of low-earnings occupations	Increase in share of high-earnings occupations	Increase in the share of wage/salaried employees	Decrease in the share of self-employment	Decrease in the share of unpaid family workers	Decline in the share of workers in low-earnings sectors	Increase in the share of workers in high-earnings sectors
<i>Unemployment</i>								
Decrease in the unemployment rate	<b>1.00</b>	0.33	0.20	-0.06	-0.03	-0.15	0.07	0.01
<i>Occupations</i>								
Decrease in the share of low-earnings occupations	0.33	<b>1.00</b>	<b>0.43</b>	<b>0.57</b>	0.37	<b>0.53</b>	<b>0.52</b>	<b>0.44</b>
Increase in the share of high-earnings occupations	0.20	<b>0.43</b>	<b>1.00</b>	0.35	<b>0.42</b>	0.23	0.22	0.21
<i>Occupational position</i>								
Increase in the share of wage/salaried employees	-0.06	<b>0.57</b>	0.35	<b>1.00</b>	<b>0.82</b>	<b>0.75</b>	<b>0.57</b>	<b>0.67</b>
Decrease in the share of self-employment	-0.03	0.37	<b>0.42</b>	<b>0.82</b>	<b>1.00</b>	0.39	0.32	<b>0.50</b>
Decrease in the share of unpaid family workers	-0.15	<b>0.53</b>	0.23	<b>0.75</b>	0.39	<b>1.00</b>	<b>0.66</b>	<b>0.58</b>
<i>Economic Sector</i>								
Decrease in the share of workers in low-earnings sectors	0.07	<b>0.52</b>	0.22	<b>0.57</b>	0.32	<b>0.66</b>	<b>1.00</b>	<b>0.66</b>
Increase in the share of workers in high-earnings sectors	0.01	<b>0.44</b>	0.21	<b>0.67</b>	<b>0.50</b>	<b>0.58</b>	<b>0.66</b>	<b>1.00</b>
<i>Education</i>								
Decrease in the share of low educated workers	-0.02	0.35	0.31	<b>0.64</b>	<b>0.52</b>	<b>0.53</b>	<b>0.68</b>	<b>0.89</b>
Increase in the share of high educated workers	0.32	<b>0.61</b>	<b>0.60</b>	<b>0.68</b>	<b>0.58</b>	<b>0.48</b>	<b>0.50</b>	<b>0.75</b>
<i>Workers registered with SS</i>								
Increase in the share of workers registered with SS	0.23	-0.08	0.10	-0.03	-0.16	0.18	<b>0.46</b>	0.05
<i>Earnings</i>								
Increase in mean labor earnings	<b>0.42</b>	<b>0.72</b>	<b>0.51</b>	<b>0.48</b>	0.22	<b>0.52</b>	<b>0.44</b>	<b>0.67</b>
<i>Poverty</i>								
Decrease in 4 dollars-a-day poverty	0.36	<b>0.65</b>	<b>0.44</b>	<b>0.55</b>	0.28	<b>0.58</b>	<b>0.62</b>	<b>0.61</b>
Decrease in 2.5 dollars-a-day poverty	<b>0.41</b>	<b>0.73</b>	<b>0.47</b>	<b>0.59</b>	0.28	<b>0.61</b>	<b>0.58</b>	<b>0.61</b>
<i>Inequality</i>								
Decrease in GINI of household per capita income	0.23	0.32	0.07	0.38	0.24	<b>0.48</b>	<b>0.55</b>	0.29
Decrease in GINI of labor earnings	<b>0.47</b>	<b>0.43</b>	0.29	0.33	0.13	<b>0.50</b>	<b>0.58</b>	<b>0.46</b>

## Part B

	Education		Workers registered with SS	Increase in mean labor earnings	Poverty		Inequality	
	Decrease in the share of low educated workers	Increase in the share of high educated workers			Decline in 4-dollar-a-day poverty	Decline in 4-dollar-a-day poverty	Decline in GINI of Household per capita income	Decline in GINI of labor earnings
<i>Unemployment</i>								
Decrease in the unemployment rate	-0.02	0.32	0.23	<b>0.42</b>	0.36	<b>0.41</b>	0.23	<b>0.47</b>
<i>Occupations</i>								
Decrease in the share of low-earnings occupations	0.35	<b>0.61</b>	-0.08	<b>0.72</b>	<b>0.65</b>	<b>0.73</b>	0.32	<b>0.43</b>
Increase in the share of high-earnings occupations	0.31	<b>0.60</b>	0.10	<b>0.51</b>	<b>0.44</b>	<b>0.47</b>	0.07	0.29
<i>Occupational position</i>								
Increase in the share of wage/salaried employees	<b>0.64</b>	<b>0.68</b>	-0.03	<b>0.48</b>	<b>0.55</b>	<b>0.59</b>	0.38	0.33
Decrease in the share of self-employment	<b>0.52</b>	<b>0.58</b>	-0.16	0.22	0.28	0.28	0.24	0.13
Decrease in the share of unpaid family workers	<b>0.53</b>	<b>0.48</b>	0.18	<b>0.52</b>	<b>0.58</b>	<b>0.61</b>	<b>0.48</b>	<b>0.50</b>
<i>Economic Sector</i>								
Decrease in the share of workers in low-earnings sectors	<b>0.68</b>	<b>0.50</b>	<b>0.46</b>	<b>0.44</b>	<b>0.62</b>	<b>0.58</b>	<b>0.55</b>	<b>0.58</b>
Increase in the share of workers in high-earnings sectors	<b>0.89</b>	<b>0.75</b>	0.05	<b>0.67</b>	<b>0.61</b>	<b>0.61</b>	0.29	<b>0.46</b>
<i>Education</i>								
Decrease in the share of low educated workers	<b>1.00</b>	<b>0.67</b>	0.01	<b>0.60</b>	<b>0.53</b>	<b>0.51</b>	0.28	<b>0.46</b>
Increase in the share of high educated workers	<b>0.67</b>	<b>1.00</b>	0.07	<b>0.68</b>	<b>0.56</b>	<b>0.63</b>	0.20	<b>0.49</b>
<i>Workers registered with SS</i>								
Increase in the share of workers registered with SS	0.01	0.07	<b>1.00</b>	0.04	0.17	0.17	0.30	<b>0.40</b>
<i>Earnings</i>								
Increase in mean labor earnings	<b>0.60</b>	<b>0.68</b>	0.04	<b>1.00</b>	<b>0.83</b>	<b>0.88</b>	0.28	<b>0.58</b>
<i>Poverty</i>								
Decrease in 4 dollars-a-day poverty	<b>0.53</b>	<b>0.56</b>	0.17	<b>0.83</b>	<b>1.00</b>	<b>0.98</b>	<b>0.70</b>	<b>0.77</b>
Decrease in 2.5 dollars-a-day poverty	<b>0.51</b>	<b>0.63</b>	0.17	<b>0.88</b>	<b>0.98</b>	<b>1.00</b>	<b>0.62</b>	<b>0.75</b>
<i>Inequality</i>								
Decrease in GINI of household per capita income	0.28	0.20	0.30	0.28	<b>0.70</b>	<b>0.62</b>	<b>1.00</b>	<b>0.85</b>
Decrease in GINI of labor earnings	<b>0.46</b>	<b>0.49</b>	<b>0.40</b>	<b>0.58</b>	<b>0.77</b>	<b>0.75</b>	<b>0.85</b>	<b>1.00</b>

Note: The blue shadow indicates a positive correlation larger than 0.4. Correlations for occupations do not include Argentina for which we do not have data.

Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014).

Table 10: Cross-country poverty elasticities with respect to GDP per capita, unemployment rate and labour earnings during the 2000s

	Dependent variable: %Δ 2.5 dollars-a-day povert						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
%Δ GDP per capita	-0.778 (0.407)			-0.381 (0.616)	-0.438 (0.254)		-0.469 (0.306)
%Δ Unemployment rate		0.320 (0.14)*		0.265 (0.196)		0.046 (0.076)	-0.024 (0.091)
%Δ Labor earnings			-1.550 (0.286)**		-1.489 (0.294)**	-1.496 (0.342)**	-1.513 (0.376)**
R-squared	0.098	0.173	0.638	0.191	0.668	0.640	0.668
Observations	16	16	16	16	16	16	16

	Dependent variable: %Δ 4 dollars-a-day povert						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
%Δ GDP per capita	-0.890 (0.338)**			-0.553 (0.505)	-0.608 (0.181)**		-0.625 (0.189)**
%Δ Unemployment rate		0.305 (0.113)**		0.225 (0.156)		0.080 (0.08)	-0.014 (0.071)
%Δ Labor earnings			-1.319 (0.185)**		-1.234 (0.198)**	-1.225 (0.233)**	-1.247 (0.249)**
R-squared	0.183	0.223	0.656	0.278	0.739	0.669	0.739
Observations	16	16	16	16	16	16	16

Note: Poverty elasticities are calculated using the percentage change in the poverty rates, GDP per capita, the unemployment rate and mean labour earnings between the initial and the final years in each country. Robust standard errors in parentheses.

\*\* significant at 1% level, \* significant at 5% level.

Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014).

Table 11: Labour market indicators' elasticities with respect to GDP per capita during the 2000s by country and for the Latin American region

Indicator	Stacked regression	AR	BO	BR	CL	CO	CR	DO	EC	HN	MX	PA	PE	PY	SV	UY	VE
<i>Unemployment elasticity coefficient</i>	-1.953 (0.331)**	-1.340 (0.786)	-1.921 (2.507)	-2.790 (0.755)**	-6.659 (2.718)*	-0.385 (0.654)	-6.694 (1.858)**	-3.790 (1.704)*	-1.284 (2.388)	-2.270 (1.609)	-5.609 (1.732)**	-1.893 (1.435)	-0.396 (0.434)	-1.001 (0.979)	-3.301 (1.356)*	-1.704 (0.312)**	-1.663 (0.404)**
<i>Share of low-earnings occupations elasticity coefficient</i>	-0.118 (0.111)		0.086 (0.517)	0.102 (0.096)	0.517 (0.719)	-1.311 (0.203)**	-0.163 (0.161)	0.213 (0.218)	-0.007 (0.285)	-0.130 (0.184)	0.020 (0.471)	-0.014 (0.237)	-0.041 (0.33)	-0.083 (0.181)	-0.075 (0.128)	0.003 (0.116)	-0.195 (0.146)
<i>Share of high-earnings occupations elasticity coefficient</i>	0.208 (0.231)		0.995 (4.026)	-0.493 (0.321)	-1.047 (2.339)	0.299 (0.482)	-0.005 (0.271)	-0.421 (0.487)	-0.431 (1.205)	2.077 (0.265)**	2.352 (0.761)**	-0.053 (0.375)	0.134 (0.655)	2.039 (0.982)*		-0.043 (0.172)	0.097 (0.488)
<i>Share of wage/salaried employees elasticity coefficient</i>	0.156 (0.055)**	0.055 (0.062)	-1.601 (0.92)	0.226 (0.049)**	0.179 (0.081)*	-0.469 (0.135)**	0.257 (0.225)	-0.105 (0.266)	-0.485 (0.647)	0.474 (0.205)*	0.267 (0.647)	0.407 (0.177)*	0.074 (0.172)	0.594 (0.095)**	0.495 (0.467)	0.195 (0.05)**	0.237 (0.026)**
<i>Share of self-employment elasticity coefficient</i>	-0.337 (0.096)**	-0.328 (0.24)	1.190 (0.714)	0.087 (0.3)	-0.013 (0.224)	0.953 (0.153)**	-0.851 (0.585)	0.322 (0.306)	-0.298 (0.832)	-1.547 (0.435)**	-1.036 (1.072)	-0.814 (0.358)*	0.353 (0.225)	-0.755 (0.179)**	-0.823 (0.672)	-0.633 (0.151)**	-0.343 (0.071)**
<i>Share of unpaid family workers elasticity coefficient</i>	-0.399 (0.309)	-0.012 (0.787)	0.478 (2.15)	-0.962 (0.572)	-0.065 (3.549)	-1.504 (0.447)**	-1.464 (0.81)	3.434 (3.13)	0.783 (2.659)	-0.641 (0.906)	-0.442 (2.035)	0.285 (0.999)	-1.046 (0.411)*	-0.467 (0.631)	-0.542 (1.107)	-1.094 (0.512)*	-0.865 (0.593)
<i>Share of workers in low-earnings sectors elasticity coefficient</i>	-0.019 (0.091)	0.468 (0.12)**	0.299 (0.738)	-0.661 (0.299)*	0.098 (0.318)	-0.633 (0.101)**	-0.081 (0.278)	0.318 (0.364)	0.061 (0.233)	-0.348 (0.354)	0.591 (0.727)	0.047 (0.321)	-0.145 (0.248)	-0.395 (0.101)**	-0.617 (0.219)**	0.266 (0.121)*	-0.208 (0.048)**
<i>Share of workers in high-earnings sectors elasticity coefficient</i>	-0.005 (0.11)	-0.570 (0.168)**	1.890 (0.99)	-0.005 (0.197)	-1.217 (0.85)	0.696 (0.104)**	-0.200 (0.178)	0.167 (0.492)	0.663 (0.794)	1.520 (0.216)**	-0.333 (0.554)	0.503 (0.34)	-0.475 (0.24)*	0.394 (0.214)	0.228 (0.324)	-0.303 (0.112)**	0.004 (0.114)
<i>Share of low educated workers elasticity coefficient</i>	-0.046 (0.057)	-0.072 (0.047)	-0.749 (0.369)*	-0.142 (0.098)	0.824 (0.204)**	-0.612 (0.167)**	0.140 (0.091)	-0.174 (0.139)	-0.032 (0.285)	-0.346 (0.093)**	0.187 (0.384)	-0.010 (0.264)	-0.236 (0.205)	0.004 (0.27)	-0.196 (0.112)	0.364 (0.29)	-0.094 (0.079)
<i>Share of high educated workers elasticity coefficient</i>	0.250 (0.152)	0.103 (0.169)	2.758 (1.998)	1.188 (0.756)	-1.242 (0.411)**	1.007 (0.255)**	-0.167 (0.299)	0.030 (0.345)	-0.394 (0.207)	2.144 (0.561)**	-0.003 (1.659)	0.090 (0.446)	0.080 (0.423)	1.142 (0.72)	0.258 (0.641)	-0.764 (0.487)	0.108 (0.138)
<i>Share of workers registered with SS elasticity coefficient</i>	0.541 (0.157)**	0.402 (0.181)*	6.716 (4.752)	0.574 (0.311)	0.625 (0.143)**	1.592 (0.438)**	0.096 (0.193)	2.582 (0.687)**	-0.053 (1.084)	3.625 (3.125)	0.757 (0.513)	0.061 (0.282)	-1.124 (1.325)	0.655 (0.358)	1.175 (0.171)**	0.307 (0.106)**	0.180 (0.128)
<i>Mean labor earnings elasticity coefficient</i>	1.133 (0.155)**	1.597 (0.43)**	1.521 (0.634)*	0.616 (0.409)	-1.176 (1.109)	0.912 (0.331)**	0.181 (0.673)	1.741 (0.716)*	0.319 (1.093)	1.361 (0.494)**	1.238 (0.526)*	0.555 (0.41)	0.128 (0.728)	1.265 (0.251)**	0.306 (0.528)	1.055 (0.256)**	1.232 (0.258)**
<i>2.5 dollars-a-day poverty elasticity coefficient</i>	-2.100 (0.354)**	-3.866 (0.167)**	0.036 (2.898)	-0.904 (0.597)	-1.910 (0.605)**	0.233 (0.332)	-2.329 (1.404)	-0.436 (1.11)	-0.703 (0.772)	-0.480 (1.739)	-0.209 (0.946)	0.551 (0.962)	-0.006 (0.907)	-1.758 (0.933)	-1.623 (2.139)	-3.576 (0.549)**	-2.030 (0.613)**
<i>4 dollars-a-day poverty elasticity coefficient</i>	-1.427 (0.261)**	-2.578 (0.234)**	-0.655 (1.583)	-0.603 (0.41)	-0.210 (1.292)	-0.430 (0.221)	-1.471 (1.006)	-0.175 (0.762)	-1.014 (0.534)	-0.344 (0.979)	-0.004 (0.555)	-0.289 (0.699)	-0.106 (0.44)	-0.719 (0.69)	-0.341 (0.999)	-2.954 (0.483)**	-1.315 (0.419)**
<i>Gini of household per capita income elasticity coefficient</i>	-0.082 (0.074)	-0.253 (0.074)**	-0.233 (1.268)	-0.093 (0.031)**	-0.594 (0.075)**	0.191 (0.116)	-0.096 (0.381)	0.144 (0.669)	-0.588 (0.446)	0.516 (0.625)	0.947 (0.241)**	0.036 (0.223)	0.107 (0.423)	0.317 (0.205)	-0.485 (0.124)**	-0.292 (0.12)*	-0.058 (0.127)
<i>Gini of labor earnings elasticity coefficient</i>	-0.123 (0.069)	-0.363 (0.058)**	-0.387 (0.774)	-0.251 (0.064)**	-0.059 (0.036)	-0.247 (0.159)	0.202 (0.271)	-0.004 (0.174)	-0.595 (0.768)	0.418 (0.471)	0.965 (0.56)	-0.443 (0.485)	0.234 (0.358)	0.053 (0.193)	-0.247 (0.188)	-0.383 (0.131)**	-0.001 (0.167)

Note: Labour market indicators' elasticities are calculated using the year-by-year percentage change in labour market indicators and GDP per capita within each country. The first column shows the results of the regression for the sample of all countries including country fixed effects. The country-specific regressions do not include extra controls. Robust standard errors in parentheses.

\*\* significant at 1% level, \* significant at 5% level.

Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014).



Table 12: 2.5 dollars-a-day elasticity with respect to employment and earnings indicators and inequality indicators during the 2000s by country and for the Latin American region

Indicator	Stacked regression	AR	BO	BR	CL	CO	CR	DO	EC	HN	MX	PA	PE	PY	SV	UY	VE
<i>Unemployment</i>																	
elasticity coefficient	0.332 (0.096)**	1.164 (0.212)**	0.391 (0.266)	0.425 (0.137)**	0.171 (0.095)	0.314 (0.445)	0.363 (0.143)*	-0.077 (0.04)	0.206 (0.118)	0.073 (0.166)	0.158 (0.186)	0.192 (0.261)	0.743 (0.418)	0.867 (0.164)**	-0.077 (0.281)	1.217 (0.848)	1.138 (0.227)**
<i>Share of low-earnings occupations</i>																	
elasticity coefficient	0.318 (0.419)		-0.565 (1.235)	3.808 (2.235)	-0.900 (1.041)	-0.185 (0.173)	1.102 (1.492)	-3.172 (0.706)**	0.919 (1.464)	-0.373 (2.292)	1.232 (1.564)	1.028 (1.279)	1.449 (1.573)	4.292 (3.503)	2.986 (5.64)	-0.217 (3.202)	2.063 (1.472)
<i>Share of high-earnings occupations</i>																	
elasticity coefficient	-0.132 (0.177)		0.093 (0.271)	-1.035 (0.396)**	-0.001 (0.336)	-0.226 (0.486)	0.050 (0.441)	1.096 (0.393)**	0.223 (0.254)	-0.288 (0.671)	0.308 (0.565)	-1.456 (1.088)	-0.420 (0.57)	-0.758 (0.401)		0.725 (1.424)	0.335 (1.239)
<i>Share of wage/salaried employees</i>																	
elasticity coefficient	-1.501 (0.368)**	-7.447 (4.677)	-0.966 (0.786)	-4.035 (1.715)*	-9.594 (0.761)**	-0.772 (0.386)*	-3.990 (1.976)*	-0.217 (1.502)	0.117 (0.437)	-0.411 (0.624)	-0.347 (1.079)	-1.081 (1.909)	-1.443 (1.416)	-2.716 (1.371)*	-1.105 (0.933)	-12.378 (2.673)**	-6.124 (1.842)**
<i>Share of self-employment</i>																	
elasticity coefficient	1.115 (0.259)**	2.492 (0.777)**	0.765 (0.706)	0.951 (1.193)	2.723 (4.172)	0.368 (0.182)*	1.127 (0.712)	-0.878 (0.576)	0.089 (0.594)	0.321 (0.445)	-0.156 (0.561)	0.504 (1.089)	1.367 (1.15)	1.724 (1.042)	0.655 (0.713)	4.174 (0.896)**	3.349 (1.172)**
<i>Share of unpaid family workers</i>																	
elasticity coefficient	0.227 (0.079)**	-0.115 (0.292)	-0.087 (0.424)	0.775 (0.257)**	0.149 (0.278)	0.233 (0.202)	1.031 (0.556)	0.136 (0.033)**	-0.040 (0.157)	0.567 (0.337)	0.258 (0.33)	0.093 (0.187)	0.103 (0.438)	1.234 (0.302)**	0.217 (0.197)	0.703 (0.419)	0.274 (0.154)
<i>Share of workers in low-earnings sectors</i>																	
elasticity coefficient	0.005 (0.581)	-4.864 (1.457)**	-0.914 (1.012)	1.134 (0.373)**	-1.224 (1.632)	-0.592 (0.259)*	-0.018 (0.858)	-1.558 (1.518)	2.193 (1.427)	1.292 (0.697)	0.425 (0.446)	0.870 (0.724)	1.950 (2.126)	2.034 (1.606)	2.288 (2.071)	-2.968 (1.556)	7.115 (1.6)**
<i>Share of workers in high-earnings sectors</i>																	
elasticity coefficient	0.183 (0.252)	4.131 (0.899)**	-0.222 (0.361)	-0.390 (0.792)	0.553 (0.321)	0.404 (0.427)	0.386 (0.954)	0.549 (0.844)	0.179 (0.495)	-0.522 (0.766)	0.536 (1.077)	-0.738 (0.564)	-1.151 (0.863)	0.031 (0.315)	-1.164 (1.004)	1.738 (1.908)	-1.772 (1.628)
<i>Share of low educated workers</i>																	
elasticity coefficient	0.264 (0.558)	4.290 (4.61)	-0.151 (1.606)	3.614 (0.9)**	-2.323 (0.376)**	0.645 (0.781)	-1.972 (1.057)	-0.441 (2.013)	2.334 (1.16)*	2.669 (2.261)	0.307 (1.024)	1.099 (0.87)	1.159 (1.536)	1.910 (1.176)	1.211 (3.828)	-2.020 (1.249)	4.051 (2.7)
<i>Share of high educated workers</i>																	
elasticity coefficient	-0.065 (0.187)	-2.869 (5.79)	0.058 (0.348)	0.150 (0.189)	1.208 (0.562)*	-0.207 (0.394)	2.738 (1.719)	0.912 (0.152)**	1.114 (1.398)	0.147 (0.292)	-0.046 (0.29)	0.264 (0.953)	-0.245 (0.883)	-0.823 (0.353)*	0.698 (0.541)	1.211 (0.66)	-3.655 (2.084)
<i>Share of workers registered with SS</i>																	
elasticity coefficient	-0.114 (0.186)	-2.457 (2.265)	0.138 (0.141)	-0.829 (0.193)**	-2.576 (1.202)*	-0.112 (0.505)	-3.503 (2.799)	0.112 (0.338)	-0.132 (0.365)	0.144 (0.185)	-0.616 (1.031)	-2.810 (1.388)*	-0.208 (0.26)	-0.744 (0.401)	-1.027 (1.294)	-4.944 (1.405)**	-1.513 (1.321)
<i>Mean labor earnings</i>																	
elasticity coefficient	-1.236 (0.171)**	-1.835 (0.139)**	0.231 (0.732)	-1.298 (0.156)**	0.265 (0.432)	-0.452 (0.274)	-0.544 (1.213)	-0.654 (0.424)	-0.267 (0.337)	-0.905 (0.497)	0.342 (0.505)	-0.413 (0.283)	-0.534 (0.621)	-1.427 (0.718)*	-0.960 (1.347)	-2.184 (0.487)**	-1.536 (0.29)**
<i>Gini of household per capita income</i>																	
elasticity coefficient	2.083 (0.378)**	8.333 (2.631)**	2.095 (0.291)**	-0.717 (2.908)	2.848 (0.812)**	-0.618 (0.991)	1.669 (1.271)	-1.041 (0.611)	0.061 (0.829)	2.334 (0.719)**	1.235 (1.175)	3.517 (1.632)*	1.186 (0.847)	2.818 (1.414)*	2.867 (1.435)*	3.573 (2.263)	1.394 (1.411)
<i>Gini of labor earnings</i>																	
elasticity coefficient	1.266 (0.391)**	7.405 (1.55)**	3.053 (0.428)**	0.397 (2.043)	6.059 (13.147)	-0.836 (0.573)	-0.257 (1.239)	-2.060 (0.703)**	0.360 (0.5)	1.481 (0.338)**	0.395 (0.54)	0.354 (1.362)	0.860 (0.903)	2.014 (1.614)	0.409 (0.507)	3.529 (1.702)*	0.519 (0.846)

Note: Labour market indicators' elasticities are calculated using the year-by-year percentage change in the 2.5 dollars-a-day poverty rate and in employment and earnings indicators and inequality indicators within each country. The first column shows the results of the regression for the sample of all countries including country fixed effects. The country-specific regressions do not include extra controls. Robust standard errors in parentheses.

\*\* significant at 1% level, \* significant at 5% level.

Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014).

Table 13: 4 dollars-a-day elasticity with respect to employment and earnings indicators and inequality indicators during the 2000s by country and for the Latin American region

Indicator	Stacked regression	AR	BO	BR	CL	CO	CR	DO	EC	HN	MX	PA	PE	PY	SV	UY	VE
<i>Unemployment</i>																	
elasticity coefficient	0.193 (0.066)**	0.673 (0.191)**	0.214 (0.137)	0.224 (0.115)	-0.100 (0.11)	0.168 (0.158)	0.188 (0.116)	-0.072 (0.027)**	0.120 (0.076)	0.063 (0.106)	0.033 (0.098)	0.260 (0.135)	0.633 (0.284)*	0.546 (0.156)**	-0.091 (0.138)	1.181 (0.465)*	0.724 (0.14)**
<i>Share of low-earnings occupations</i>																	
elasticity coefficient	0.587 (0.295)*		0.080 (0.605)	2.080 (1.533)	-1.360 (0.474)**	0.249 (0.142)	0.325 (0.911)	-1.939 (0.381)**	0.823 (0.916)	0.115 (1.451)	0.766 (0.617)	0.699 (0.734)	1.514 (0.918)	3.276 (2.281)	1.512 (2.487)	3.260 (2.478)	1.608 (1.08)
<i>Share of high-earnings occupations</i>																	
elasticity coefficient	-0.159 (0.112)		-0.012 (0.134)	-0.578 (0.308)	0.173 (0.094)	-0.325 (0.304)	-0.368 (0.488)	0.434 (0.303)	0.108 (0.187)	-0.304 (0.457)	0.075 (0.299)	-1.311 (0.743)	-0.534 (0.357)	-0.491 (0.291)		-0.901 (1.089)	-0.017 (0.852)
<i>Share of wage/salaried employees</i>																	
elasticity coefficient	-0.972 (0.259)**	-4.215 (3.59)	-0.375 (0.498)	-3.289 (1.055)**	-4.521 (3.059)	-0.227 (0.458)	-3.637 (1.201)**	-0.500 (0.894)	0.001 (0.347)	-0.321 (0.375)	-0.320 (0.316)	-1.961 (1.025)	-1.026 (0.863)	-1.488 (1.006)	-0.438 (0.435)	-11.149 (1.642)**	-4.449 (1.175)**
<i>Share of self-employment</i>																	
elasticity coefficient	0.802 (0.181)**	1.415 (0.648)*	0.176 (0.477)	0.306 (0.689)	5.546 (0.552)**	-0.082 (0.263)	1.190 (0.355)**	-0.317 (0.475)	0.089 (0.407)	0.228 (0.245)	0.066 (0.178)	0.960 (0.581)	0.581 (0.841)	0.906 (0.747)	0.329 (0.32)	3.835 (0.601)**	2.301 (0.735)**
<i>Share of unpaid family workers</i>																	
elasticity coefficient	0.169 (0.053)**	-0.059 (0.216)	-0.099 (0.192)	0.570 (0.193)**	0.361 (0.028)**	0.230 (0.157)	0.710 (0.363)	0.106 (0.015)**	0.016 (0.089)	0.295 (0.184)	0.135 (0.088)	0.111 (0.075)	0.242 (0.197)	0.814 (0.246)**	0.060 (0.089)	0.388 (0.334)	0.207 (0.098)*
<i>Share of workers in low-earnings sectors</i>																	
elasticity coefficient	0.098 (0.379)	-3.596 (0.979)**	-0.262 (0.597)	0.746 (0.261)**	1.631 (1.059)	0.095 (0.334)	0.064 (0.801)	-0.864 (1.175)	1.313 (1.145)	0.621 (0.392)	0.481 (0.174)**	1.240 (0.28)**	1.710 (1.273)	1.046 (0.997)	1.110 (0.898)	-0.458 (1.398)	4.181 (1.151)**
<i>Share of workers in high-earnings sectors</i>																	
elasticity coefficient	0.024 (0.173)	2.846 (0.69)**	-0.207 (0.206)	0.004 (0.533)	-0.676 (0.224)**	0.092 (0.375)	-0.481 (1.08)	0.781 (0.439)	-0.093 (0.332)	-0.409 (0.473)	-0.004 (0.523)	-0.666 (0.252)**	-0.891 (0.567)	0.016 (0.204)	-0.305 (0.415)	0.066 (1.648)	-1.028 (1.142)
<i>Share of low educated workers</i>																	
elasticity coefficient	0.521 (0.409)	2.314 (3.323)	-0.031 (0.998)	2.262 (0.65)**	-0.388 (1.405)	0.745 (0.39)	-0.088 (1.691)	-0.238 (1.8)	1.822 (1.048)	1.505 (1.226)	0.067 (0.741)	1.038 (0.315)**	1.305 (0.968)	1.309 (0.729)	1.067 (1.564)	-0.489 (1.163)	2.141 (2.109)
<i>Share of high educated workers</i>																	
elasticity coefficient	-0.119 (0.125)	-2.044 (4.064)	-0.006 (0.212)	-0.026 (0.15)	-0.346 (0.745)	-0.264 (0.163)	1.396 (1.566)	0.466 (0.166)**	0.778 (0.792)	0.047 (0.17)	-0.024 (0.218)	0.276 (0.792)	-0.557 (0.564)	-0.503 (0.241)*	0.254 (0.213)	0.440 (0.652)	-2.382 (1.304)
<i>Share of workers registered with SS</i>																	
elasticity coefficient	-0.104 (0.116)	-1.618 (1.638)	0.039 (0.094)	-0.760 (0.151)**	0.548 (1.784)	-0.064 (0.239)	-1.745 (2.378)	0.051 (0.181)	-0.065 (0.27)	0.054 (0.135)	-0.343 (0.444)	-2.154 (0.921)*	-0.074 (0.199)	-0.484 (0.242)*	-0.203 (0.646)	-4.358 (1.327)**	-0.738 (0.87)
<i>Mean labor earnings</i>																	
elasticity coefficient	-0.950 (0.111)**	-1.250 (0.123)**	-0.203 (0.415)	-0.955 (0.094)**	-0.694 (0.227)**	-0.445 (0.166)**	-0.791 (0.751)	-0.626 (0.211)**	-0.180 (0.261)	-0.538 (0.268)*	-0.086 (0.256)	-0.323 (0.227)	-0.626 (0.384)	-0.825 (0.489)	-0.611 (0.578)	-2.015 (0.275)**	-1.078 (0.137)**
<i>Gini of household per capita income</i>																	
elasticity coefficient	1.244 (0.261)**	5.885 (2.016)**	1.140 (0.217)**	0.762 (2.027)	0.547 (1.966)	-0.704 (0.809)	0.684 (1.047)	-0.495 (0.419)	0.149 (0.539)	1.301 (0.386)**	0.574 (0.551)	2.283 (1.441)	0.298 (0.55)	1.976 (0.977)*	1.090 (0.698)	3.416 (1.306)**	0.685 (1.016)
<i>Gini of labor earnings</i>																	
elasticity coefficient	0.891 (0.288)**	5.457 (0.953)**	1.753 (0.325)**	0.783 (1.171)	-7.159 (13.986)	-0.499 (0.615)	-1.111 (1.309)	-1.179 (0.449)**	0.319 (0.312)	0.967 (0.257)**	0.266 (0.314)	0.875 (0.933)	0.099 (0.691)	1.511 (1.128)	-0.025 (0.235)	3.613 (1.091)**	0.192 (0.636)

Note: Labour market indicators' elasticities are calculated using the year-by-year percentage change in the 4 dollars-a-day poverty rate and in employment and earnings indicators and inequality indicators within each country. The first column shows the results of the regression for the sample of all countries including country fixed effects. The country-specific regressions do not include extra controls. Robust standard errors in parentheses.

Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014).

## Figures

Figure 1: Evolution of GDP per capita and labour market indicators in the Latin American region. Unweighted average. 2000–12.

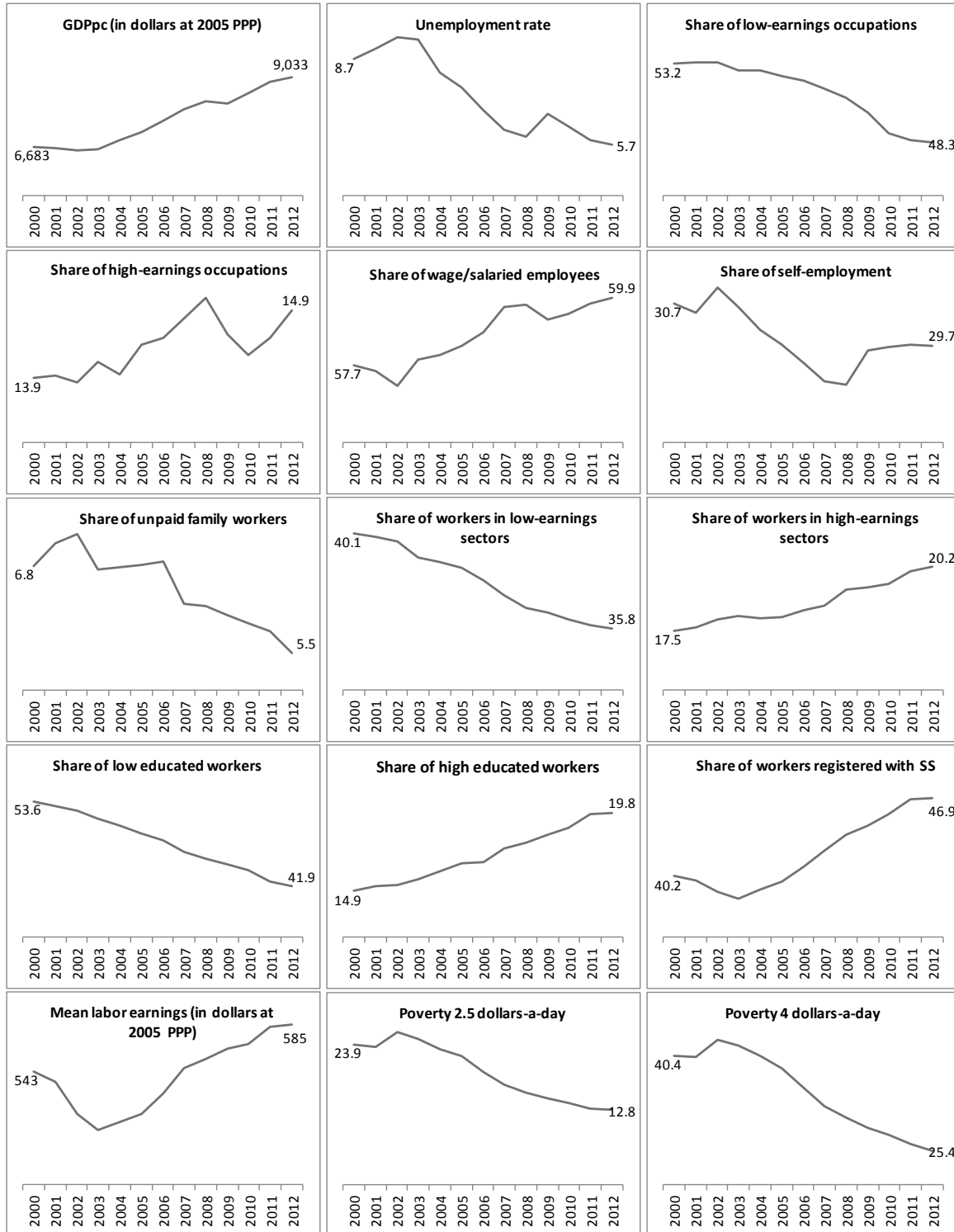
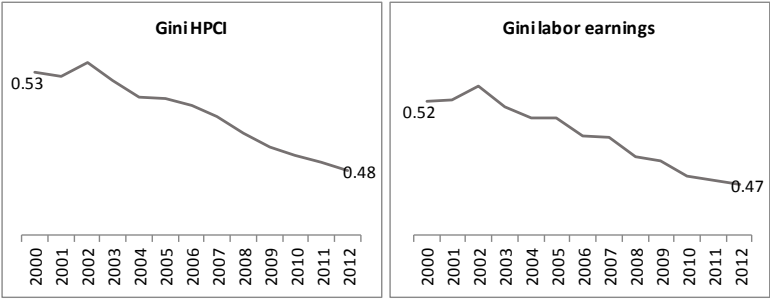


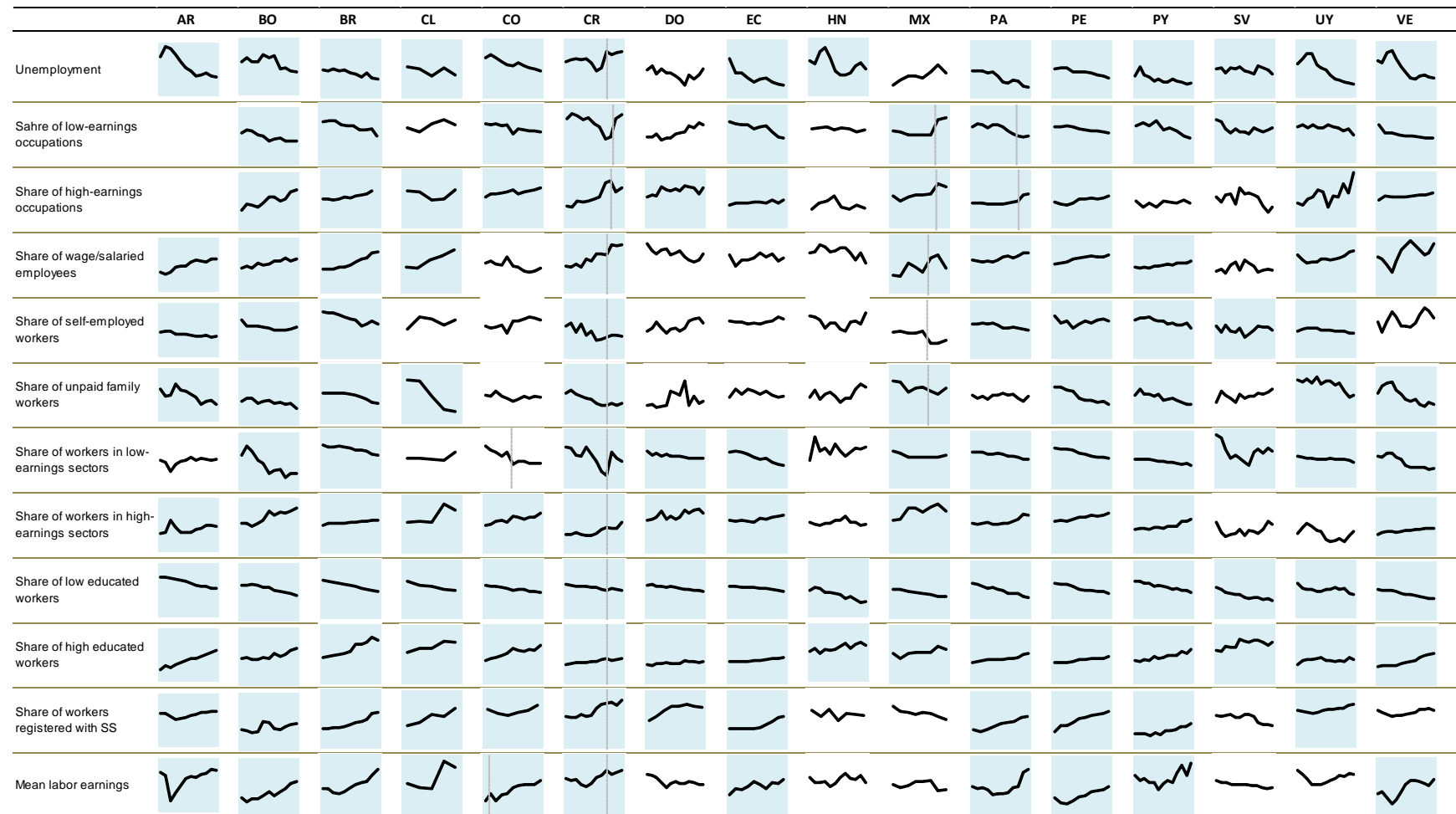
Figure 1 (cont.): Evolution of GDP per capita and labour market indicators in the Latin American region. Unweighted average. 2000–12



Note: All series represent the unweighted averages across the 16 Latin American countries in our sample. In the years when we do not have data for a particular country, we use a linear extrapolation. In the cases where we do not have data for the initial or final year, we impute the value of the following or previous year.

Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014) and World Development Indicators (World Bank 2014).

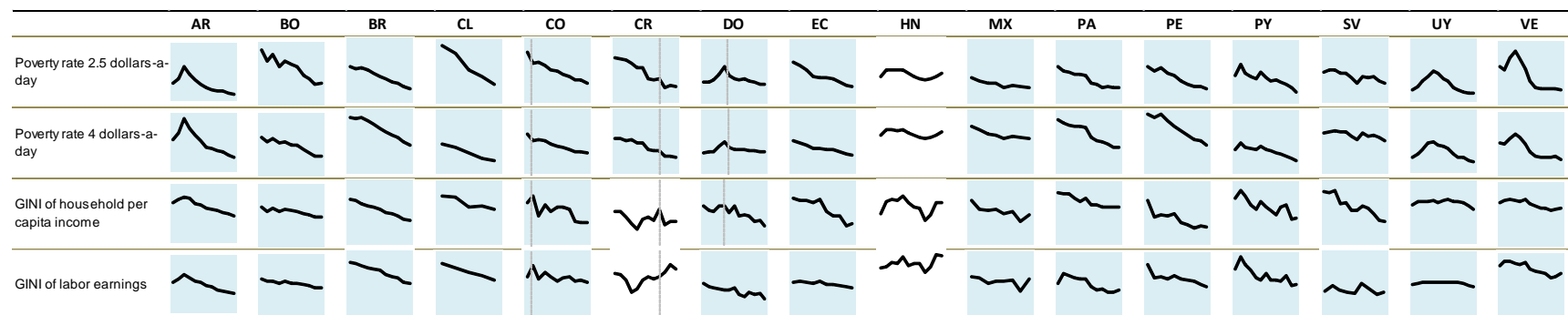
Figure 2: Evolution of labour market indicators over time by country



Note: Shaded figures indicate that there was an improvement from initial to final year that was statistically significant at 5 per cent level. Vertical lines indicate that the series to the left and the right are not fully comparable. In these cases, the shadow corresponds to the larger comparable period for each indicator-country cell.

Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014).

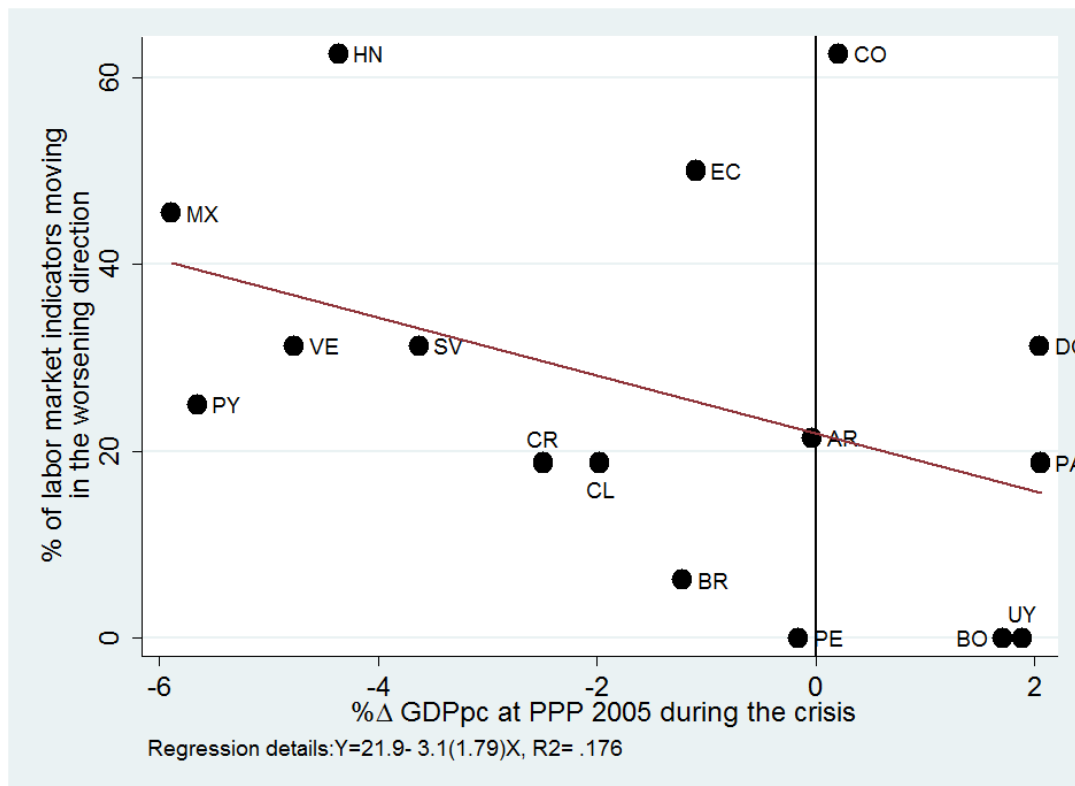
Figure 2 (cont.): Evolution of labour market indicators over time by country



Note: Shaded figures indicate that there was an improvement from initial to final year that was statistically significant at 5 per cent level. Vertical lines indicate that the series to the left and the right are not fully comparable. In these cases, the shadow corresponds to the larger comparable period for each indicator-country cell.

Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014).

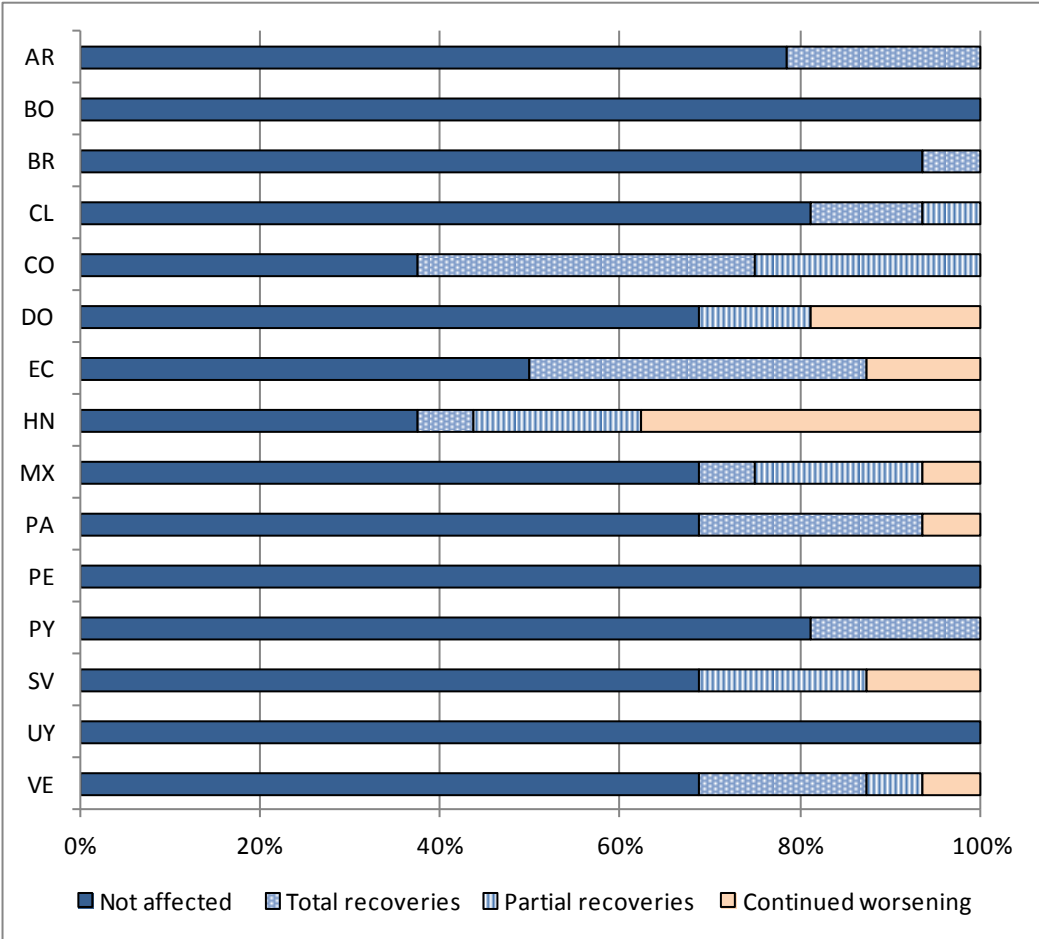
Figure 3: Cross-Country relationship between the percentage of labour market indicators moving in the welfare-worsening direction and growth rate of GDP per capita during the international crisis



Note: This figure displays the percentage of labour market indicators that change in the welfare-worsening direction according to Table 4 and the growth rate of GDP per capita during the international crisis. The economic crisis period is 2008–09 except for Chile (2006–09) and Mexico (2006–10). The line represents the linear regression specified at the bottom of the figure. Robust standard error of the slope coefficient between parentheses.

Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014).

Figure 4: Distribution of labour market indicators according to the post-crisis path by country

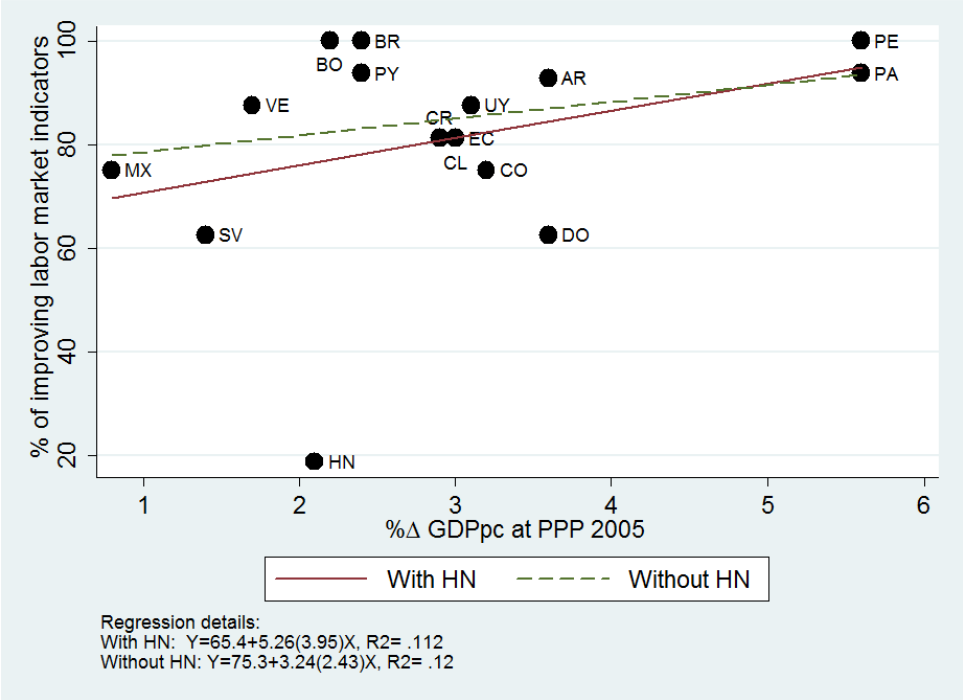


Note: Not affected indicates the percentage of indicators that did not worsen during the international crisis. Total recoveries denotes the percentage of indicators that improved after 2009 surpassing the pre-crisis level; Partial recoveries denotes the percentage of indicators that improved after 2009 but the recovery was not enough to reach its pre-crisis level of 2008; Continued worsening denotes the percentage of indicators that continued to worsen after the crises.

Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014).



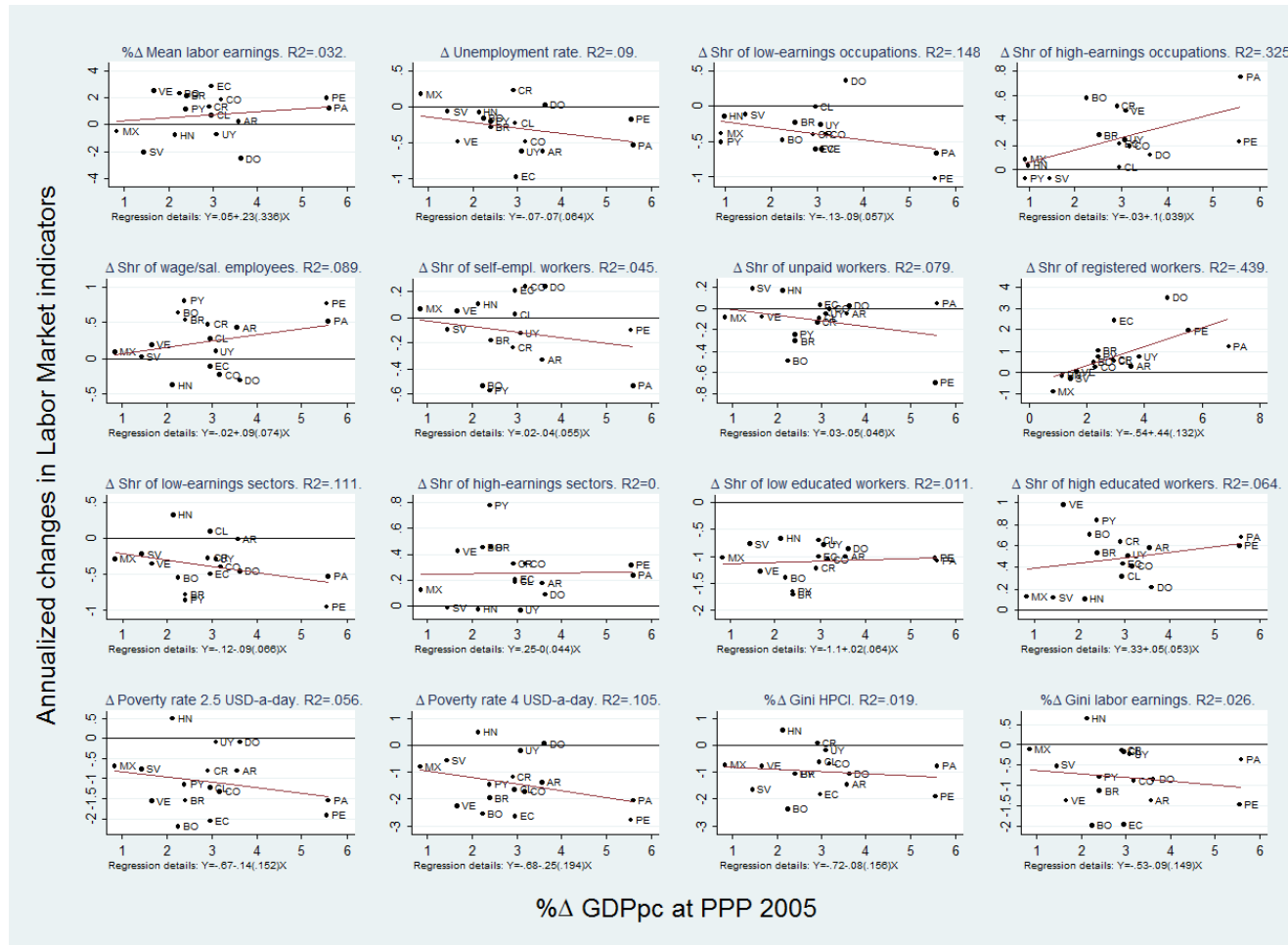
Figure 5: Cross-country relationship between the percentage of labour market indicators moving in the welfare-improving direction and growth rate of GDP per capita during the 2000s



Note: This figure displays the percentage of labour market indicators that changed in the welfare-improving direction according to Table 3 and the annualized growth rate during the period under study according to Table 2. The line represents the linear regression specified at the bottom of the figure. Robust standard error of the slope coefficient between parentheses.

Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014).

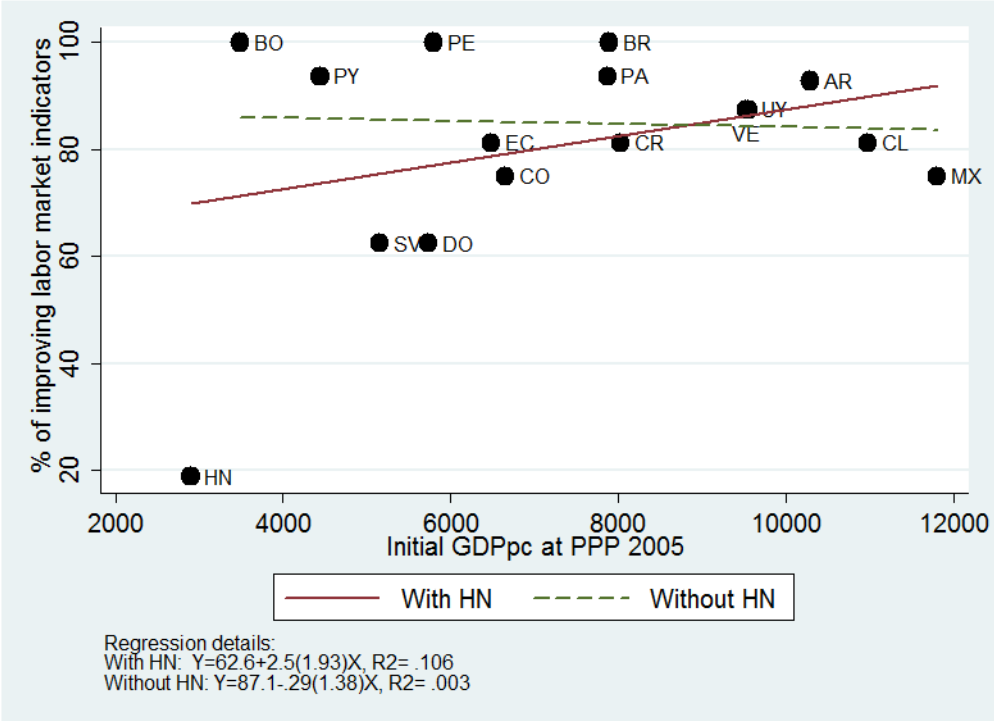
Figure 6: Cross-country relationship between the annualized changes in labour market indicators and annualized growth rate of GDP per capita during the 2000s



Note: The vertical axes display the annualized change in each labour market indicator.  $\Delta$  denotes changes in percentage points and % $\Delta$  denotes percentage changes. The line in each figure represents the linear regression specified at the bottom. Robust standard error of the slope coefficient between parentheses. R-squared of the regression indicated along the title of each figure.

Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014) and World Development Indicators (World Bank 2014).

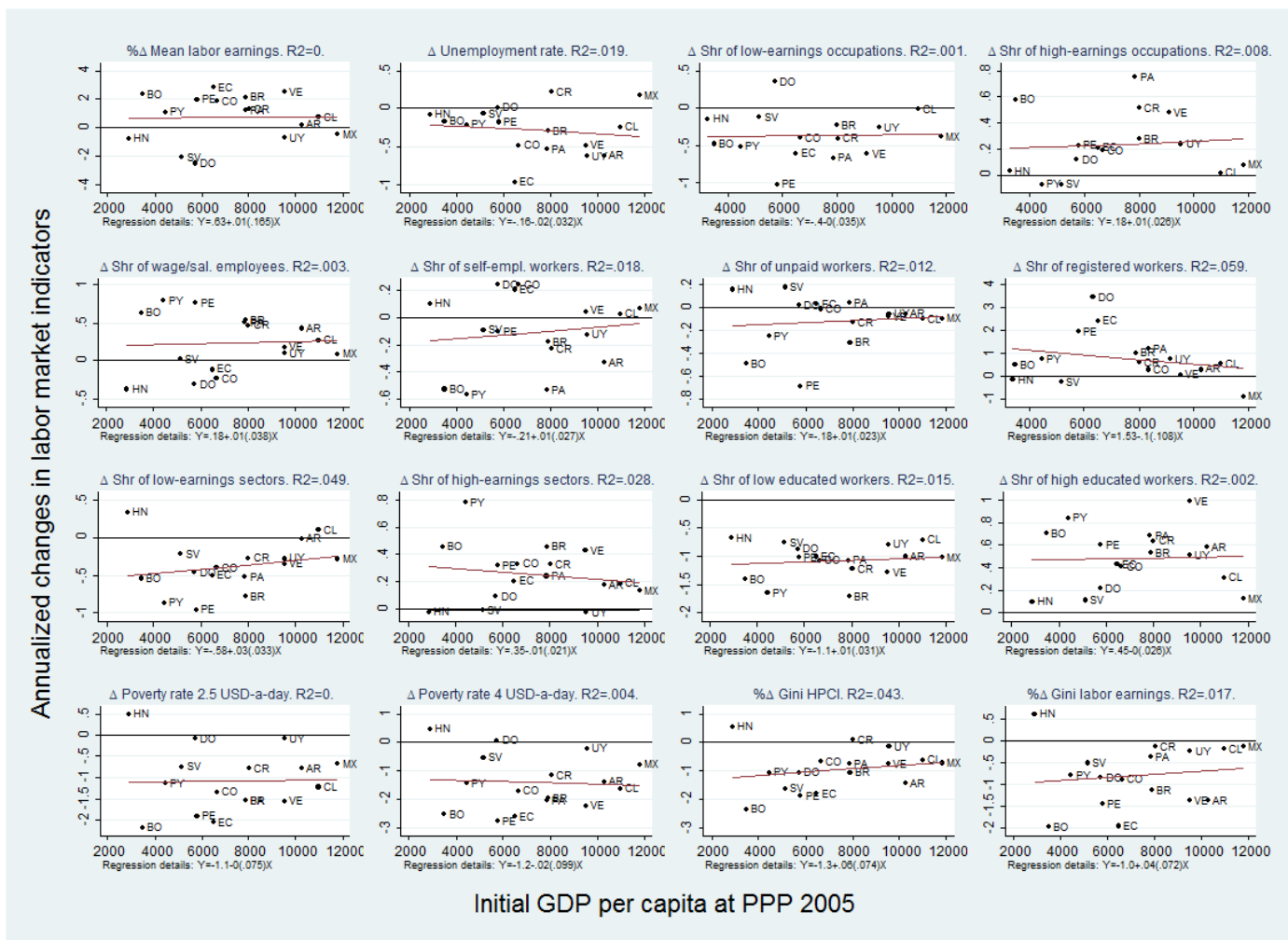
Figure 7: Cross-country relationship between the percentage of labour market indicators moving in the welfare-improving direction during the 2000s and initial GDP per capita



Note: This figure displays the percentage of labour market indicators that changed in the welfare-improving direction according to Table 3 and GDP per capita of the initial year at PPP 2005. The line represents the linear regression specified at the bottom of the figure. Robust standard error of the slope coefficient between parentheses.

Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014) and WDI (World Bank 2014).

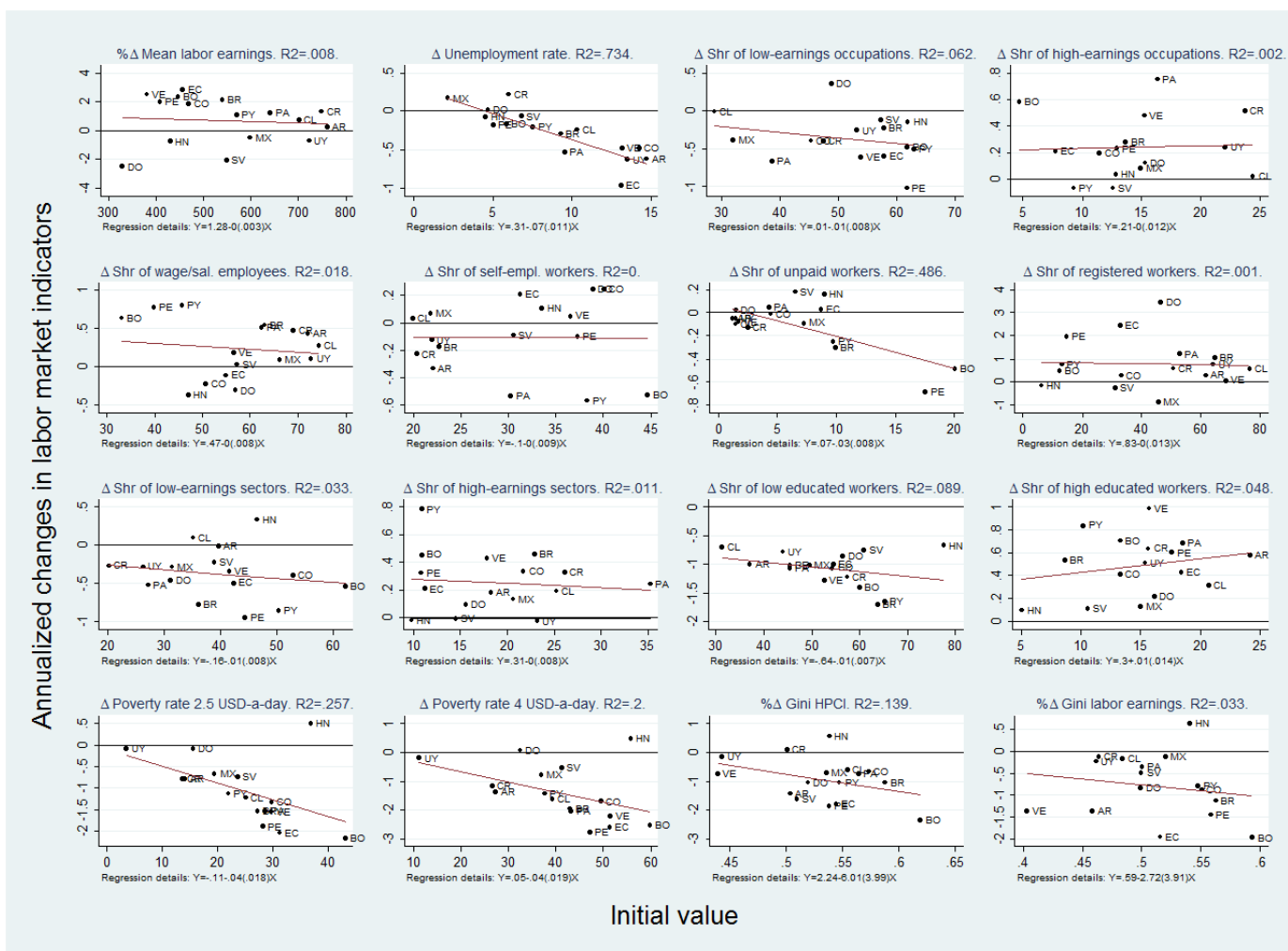
Figure 8: Cross-country relationship between the annualized changes in labour market indicators during the 2000s and initial GDP per capita



Note: The vertical axes display the annualized change in each labour market indicator.  $\Delta$  denotes changes in percentage points,  $\% \Delta$  denotes percentage changes. The line represents the linear regression specified at the bottom of the figure. Robust standard error of the slope coefficient between parentheses. R-squared of the regression indicated along the title of each figure.

Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014) and World Development Indicators (World Bank 2014).

Figure 9: Cross-country relationship between the annualized changes in labour market indicators during the 2000s and the initial value of labour market indicators



Note: The vertical axes display the annualized change in each labour market indicator. Δ denotes changes in percentage points, %Δ denotes percentage changes. The line represents the linear regression specified at the bottom of the figure. Robust standard error of the slope coefficient between parentheses. R-squared of the regression indicated along the title of each figure.

Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014).

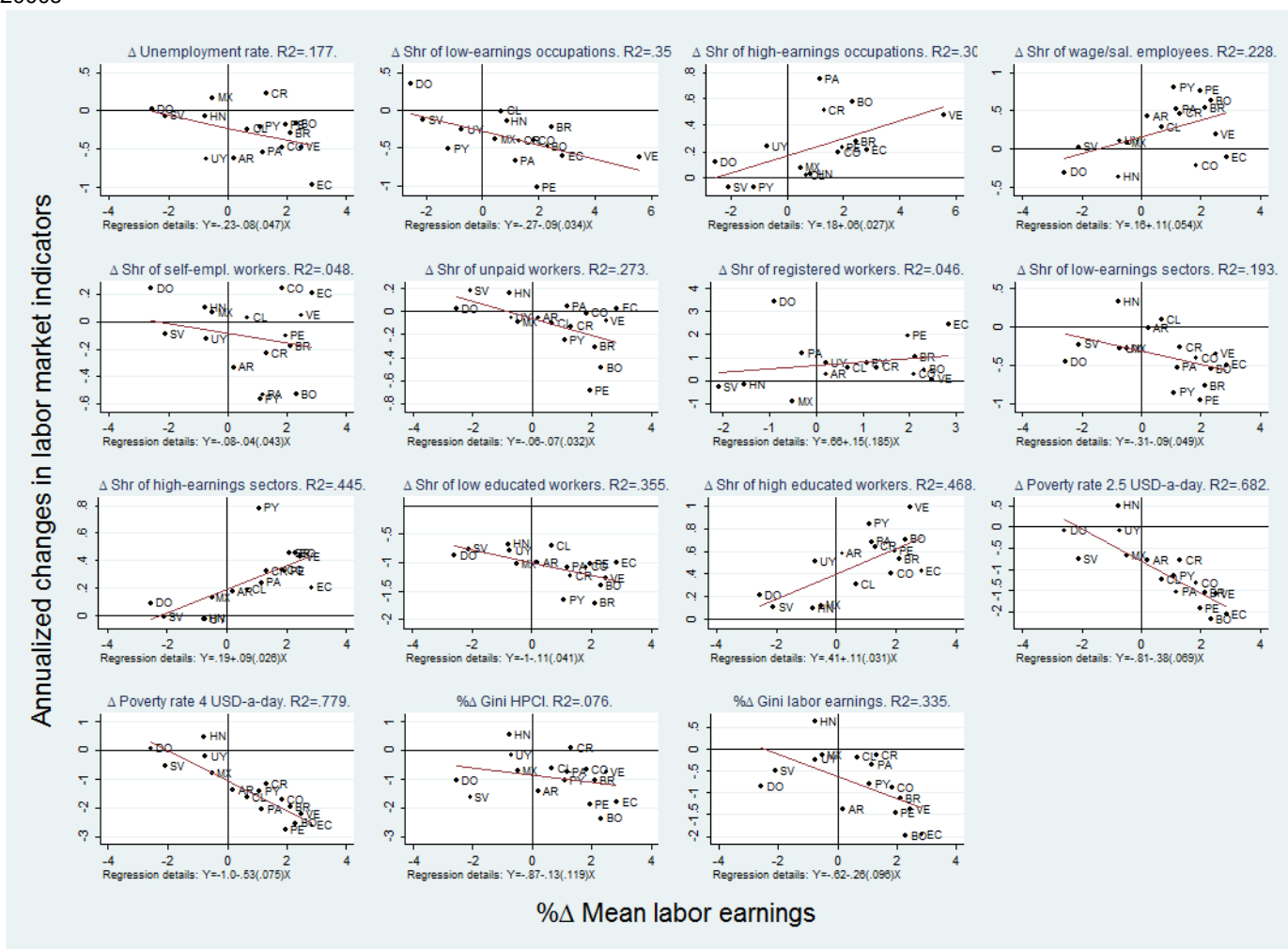
Figure 10: Cross-country relationship between the percentage of improving labour market indicators and the annualized changes in macroeconomic variables during the 2000s



Note: The vertical axes display the annualized change in each labour market indicator.  $\Delta$  denotes changes in percentage points, % $\Delta$  denotes percentage changes. The line represents the linear regression specified at the bottom of the figure. Robust standard error of the slope coefficient between parentheses. R-squared of the regression indicated along the title of each figure.

Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014), World Development Indicators (World Bank 2014), and CEPALSTAT (UN-ECLAC 2015).

Figure 11: Cross-country relationship between annualized changes in labour market indicators and annualized changes in mean labour earnings and during the 2000s



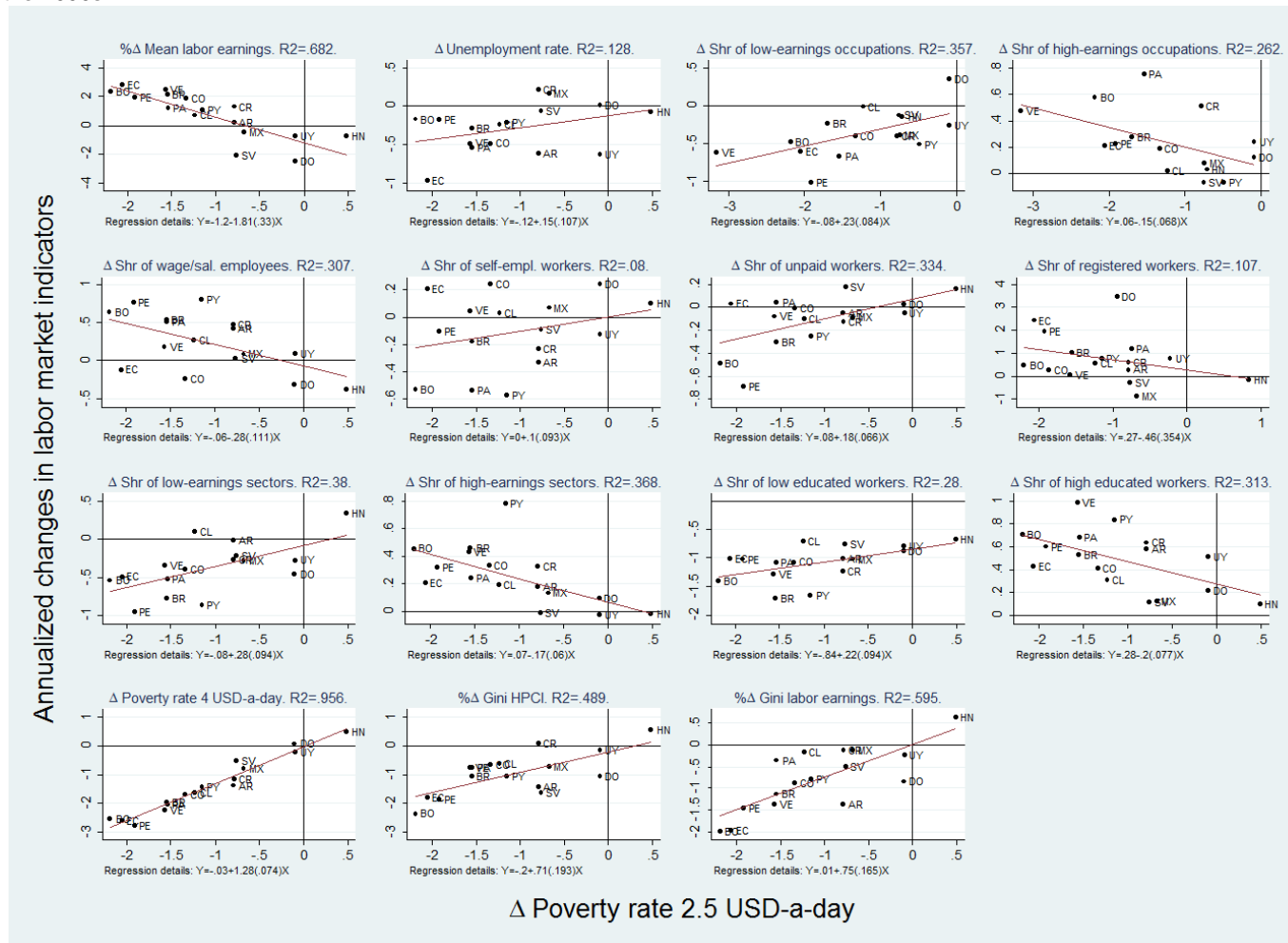
Note: The vertical axes display the annualized changes in each labour market indicator.  $\Delta$  denotes changes in percentage points,  $\% \Delta$  denotes percentage changes. The line represents the linear regression specified at the bottom of the figure. Robust standard error of the slope coefficient between parentheses. R-squared of the regression indicated along the title of each figure.

Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014).





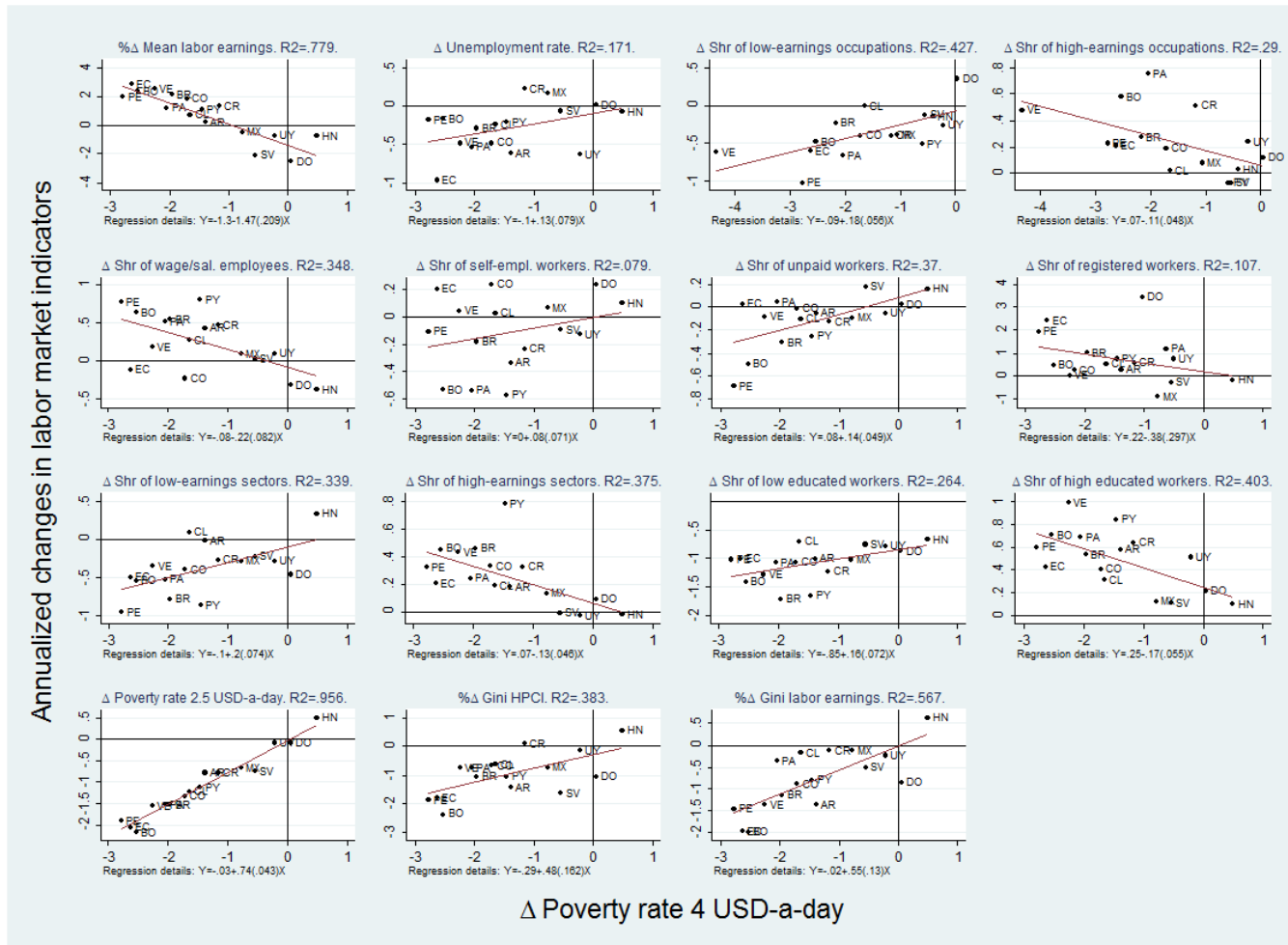
Figure 13: Cross-country relationship between annualized changes in labour market indicators and annualized changes in the 2.5 dollars-a-day poverty rate during the 2000s



Note: The vertical axes display the annualized changes in each labour market indicator. Δ denotes changes in percentage points, %Δ denotes percentage changes. The line represents the linear regression specified at the bottom of the figure. Robust standard error of the slope coefficient between parentheses. R-squared of the regression indicated along the title of each figure.

Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014).

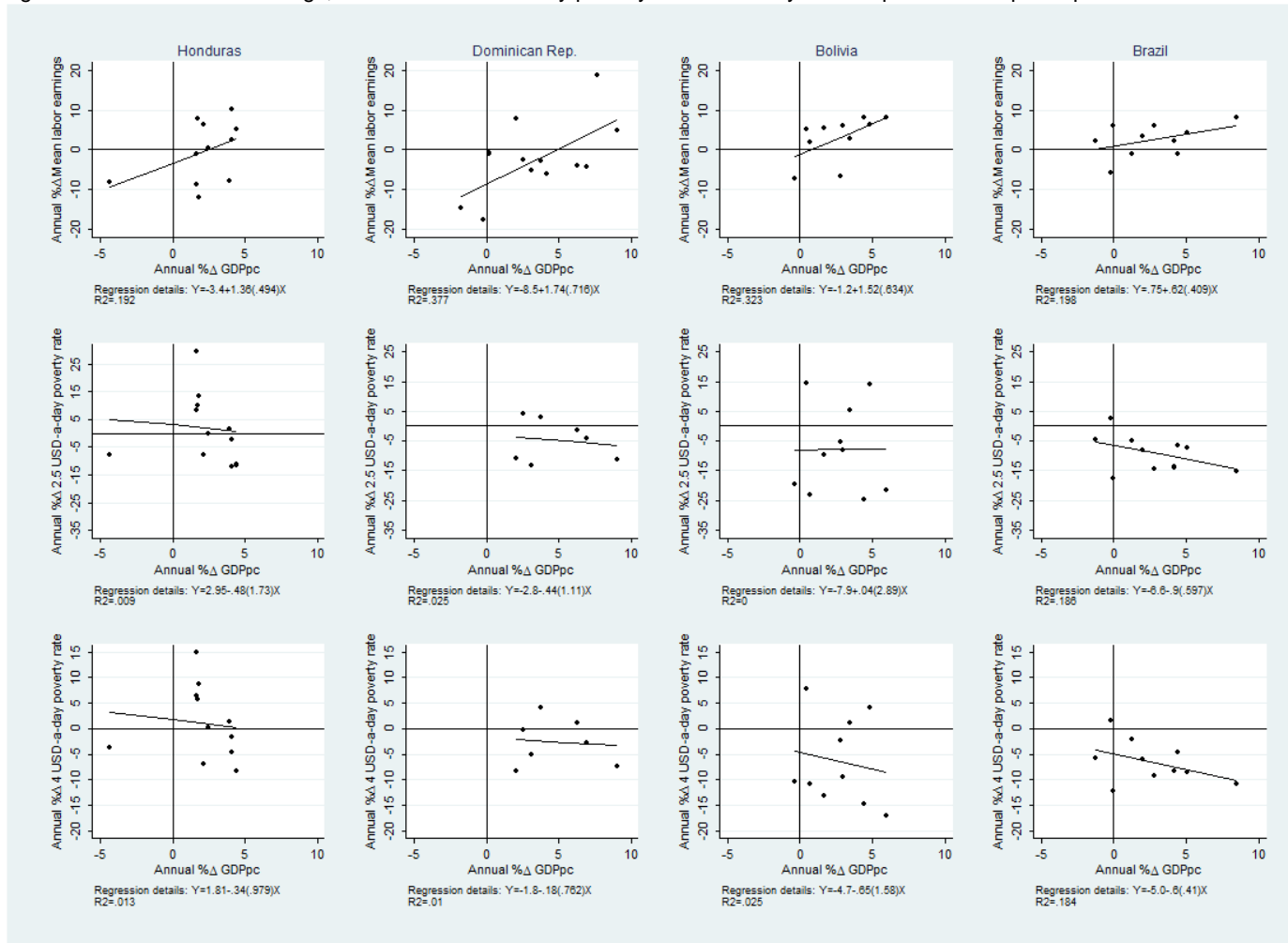
Figure 14: Cross-country relationship between annualized changes in labour market indicators and annualized changes in the 4 dollars-a-day poverty rate during the 2000s



Note: The vertical axes display the annualized changes in each labour market indicator. Δ denotes changes in percentage points, %Δ denotes percentage changes. The line represents the linear regression specified at the bottom of the figure. Robust standard error of the slope coefficient between parentheses. R-squared of the regression indicated along the title of each figure.

Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014).

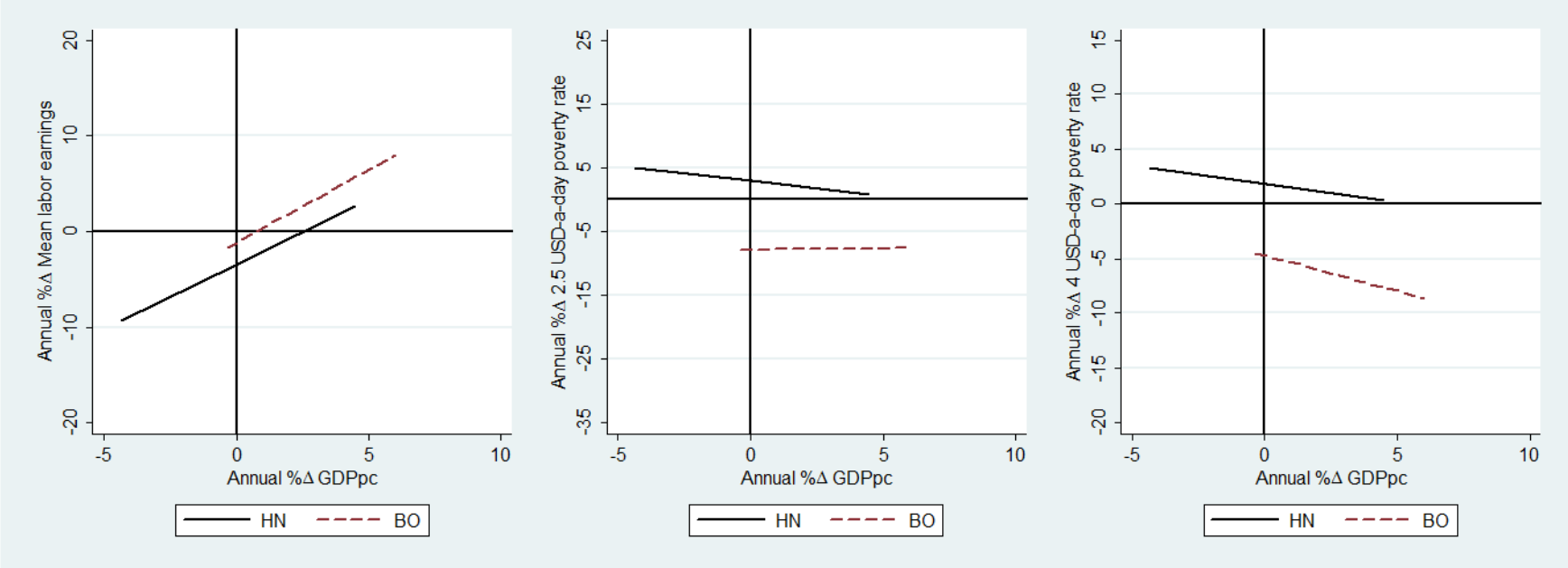
Figure 15: Mean labour earnings, 2.5 and 4 dollars-a-day poverty rates elasticity with respect to GDP per capita for illustrative countries



Note: The points in each figure represent year-by-year percentage changes in the labour market indicator indicated in the vertical axes and GDP per capita. The line represents the linear regression specified at the bottom of the figure. Robust standard error of the slope coefficient between parentheses.

Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014) and World Development Indicators (World Bank 2014).

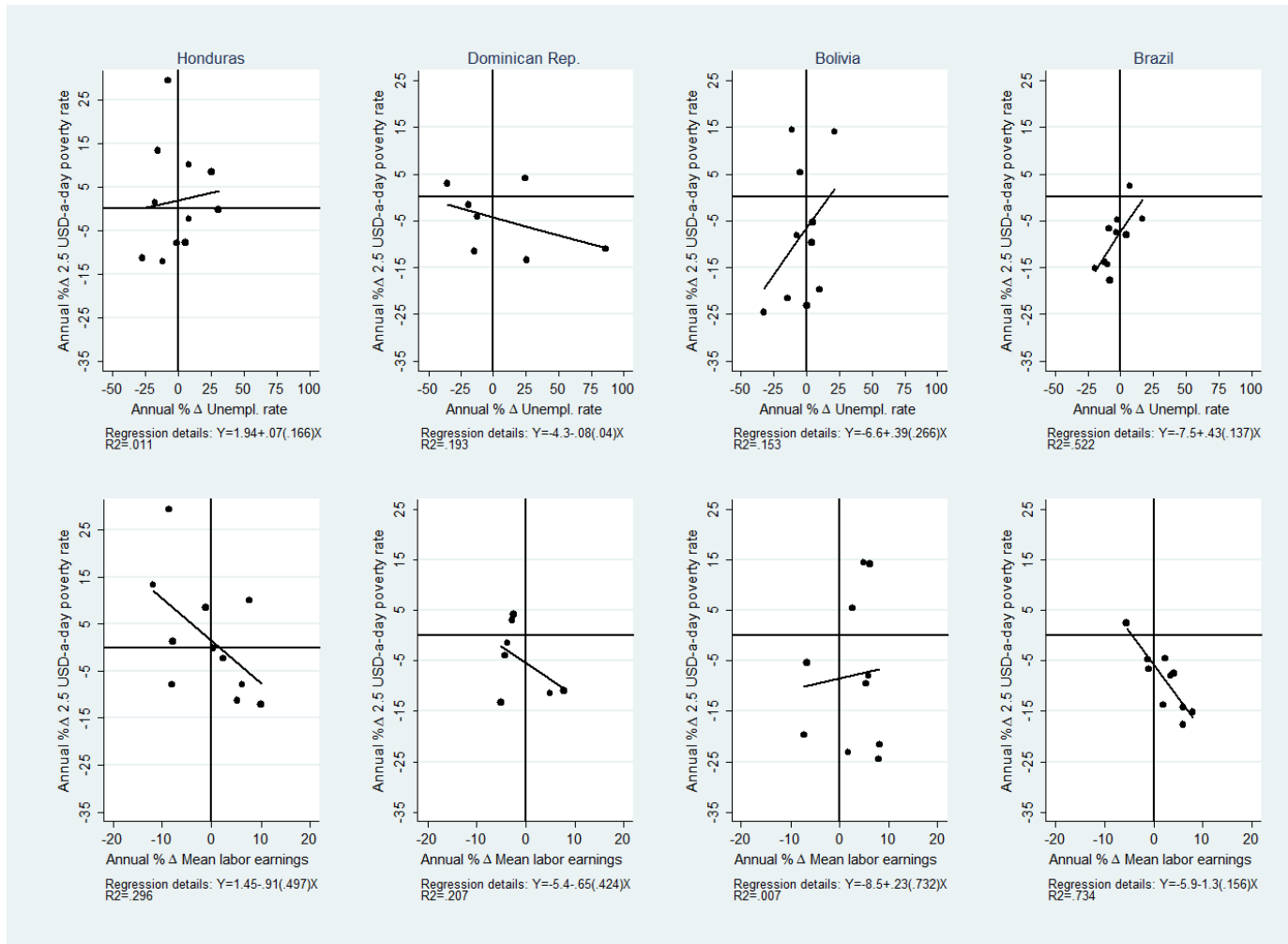
Figure 16: Relationship between percentage changes in mean labour earnings, 2.5 and 4 dollars-a-day poverty rates, and percentage changes in GDP per capita for illustrative countries



Note: Linear regression of the year-by-year percentage changes in each labour market indicator on year-by-year percentage changes in GDP per capita.

Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014) and World Development Indicators (World Bank 2014).

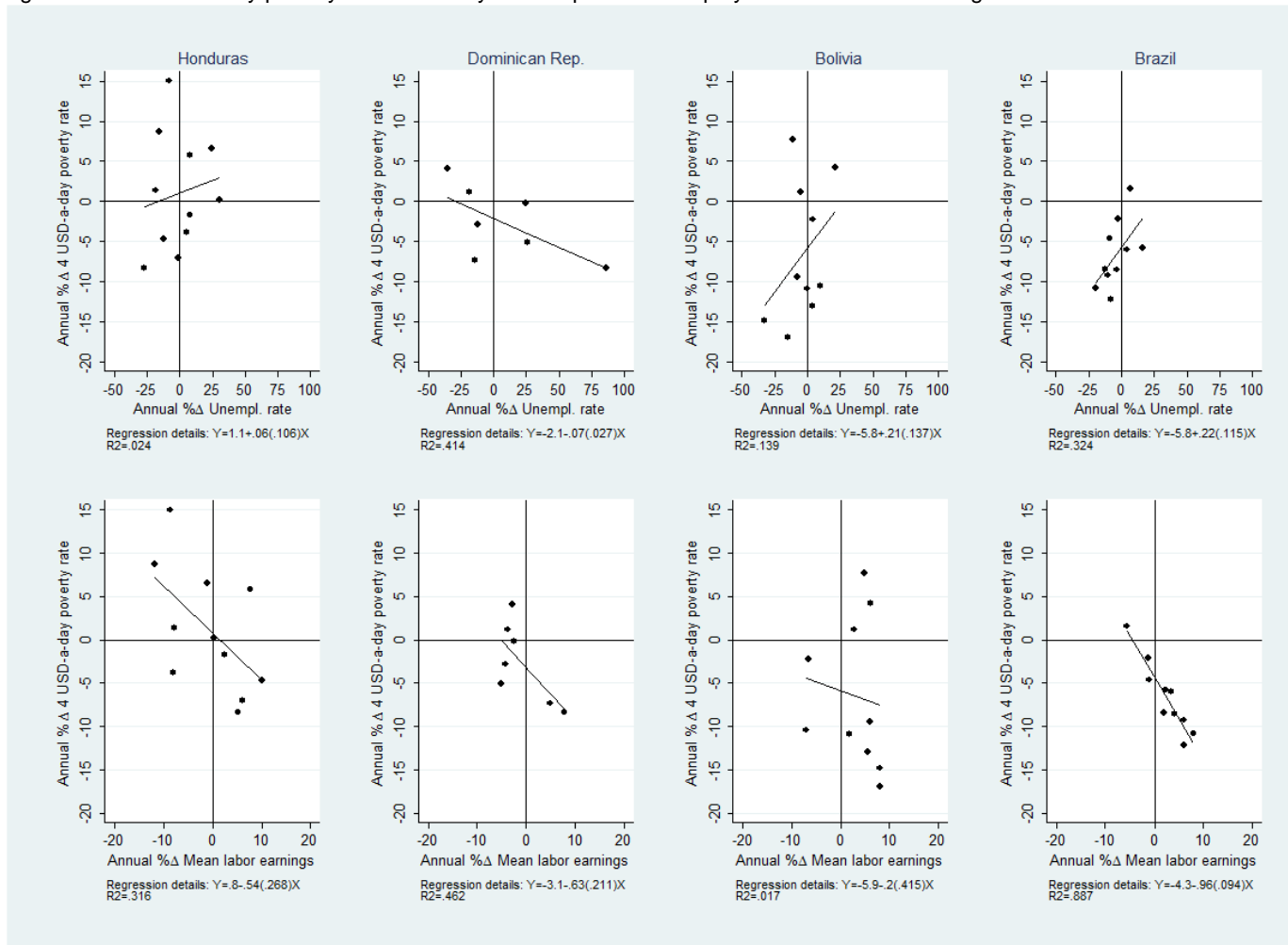
Figure 17: 2.5 dollars-a-day poverty rates elasticity with respect to unemployment and mean earnings for illustrative countries



Note: The points in each figure represent year-by-year percentage changes in the 2.5 dollars-a-day poverty rate, and the labour market indicator indicated in the horizontal axes. The line represents the linear regression specified at the bottom of the figure. Robust standard error of the slope coefficient between parentheses.

Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014).

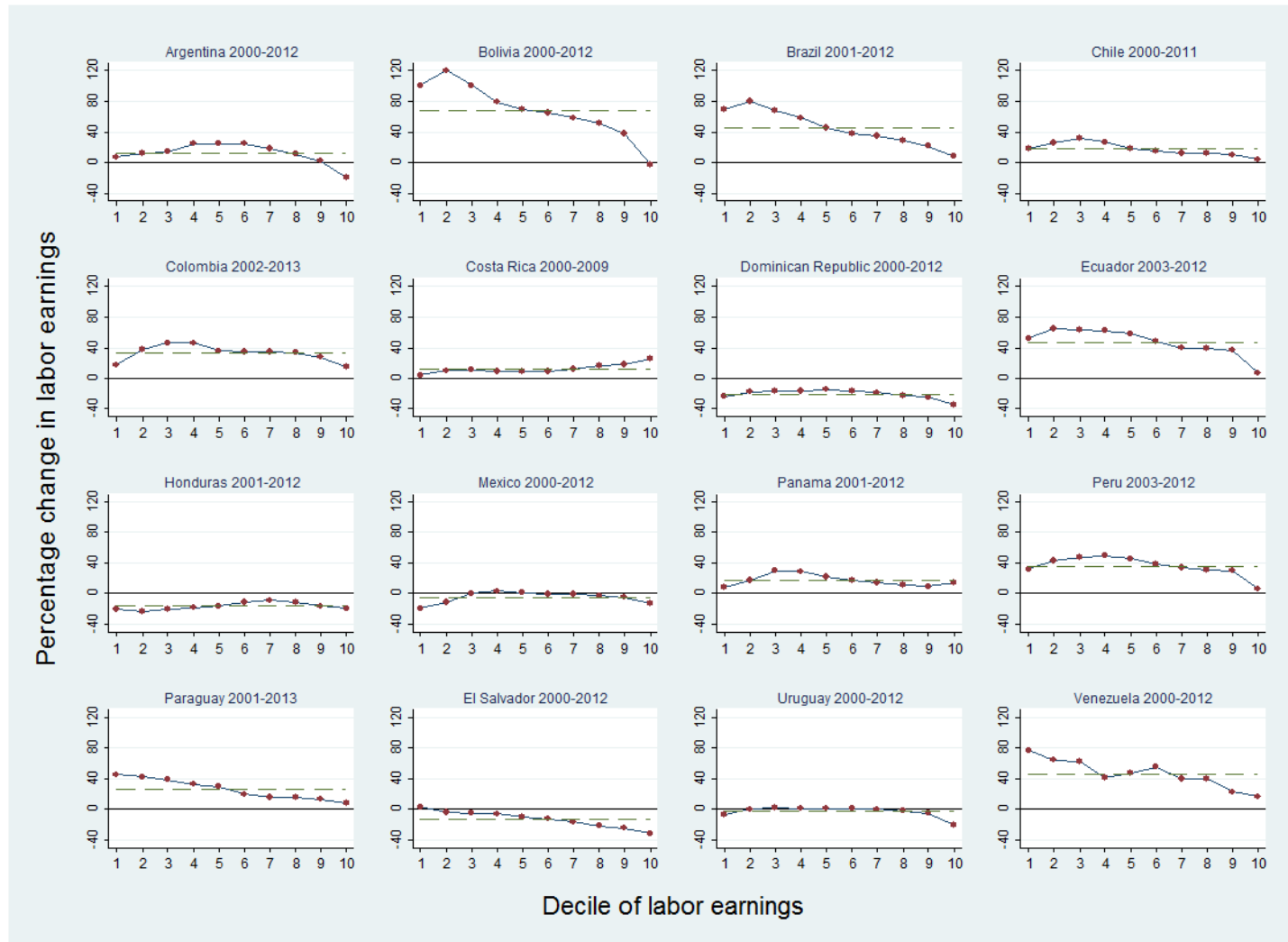
Figure 18: 4 dollars-a-day poverty rates elasticity with respect to unemployment and mean earnings for illustrative countries.



Note: The points in each figure represent year-by-year percentage changes in the 2.5 dollars-a-day poverty rate, and the labour market indicator indicated in the horizontal axes. The line represents the linear regression specified at the bottom of the figure. Robust standard error of the slope coefficient between parentheses.

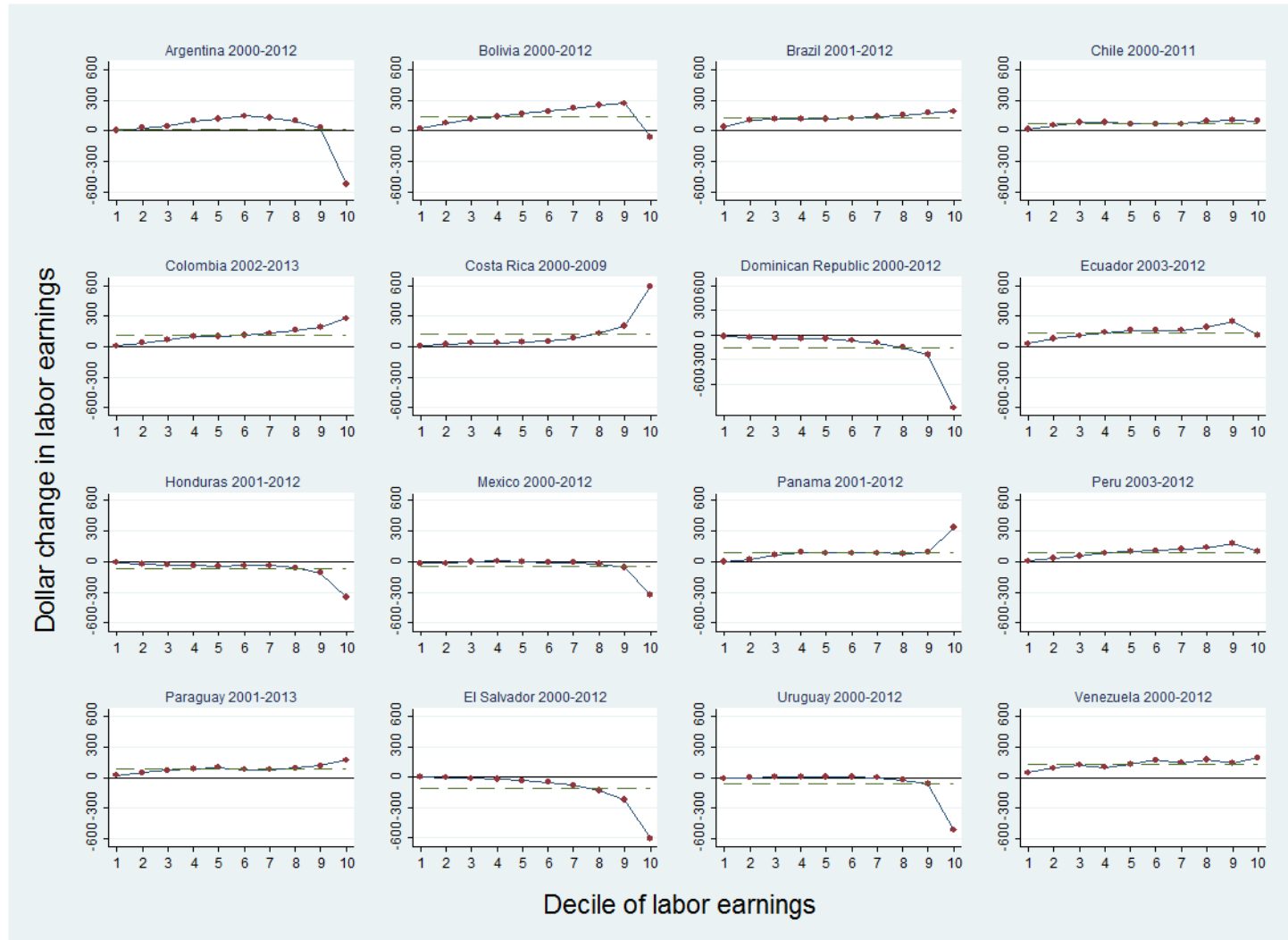
Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014).

Figure 19: Growth incidence curves of labour earnings by country. Percentage changes for the sample of employed workers with positive labour earnings.



Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014).

Figure 20: Growth incidence curves of labour earnings by country. Dollar changes for the sample of employed workers with positive labour earnings.



Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014).



## Appendix 1. Evolution of labour market indicators over the 2000s by country

### Argentina

	00	01	02	03	04	05	06	07	08	09	10	11	12	13	
Unemployment rate	14.78	18.40	17.88	15.41	12.58	10.60	9.30	7.53	7.61	8.60	7.41	7.17	7.25	...	
Share of low-earnings occupations															
Share of high-earnings occupations															
Share of wage/salaried employees	72.13	71.29	72.07	74.06	74.24	74.40	75.79	76.70	76.28	75.88	76.97	77.08	77.25	...	
Share of self-employed workers	22.07	23.41	22.98	20.78	20.46	20.36	19.01	17.99	18.50	19.07	17.79	17.93	18.04	...	
Share of unpaid family workers	1.19	0.92	0.98	1.40	1.17	1.10	1.02	0.90	0.62	0.73	0.78	0.64	0.54	...	
Share of workers in low-earnings sectors	39.7	39.0	35.4	38.3	39.3	39.7	41.0	39.8	40.4	39.9	39.6	39.9	39.5	...	
Share of workers in high-earnings sectors	18.3	18.5	20.8	19.5	18.4	18.5	18.4	19.0	19.2	19.9	19.9	19.6	20.5	...	
Share of low educated workers	37.04	36.17	35.51	34.55	33.59	32.76	31.18	29.09	28.37	27.58	26.38	26.13	24.93	...	
Share of high educated workers	24.18	25.89	25.24	26.07	26.90	27.80	28.46	28.52	29.33	29.98	30.83	31.49	31.13	...	
Share of workers registered with SS	61.59	61.40	55.95	50.62	52.01	54.42	57.27	60.59	62.96	64.11	65.40	65.55	65.01	...	
Mean labor earnings	761.7	736.0	497.8	...	578.4	646.1	705.8	732.6	718.5	747.4	756.8	799.0	781.0	...	
Poverty rate 2.5 dollars-a-day	14.16	18.64	29.17	22.02	16.96	13.32	10.32	8.75	8.21	8.04	6.14	4.60	4.69	...	
Poverty rate 4 dollars-a-day	27.46	32.86	45.54	36.44	30.96	25.80	20.62	19.54	17.26	16.31	14.07	11.55	10.84	...	
GINI of household per capita income	0.504	0.522	0.533	0.526	0.496	0.488	0.475	0.469	0.459	0.449	0.442	0.433	0.423	...	
GINI of labor earnings	0.459	0.476	0.498	0.481	0.463	0.459	0.440	0.434	0.416	0.412	0.403	0.400	0.388	...	

Note: The shaded figures represent statistical significant improvements at 5 per cent between the initial and final years.  
Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014).

## Bolivia

	00	01	02	03	04	05	06	07	08	09	10	11	12	13	
Unemployment rate	5.90	6.50	5.76	5.80	...	7.05	6.53	6.85	4.62	4.81	...	4.12	3.91	...	
Share of low-earnings occupations	61.77	63.90	63.61	60.56	...	59.48	56.03	57.33	58.11	55.91	...	56.43	56.01	...	
Share of high-earnings occupations	4.71	6.67	6.64	5.58	...	7.32	9.42	9.35	7.99	8.70	...	11.07	11.66	...	
Share of wage/salaried employees	33.10	34.89	33.04	37.39	...	36.06	36.61	39.28	38.96	41.78	...	39.50	40.67	...	
Share of self-employed workers	44.74	39.52	39.43	38.99	...	38.13	37.48	36.04	35.58	35.36	...	36.53	38.34	...	
Share of unpaid family workers	20.11	23.18	22.74	18.45	...	20.11	21.10	18.85	19.29	17.73	...	18.19	14.20	...	
Share of workers in low-earnings sectors	62.12	65.31	63.47	60.18	...	59.35	55.75	56.62	57.00	54.19	...	55.71	55.54	...	
Share of workers in high-earnings sectors	10.91	10.85	9.89	10.86	...	12.07	15.31	13.82	14.91	14.46	...	15.26	16.36	...	
Share of low educated workers	60.05	59.64	61.33	59.36	...	55.94	56.04	50.84	50.26	48.15	...	45.91	43.17	...	
Share of high educated workers	13.35	14.02	11.83	11.78	...	14.25	13.12	17.30	14.79	16.77	...	20.50	21.76	...	
Share of workers registered with SS	12.29	11.85	9.66	10.47	...	19.83	18.73	13.65	13.03	14.89	...	17.44	18.06	...	
Mean labor earnings	447.3	415.4	435.7	443.6	...	471.0	498.9	466.1	503.6	530.9	...	573.8	589.3	...	
Poverty rate 2.5 dollars-a-day	43.25	34.72	39.70	30.50	...	34.81	32.00	30.29	22.84	20.64	...	16.19	17.05	...	
Poverty rate 4 dollars-a-day	59.90	53.61	57.75	51.43	...	53.58	48.52	47.43	40.41	35.14	...	29.16	29.49	...	
GINI of household per capita income	0.619	0.549	0.600	0.549	...	0.583	0.567	0.553	0.514	0.494	...	0.462	0.465	...	
GINI of labor earnings	0.594	0.559	0.574	0.529	...	0.563	0.539	0.536	0.508	0.495	...	0.454	0.467	...	

Note: The shaded figures represent statistical significant improvements at 5 per cent between the initial and final years.

Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014).

## Brazil

	00	01	02	03	04	05	06	07	08	09	10	11	12	13	
Unemployment rate	...	9.34	9.10	9.72	8.89	9.30	8.39	8.09	7.09	8.28	...	6.69	6.15	...	
Share of low-earnings occupations	...	...	57.83	58.00	58.09	57.39	57.22	57.20	56.51	56.48	...	56.75	55.55	...	
Share of high-earnings occupations	...	...	13.68	13.71	13.30	13.82	14.47	14.20	14.59	15.09	...	15.28	16.45	...	
Share of wage/salaried employees	...	63.00	62.90	62.93	63.66	63.65	64.36	65.51	66.39	66.87	...	68.44	68.89	...	
Share of self-employed workers	...	22.72	22.63	22.67	22.27	21.95	21.49	21.41	20.44	20.66	...	21.20	20.76	...	
Share of unpaid family workers	...	9.95	10.12	10.12	9.87	10.09	9.62	9.25	8.63	8.11	...	6.93	6.55	...	
Share of workers in low-earnings sectors	...	36.15	34.72	34.66	35.05	34.78	33.71	32.34	31.53	31.51	...	28.52	27.59	...	
Share of workers in high-earnings sectors	...	23.01	25.04	25.04	25.13	24.80	25.92	26.08	26.65	26.80	...	27.42	28.05	...	
Share of low educated workers	...	63.79	61.96	59.97	58.56	56.83	54.69	53.05	50.72	48.93	...	46.38	44.95	...	
Share of high educated workers	...	8.68	9.05	9.39	9.56	9.93	10.65	13.23	13.04	13.93	...	15.45	14.55	...	
Share of workers registered with SS	...	46.90	46.27	47.36	47.50	48.44	49.60	51.64	52.86	54.27	...	59.13	60.22	...	
Mean labor earnings	...	539.9	533.6	503.8	498.4	515.8	546.4	569.1	580.3	593.9	...	641.3	680.1	...	
Poverty rate 2.5 dollars-a-day	...	27.35	26.02	26.66	24.87	22.88	19.59	18.11	15.59	14.88	...	12.60	10.37	...	
Poverty rate 4 dollars-a-day	...	43.05	42.13	42.78	40.81	38.37	34.81	31.84	29.14	27.44	...	24.46	21.49	...	
GINI of household per capita income	...	0.588	0.583	0.576	0.566	0.564	0.559	0.549	0.542	0.536	...	0.527	0.523	...	
GINI of labor earnings	...	0.563	0.560	0.552	0.544	0.540	0.538	0.525	0.518	0.515	...	0.499	0.496	...	

Note: The shaded figures represent statistical significant improvements at 5 per cent between the initial and final years.

Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014).

## Chile

	00	01	02	03	04	05	06	07	08	09	10	11	12	13	
Unemployment rate	10.37	...	...	9.98	...	...	7.32	...	...	10.22	...	7.73	...	...	
Share of low-earnings occupations	42.81	...	...	41.64	...	...	44.45	...	...	45.57	...	44.13	...	...	
Share of high-earnings occupations	16.65	...	...	16.17	...	...	13.42	...	...	13.75	...	17.08	...	...	
Share of wage/salaried employees	74.39	...	...	74.28	...	...	75.67	...	...	76.28	...	77.42	...	...	
Share of self-employed workers	20.00	...	...	20.40	...	...	20.34	...	...	20.13	...	20.29	...	...	
Share of unpaid family workers	1.48	...	...	1.45	...	...	0.91	...	...	0.47	...	0.40	...	...	
Share of workers in low-earnings sectors	35.15	...	...	35.15	...	...	34.93	...	...	34.78	...	36.17	...	...	
Share of workers in high-earnings sectors	25.25	...	...	25.42	...	...	25.30	...	...	28.37	...	27.35	...	...	
Share of low educated workers	31.29	...	...	28.02	...	...	27.01	...	...	24.47	...	23.55	...	...	
Share of high educated workers	20.69	...	...	21.99	...	...	22.03	...	...	24.40	...	24.12	...	...	
Share of workers registered with SS	62.77	...	...	63.65	...	...	66.66	...	...	66.03	...	68.76	...	...	
Mean labor earnings	702.6	...	...	686.6	...	...	685.0	...	...	780.0	...	756.8	...	...	
Poverty rate 2.5 dollars-a-day	8.89	...	...	7.64	...	...	5.12	...	...	4.09	...	2.88	...	...	
Poverty rate 4 dollars-a-day	22.99	...	...	20.58	...	...	15.62	...	...	11.56	...	9.88	...	...	
GINI of household per capita income	0.552	...	...	0.547	...	...	0.517	...	...	0.519	...	0.508	...	...	
GINI of labor earnings	0.560	...	...	0.546	...	...	0.532	...	...	0.522	...	0.510	...	...	

Note: The shaded figures represent statistical significant improvements at 5 per cent between the initial and final years.

Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014).

## Colombia

	00	01	02	03	04	05	06	07	08	09	10	11	12	13	
Unemployment rate	...	13.58	14.33	13.57	12.06	11.08	...	...	10.88	11.63	10.86	9.92	9.78	9.00	
Share of low-earnings occupations	...	46.15	45.34	46.00	45.20	45.36	...	...	39.40	42.64	42.42	41.72	41.47	41.02	
Share of high-earnings occupations	...	10.50	11.49	11.37	11.74	12.16	...	...	12.62	11.36	11.95	12.41	12.73	13.62	
Share of wage/salaried employees	...	50.00	50.77	49.58	49.35	52.00	...	...	49.06	48.50	47.36	47.07	47.28	48.25	
Share of self-employed workers	...	40.89	40.15	40.54	40.94	38.48	...	...	42.55	42.60	43.07	43.74	43.33	42.79	
Share of unpaid family workers	...	4.70	4.47	5.30	4.55	4.22	...	...	3.72	3.91	4.56	4.16	4.44	4.37	
Share of workers in low-earnings sectors	...	54.03	52.79	52.18	50.58	51.94	...	...	48.08	49.01	49.07	48.40	48.45	48.39	
Share of workers in high-earnings sectors	...	21.39	21.79	22.71	22.94	22.50	...	...	24.45	24.14	23.37	24.11	24.14	25.43	
Share of low educated workers	...	56.11	54.36	54.24	52.70	50.81	...	...	47.09	48.36	48.00	45.30	45.37	42.60	
Share of high educated workers	...	12.79	13.34	13.62	14.43	15.12	...	...	16.88	15.97	15.60	16.51	16.18	17.83	
Share of workers registered with SS	...	...	...	...	...	...	...	...	33.22	31.87	30.92	32.00	32.61	34.60	
Mean labor earnings	...	402.0	469.3	408.1	452.6	464.9	...	...	516.9	537.1	543.5	546.0	545.6	573.5	
Poverty rate 2.5 dollars-a-day	...	39.04	29.84	31.05	28.37	25.30	...	...	24.45	21.92	19.56	16.97	17.50	15.16	
Poverty rate 4 dollars-a-day	...	60.33	49.55	51.96	49.41	45.24	...	...	41.64	39.61	36.51	33.14	32.92	30.75	
GINI of household per capita income	...	0.565	0.574	0.543	0.560	0.550	...	...	0.558	0.557	0.553	0.535	0.534	0.533	
GINI of labor earnings	...	0.517	0.551	0.510	0.530	0.519	...	...	0.502	0.514	0.516	0.504	0.506	0.499	

Note: The shaded figures represent statistical significant improvements at 5 per cent between the initial and final years. Vertical lines are used to indicate when the series are not fully comparable before and after that line.

Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014).

## Costa Rica

	00	01	02	03	04	05	06	07	08	09	10	11	12	13	
Unemployment rate	...	6.04	6.39	6.65	6.44	6.63	5.92	4.55	4.93	7.82	7.29	7.66	7.77	...	
Share of low-earnings occupations	...	47.48	48.26	47.86	47.17	47.51	46.58	45.98	43.95	44.27	47.46	48.15	...	...	
Share of high-earnings occupations	...	23.73	23.40	24.48	24.37	24.46	24.87	25.26	27.52	27.85	26.04	26.65	...	...	
Share of wage/salaried employees	...	69.06	68.53	69.58	68.84	71.56	70.85	73.17	72.95	72.77	76.11	76.00	76.09	...	
Share of self-employed workers	...	20.38	20.80	19.35	20.77	18.90	19.42	17.93	18.06	18.52	18.87	18.77	18.69	...	
Share of unpaid family workers	...	2.54	2.74	2.42	2.24	2.04	1.97	1.64	1.46	1.49	1.65	1.50	1.66	...	
Share of workers in low-earnings sectors	...	28.96	28.75	27.52	27.40	28.94	27.71	26.45	24.72	24.14	28.00	27.10	26.44	...	
Share of workers in high-earnings sectors	...	26.21	26.34	26.82	26.28	25.78	26.01	26.57	28.06	28.82	28.21	28.46	30.26	...	
Share of low educated workers	...	57.32	55.40	53.23	53.27	53.38	52.25	51.06	49.08	47.55	50.03	48.80	46.53	...	
Share of high educated workers	...	15.68	16.45	17.14	17.28	17.59	18.64	18.67	20.02	20.77	19.16	19.73	20.85	...	
Share of workers registered with SS	...	50.70	50.53	50.35	51.31	50.68	51.23	53.47	54.69	55.26	55.65	54.58	56.06	...	
Mean labor earnings	...	749.7	736.3	740.3	694.7	675.3	703.5	764.7	784.8	832.2	794.1	812.0	833.0	...	
Poverty rate 2.5 dollars-a-day	...	13.78	13.55	13.07	12.26	10.76	10.58	7.27	6.87	7.46	4.53	5.09	4.73	...	
Poverty rate 4 dollars-a-day	...	26.72	26.45	24.87	25.93	23.07	22.98	17.88	17.01	17.42	12.70	13.01	12.18	...	
GINI of household per capita income	...	0.501	0.500	0.492	0.482	0.473	0.489	0.492	0.486	0.504	0.480	0.485	0.485	...	
GINI of labor earnings	...	0.464	0.463	0.454	0.435	0.440	0.454	0.459	0.455	0.459	0.466	0.477	0.471	...	

Note: The shaded figures represent statistical significant improvements at 5 per cent between the initial and final years. Vertical lines are used to indicate when the series are not fully comparable before and after that line.

Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014).

## Dominican Republic

	00	01	02	03	04	05	06	07	08	09	10	11	12	13	
Unemployment rate	4.72	5.49	4.11	4.92	4.21	4.25	3.64	3.20	2.07	3.85	3.14	3.94	4.92	...	
Share of low-earnings occupations	48.77	48.84	49.98	47.81	48.52	48.63	49.84	50.28	50.42	52.54	52.08	53.59	52.96	...	
Share of high-earnings occupations	15.35	15.53	15.39	17.06	16.47	16.24	16.74	16.34	17.17	17.03	16.81	15.81	16.76	...	
Share of wage/salaried employees	56.90	54.30	53.29	54.80	55.18	52.83	53.56	54.23	52.14	51.07	50.62	51.33	53.18	...	
Share of self-employed workers	38.98	40.26	42.16	40.27	38.57	39.99	40.04	39.14	40.20	42.56	43.36	43.79	41.87	...	
Share of unpaid family workers	1.53	1.58	1.36	1.44	1.53	2.76	2.52	2.41	3.62	1.51	2.27	1.70	1.82	...	
Share of workers in low-earnings sectors	31.21	28.51	29.71	27.65	28.66	27.59	27.40	27.55	26.54	25.84	25.55	25.85	25.70	...	
Share of workers in high-earnings sectors	15.62	15.77	16.16	17.22	15.74	16.24	15.86	16.20	17.30	16.77	17.28	17.51	16.77	...	
Share of low educated workers	56.47	57.22	55.21	54.36	53.52	53.69	52.16	50.13	49.63	49.56	48.32	47.27	46.09	...	
Share of high educated workers	16.15	15.11	16.55	16.91	17.27	16.51	16.84	17.20	19.26	18.76	18.52	17.24	18.71	...	
Share of workers registered with SS	...	...	...	...	...	46.66	53.89	64.07	71.43	71.75	74.72	71.18	70.89	...	
Mean labor earnings	330.0	327.0	307.6	263.1	217.3	257.8	270.2	258.9	251.7	271.3	261.1	248.1	241.8	...	
Poverty rate 2.5 dollars-a-day	15.71	15.84	17.61	21.83	27.77	21.08	18.66	17.90	18.44	16.40	16.14	13.97	14.55	...	
Poverty rate 4 dollars-a-day	32.63	33.27	33.07	41.73	49.50	40.48	37.48	36.41	37.89	34.71	35.12	33.34	33.26	...	
GINI of household per capita income	0.519	0.504	0.500	0.520	0.519	0.499	0.519	0.487	0.490	0.489	0.472	0.474	0.457	...	
GINI of labor earnings	0.499	0.487	0.483	0.481	0.479	0.476	0.484	0.464	0.457	0.471	0.464	0.468	0.451	...	

Note: The shaded figures represent statistical significant improvements at 5 per cent between the initial and final years. Vertical lines are used to indicate when the series are not fully comparable before and after that line.

Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014).

## Ecuador

	00	01	02	03	04	05	06	07	08	09	10	11	12	13	
Unemployment rate	...	...	...	13.19	8.50	8.37	6.72	5.48	6.43	6.86	5.22	4.50	4.40	...	
Share of low-earnings occupations	...	...	...	57.88	57.42	56.80	57.12	55.56	56.22	56.75	54.43	52.91	52.42	...	
Share of high-earnings occupations	...	...	...	7.78	8.51	8.56	8.44	8.96	8.76	8.61	9.42	8.49	9.65	...	
Share of wage/salaried employees	...	...	...	55.09	51.19	53.41	53.38	54.10	55.74	54.13	55.30	52.93	54.06	...	
Share of self-employed workers	...	...	...	31.29	30.64	30.53	28.90	29.76	29.08	30.68	31.64	34.82	33.16	...	
Share of unpaid family workers	...	...	...	8.73	11.47	9.77	11.70	10.93	9.89	10.99	9.58	8.72	9.01	...	
Share of workers in low-earnings sectors	...	...	...	42.39	42.61	42.35	41.55	40.68	39.90	40.07	38.76	38.13	37.92	...	
Share of workers in high-earnings sectors	...	...	...	11.24	10.83	11.22	10.72	10.70	12.00	11.42	12.16	12.59	13.12	...	
Share of low educated workers	...	...	...	54.58	55.04	53.52	52.38	51.93	50.99	50.64	48.69	46.92	45.55	...	
Share of high educated workers	...	...	...	18.39	18.81	18.73	18.63	19.21	19.56	20.14	21.38	21.31	22.24	...	
Share of workers registered with SS	...	...	...	32.97	33.53	33.15	33.30	34.04	36.00	39.95	45.24	53.30	54.67	...	
Mean labor earnings	...	...	...	457.6	511.1	502.6	529.2	575.1	546.8	515.7	559.7	559.0	589.6	...	
Poverty rate 2.5 dollars-a-day	...	...	...	31.33	28.81	25.61	20.00	19.81	19.29	18.85	15.88	13.55	12.85	...	
Poverty rate 4 dollars-a-day	...	...	...	51.44	48.03	43.60	38.34	38.11	36.75	37.11	33.43	29.54	27.76	...	
GINI of household per capita income	...	...	...	0.545	0.536	0.536	0.529	0.539	0.502	0.489	0.489	0.458	0.462	...	
GINI of labor earnings	...	...	...	0.515	0.527	0.501	0.489	0.524	0.482	0.466	0.463	0.436	0.431	...	

Note: The shaded figures represent statistical significant improvements at 5 per cent between the initial and final years.

Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014).



## Honduras

	00	01	02	03	04	05	06	07	08	09	10	11	12	13	
Unemployment rate	...	4.60	4.24	5.54	5.99	4.92	3.58	3.15	3.11	3.28	4.10	4.42	3.73	...	
Share of low-earnings occupations	...	...	...	...	...	61.93	62.49	63.07	61.13	62.12	61.71	59.72	61.34	...	
Share of high-earnings occupations	...	...	...	...	...	12.86	13.95	14.19	15.03	13.19	12.90	13.54	13.00	...	
Share of wage/salaried employees	...	47.04	47.25	50.12	49.17	47.24	47.68	48.94	49.00	47.02	44.23	46.83	42.91	...	
Share of self-employed workers	...	33.58	33.22	32.21	29.34	31.29	31.19	29.06	28.52	31.50	32.07	30.71	34.73	...	
Share of unpaid family workers	...	9.00	10.20	8.61	9.58	9.91	9.25	8.25	8.81	8.94	10.48	11.34	10.77	...	
Share of workers in low-earnings sectors	...	46.51	52.73	48.94	49.67	48.21	50.91	48.84	47.70	48.66	49.91	49.43	50.11	...	
Share of workers in high-earnings sectors	...	9.83	9.59	9.35	9.83	9.68	10.19	10.22	11.01	9.84	9.94	9.40	9.59	...	
Share of low educated workers	...	77.60	79.51	79.24	76.52	76.15	75.48	74.48	72.23	73.22	70.97	69.32	70.19	...	
Share of high educated workers	...	5.10	5.63	4.69	5.37	5.22	5.52	5.91	6.52	5.60	6.31	6.63	6.21	...	
Share of workers registered with SS	...	...	...	...	...	...	6.19	5.00	6.34	4.40	5.63	5.42	5.21	...	
Mean labor earnings	...	430.1	393.2	394.6	404.1	372.1	391.6	431.2	457.9	421.2	416.3	448.4	395.0	...	
Poverty rate 2.5 dollars-a-day	...	37.04	47.95	47.89	46.77	47.41	42.04	36.96	34.01	31.34	33.99	37.40	42.42	...	
Poverty rate 4 dollars-a-day	...	55.91	64.28	64.38	63.29	64.16	58.80	56.00	52.05	50.04	53.30	56.39	61.28	...	
GINI of household per capita income	...	0.539	0.577	0.583	0.581	0.593	0.573	0.560	0.556	0.516	0.534	0.572	0.573	...	
GINI of labor earnings	...	0.541	0.545	0.558	0.556	0.575	0.546	0.553	0.554	0.526	0.543	0.582	0.580	...	

Note: The shaded figures represent statistical significant improvements at 5 per cent between the initial and final years.

Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014).

## Mexico

	00	01	02	03	04	05	06	07	08	09	10	11	12	13	
Unemployment rate	2.18	...	2.95	...	3.77	3.77	3.31	...	4.48	...	5.66	...	4.23	...	
Share of low-earnings occupations	32.04	...	31.26	...	28.91	28.98	29.16	...	28.98	...	41.41	...	43.08	...	
Share of high-earnings occupations	14.95	...	13.31	...	14.60	15.26	15.26	...	15.60	...	18.94	...	17.86	...	
Share of wage/salaried employees	66.14	...	65.73	...	70.22	68.86	67.16	...	71.78	...	72.94	...	68.31	...	
Share of self-employed workers	21.81	...	23.21	...	21.17	21.39	22.61	...	12.80	...	12.76	...	15.06	...	
Share of unpaid family workers	7.26	...	7.02	...	5.31	5.94	6.17	...	5.49	...	4.87	...	5.91	...	
Share of workers in low-earnings sectors	31.52	...	30.13	...	26.74	26.56	26.24	...	26.11	...	25.93	...	28.12	...	
Share of workers in high-earnings sectors	20.67	...	20.74	...	22.74	22.65	21.92	...	22.91	...	23.43	...	22.24	...	
Share of low educated workers	49.48	...	48.48	...	45.01	44.06	42.69	...	40.98	...	37.86	...	37.19	...	
Share of high educated workers	15.03	...	13.38	...	15.27	15.43	15.39	...	15.38	...	17.48	...	16.56	...	
Share of workers registered with SS	45.63	...	41.58	...	40.32	39.38	40.99	...	39.61	...	37.15	...	34.94	...	
Mean labor earnings	598.6	...	575.4	...	591.7	616.5	616.6	...	622.0	...	554.6	...	563.9	...	
Poverty rate 2.5 dollars-a-day	19.54	...	17.15	...	14.73	14.98	11.83	...	13.57	...	12.61	...	11.45	...	
Poverty rate 4 dollars-a-day	36.97	...	34.10	...	30.82	29.89	27.03	...	28.54	...	28.16	...	27.65	...	
GINI of household per capita income	0.536	...	0.510	...	0.507	0.509	0.495	...	0.502	...	0.472	...	0.491	...	
GINI of labor earnings	0.520	...	0.515	...	0.497	0.507	0.505	...	0.508	...	0.474	...	0.512	...	

Note: The shaded figures represent statistical significant improvements at 5 per cent between the initial and final years. Vertical lines are used to indicate when the series are not fully comparable before and after that line.

Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014).

## Panama

	00	01	02	03	04	05	06	07	08	09	10	11	12	13	
Unemployment rate	...	9.60	9.28	9.60	8.63	8.95	7.75	5.68	5.06	6.11	6.02	4.05	3.66	...	
Share of low-earnings occupations	...	52.77	53.78	53.43	52.32	53.47	53.34	52.66	51.33	50.15	49.46	49.12	49.62	...	
Share of high-earnings occupations	...	16.37	16.45	16.82	16.20	16.01	15.57	16.35	16.80	17.56	18.19	23.77	24.61	...	
Share of wage/salaried employees	...	63.20	62.45	61.71	62.63	61.77	62.99	65.33	66.06	64.67	65.89	68.00	68.06	...	
Share of self-employed workers	...	29.45	30.29	30.75	30.00	30.33	28.96	26.44	25.87	27.13	26.48	25.20	24.39	...	
Share of unpaid family workers	...	4.82	4.32	4.64	4.14	4.83	4.97	5.18	4.86	5.09	4.42	3.75	4.80	...	
Share of workers in low-earnings sectors	...	31.72	31.47	31.32	30.27	30.12	30.49	29.83	28.50	28.05	27.07	25.41	25.26	...	
Share of workers in high-earnings sectors	...	20.66	20.31	20.63	20.93	20.25	20.13	20.50	20.36	21.18	21.94	23.72	23.46	...	
Share of low educated workers	...	45.35	44.70	43.17	41.60	42.02	40.56	39.27	37.15	36.98	36.59	34.38	33.52	...	
Share of high educated workers	...	18.54	18.84	19.89	20.99	20.60	21.30	20.67	21.48	22.19	22.52	25.35	26.03	...	
Share of workers registered with SS	...	...	...	...	52.82	51.96	53.28	55.40	57.42	58.07	58.71	61.85	62.34	...	
Mean labor earnings	...	641.7	630.7	637.7	626.7	596.3	605.5	606.2	610.3	637.1	643.7	715.8	730.5	...	
Poverty rate 2.5 dollars-a-day	...	28.70	25.41	24.09	22.77	22.48	22.23	15.89	14.45	12.30	13.16	11.60	11.78	...	
Poverty rate 4 dollars-a-day	...	43.39	40.72	39.04	38.33	37.48	37.14	28.63	26.18	25.34	23.96	21.25	20.90	...	
GINI of household per capita income	...	0.565	0.564	0.561	0.549	0.538	0.549	0.526	0.526	0.520	0.519	0.518	0.519	...	
GINI of labor earnings	...	0.501	0.535	0.528	0.521	0.515	0.515	0.491	0.480	0.484	0.472	0.475	0.481	...	

Note: The shaded figures represent statistical significant improvements at 5 per cent between the initial and final years. Vertical lines are used to indicate when the series are not fully comparable before and after that line.

Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014).

## Peru

	00	01	02	03	04	05	06	07	08	09	10	11	12	13	
Unemployment rate	...	...	...	5.06	5.18	5.16	4.54	4.55	4.41	4.29	3.90	3.77	3.45	...	
Share of low-earnings occupations	...	...	...	61.74	63.18	63.25	61.84	59.37	57.92	55.69	54.82	53.82	52.59	...	
Share of high-earnings occupations	...	...	...	12.95	12.39	11.85	12.60	14.11	13.95	14.47	14.17	14.23	14.99	...	
Share of wage/salaried employees	...	...	...	39.78	40.96	41.33	43.22	44.58	45.09	45.31	45.22	45.26	46.64	...	
Share of self-employed workers	...	...	...	37.34	36.00	36.46	35.22	35.85	36.34	36.04	36.56	36.81	36.42	...	
Share of unpaid family workers	...	...	...	17.57	17.54	16.57	15.96	13.65	12.95	13.00	12.23	12.49	11.35	...	
Share of workers in low-earnings sectors	...	...	...	44.44	43.97	44.08	43.02	40.17	39.21	38.04	37.10	36.83	35.83	...	
Share of workers in high-earnings sectors	...	...	...	10.89	11.24	11.00	11.90	12.47	12.46	13.16	12.96	13.07	13.76	...	
Share of low educated workers	...	...	...	45.32	44.20	44.29	42.60	39.80	39.06	38.75	38.43	37.87	36.07	...	
Share of high educated workers	...	...	...	17.65	18.13	17.99	18.98	20.95	20.83	21.30	21.26	21.88	23.04	...	
Share of workers registered with SS	...	...	...	14.85	20.10	19.71	22.57	25.96	26.47	28.82	29.69	30.49	32.39	...	
Mean labor earnings	...	...	...	408.3	375.3	368.9	386.3	413.7	423.3	449.9	457.8	467.3	486.3	...	
Poverty rate 2.5 dollars-a-day	...	...	...	28.29	25.24	27.21	22.98	21.22	17.23	14.61	12.64	12.75	11.07	...	
Poverty rate 4 dollars-a-day	...	...	...	47.30	44.64	46.67	41.38	37.62	33.55	30.04	26.87	25.80	22.29	...	
GINI of household per capita income	...	...	...	0.538	0.487	0.493	0.491	0.496	0.469	0.462	0.449	0.457	0.453	...	
GINI of labor earnings	...	...	...	0.559	0.518	0.522	0.514	0.524	0.513	0.509	0.506	0.496	0.489	...	

Note: The shaded figures represent statistical significant improvements at 5 per cent between the initial and final years.

Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014).

## Paraguay

	00	01	02	03	04	05	06	07	08	09	10	11	12	13	
Unemployment rate	...	7.57	10.70	7.94	7.35	5.78	6.68	5.62	5.59	6.50	5.70	5.51	4.85	5.01	
Share of low-earnings occupations	...	62.94	64.10	63.01	64.86	61.70	62.17	61.21	59.48	58.89	...	...	...	...	
Share of high-earnings occupations	...	9.30	7.28	8.71	7.44	9.34	9.14	8.86	9.89	8.76	...	...	...	...	
Share of wage/salaried employees	...	45.82	44.05	45.07	44.14	47.70	47.38	49.19	51.23	49.29	52.64	53.39	52.21	55.42	
Share of self-employed workers	...	38.35	39.99	40.38	41.32	38.36	37.83	37.47	35.06	36.05	34.18	34.06	35.57	31.50	
Share of unpaid family workers	...	9.76	12.12	10.06	10.15	9.28	10.12	8.08	8.46	8.86	7.93	7.40	6.54	6.74	
Share of workers in low-earnings sectors	...	50.32	50.56	50.08	51.23	48.86	47.81	48.02	45.35	45.93	44.46	42.66	43.10	40.03	
Share of workers in high-earnings sectors	...	10.90	11.82	11.57	10.94	12.28	12.56	11.82	13.34	13.19	14.00	18.50	18.42	20.24	
Share of low educated workers	...	65.22	65.08	61.07	62.21	56.48	58.23	56.23	54.11	51.54	52.89	48.13	48.84	45.35	
Share of high educated workers	...	10.24	8.94	11.34	10.38	13.28	11.67	12.67	14.13	14.19	14.44	17.71	16.00	20.26	
Share of workers registered with SS	...	13.03	12.56	12.52	10.97	14.11	12.03	15.14	15.86	16.24	...	18.95	19.24	21.88	
Mean labor earnings	...	570.8	528.3	546.0	517.2	515.3	469.7	508.3	530.6	518.4	579.8	642.5	571.0	651.2	
Poverty rate 2.5 dollars-a-day	...	22.05	30.68	23.87	21.13	19.39	24.69	19.67	17.29	18.10	16.35	14.43	12.04	8.27	
Poverty rate 4 dollars-a-day	...	37.67	48.52	42.29	40.33	37.60	43.69	38.69	35.69	32.99	30.69	27.75	24.08	20.20	
GINI of household per capita income	...	0.547	0.573	0.555	0.525	0.513	0.536	0.521	0.510	0.496	0.518	0.526	0.482	0.482	
GINI of labor earnings	...	0.548	0.588	0.562	0.546	0.519	0.513	0.534	0.513	0.512	0.509	0.527	0.494	0.498	

Note: The shaded figures represent statistical significant improvements at 5 per cent between the initial and final years.

Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014).

## El Salvador

	00	01	02	03	04	05	06	07	08	09	10	11	12	13	
Unemployment rate	6.86	7.00	6.20	6.95	6.78	7.19	6.50	6.39	5.92	7.34	7.04	6.64	6.06	...	
Share of low-earnings occupations	57.32	56.97	55.78	54.94	55.73	55.11	55.19	54.76	55.86	55.56	55.21	55.54	55.86	...	
Share of high-earnings occupations	12.59	12.19	12.77	12.84	11.98	13.39	12.85	12.91	12.73	12.63	11.83	11.34	11.78	...	
Share of wage/salaried employees	57.35	58.15	56.49	59.26	60.42	57.67	61.17	59.88	58.90	56.88	57.75	57.88	57.65	...	
Share of self-employed workers	30.58	28.78	31.10	28.86	28.65	29.93	27.12	28.15	29.22	30.82	30.42	30.22	29.48	...	
Share of unpaid family workers	6.54	8.32	7.66	7.10	6.55	7.87	7.25	7.48	7.54	8.04	7.78	8.20	8.70	...	
Share of workers in low-earnings sectors	38.97	38.39	36.54	34.99	35.47	35.00	34.32	33.78	35.98	36.52	35.92	36.76	36.28	...	
Share of workers in high-earnings sectors	14.57	13.72	13.38	13.60	13.63	14.01	13.51	13.95	13.80	13.69	14.03	14.69	14.44	...	
Share of low educated workers	60.88	59.21	57.68	56.92	55.89	55.65	54.05	53.49	53.63	53.58	52.46	53.27	51.69	...	
Share of high educated workers	10.57	10.43	11.19	11.11	11.04	12.38	12.03	11.89	12.19	12.32	11.90	11.36	11.95	...	
Share of workers registered with SS	31.07	30.81	31.17	31.28	30.32	30.41	31.50	31.33	30.72	28.65	28.03	28.03	27.65	...	
Mean labor earnings	549.5	523.6	527.6	...	476.9	487.4	482.7	486.2	464.0	461.2	440.5	423.0	426.3	...	
Poverty rate 2.5 dollars-a-day	23.78	25.32	25.16	...	22.34	22.29	18.68	15.16	20.21	18.72	19.75	16.57	14.68	...	
Poverty rate 4 dollars-a-day	41.35	42.29	42.76	...	41.57	41.77	38.84	35.66	40.99	38.85	39.31	37.87	34.84	...	
GINI of household per capita income	0.513	0.510	0.515	...	0.473	0.478	0.454	0.452	0.466	0.459	0.445	0.424	0.418	...	
GINI of labor earnings	0.504	0.502	0.520	...	0.472	0.489	0.475	0.471	0.466	0.498	0.480	0.462	0.470	...	

Note: The shaded figures represent statistical significant improvements at 5 per cent between the initial and final years.

Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014).

## Uruguay

	00	01	02	03	04	05	06	07	08	09	10	11	12	13	
Unemployment rate	13.54	15.24	16.91	16.81	13.05	12.12	11.31	9.55	8.00	7.63	7.04	6.60	6.35	...	
Share of low-earnings occupations	53.17	53.78	52.63	53.76	52.59	52.60	53.95	53.24	52.88	51.62	52.41	50.25	...	...	
Share of high-earnings occupations	22.09	21.86	22.37	22.59	23.19	23.03	21.67	22.71	22.60	23.72	22.90	24.75	...	...	
Share of wage/salaried employees	72.86	71.04	69.98	70.15	70.27	71.22	71.28	71.16	71.48	71.84	72.46	73.94	74.24	...	
Share of self-employed workers	21.99	23.65	24.81	25.07	24.65	23.53	22.97	23.00	22.60	22.31	21.95	20.61	20.59	...	
Share of unpaid family workers	1.44	1.37	1.50	1.35	1.56	1.31	1.43	1.41	1.29	1.37	1.06	0.87	0.92	...	
Share of workers in low-earnings sectors	26.48	26.10	24.68	24.93	23.60	24.05	24.30	24.70	24.27	23.60	24.12	23.38	21.70	...	
Share of workers in high-earnings sectors	23.24	24.23	24.99	24.52	23.79	23.51	22.21	21.76	21.95	22.39	21.76	22.94	23.55	...	
Share of low educated workers	43.99	39.78	38.87	38.72	37.10	36.85	39.21	39.10	41.22	39.07	40.25	35.39	34.67	...	
Share of high educated workers	15.40	18.38	19.52	19.52	20.54	20.93	18.67	18.92	17.97	18.86	17.69	21.00	19.57	...	
Share of workers registered with SS	...	64.14	62.88	60.56	59.39	61.32	64.78	65.24	66.53	67.90	68.37	72.37	73.83	...	
Mean labor earnings	723.6	654.0	582.6	483.8	483.5	486.7	524.2	554.5	591.9	641.2	627.0	668.2	661.3	...	
Poverty rate 2.5 dollars-a-day	3.59	4.78	6.41	7.73	9.78	8.90	7.25	6.25	4.18	3.51	2.84	2.57	2.61	...	
Poverty rate 4 dollars-a-day	11.22	13.92	17.78	22.76	23.72	21.60	20.76	18.94	14.17	12.00	11.28	8.85	8.32	...	
GINI of household per capita income	0.444	0.462	0.466	0.462	0.471	0.459	0.473	0.478	0.465	0.464	0.454	0.436	0.415	...	
GINI of labor earnings	0.462	0.485	0.495	0.500	0.505	0.499	0.504	0.507	0.502	0.495	0.479	0.450	0.420	...	

Note: The shaded figures represent statistical significant improvements at 5 per cent between the initial and final years.

Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014).

## Venezuela

	00	01	02	03	04	05	06	07	08	09	10	11	12	13	
Unemployment rate	13.23	12.78	16.17	16.78	13.94	11.35	9.33	7.47	6.85	8.05	8.45	7.84	7.41	...	
Share of low-earnings occupations	...	...	...	...	53.85	50.78	50.75	50.04	49.83	49.91	49.65	49.03	48.96	...	
Share of high-earnings occupations	...	...	...	...	15.25	17.47	16.66	16.71	17.00	17.41	18.07	18.12	19.08	...	
Share of wage/salaried employees	56.58	56.22	55.17	53.86	55.81	57.79	58.51	59.30	58.43	57.73	56.95	57.19	58.78	...	
Share of self-employed workers	36.60	34.81	36.69	38.34	37.43	35.72	35.77	35.55	36.30	37.72	39.00	38.46	37.19	...	
Share of unpaid family workers	1.71	2.34	2.61	2.72	1.96	1.60	1.22	0.98	1.18	0.77	0.59	0.88	0.77	...	
Share of workers in low-earnings sectors	41.54	41.39	42.58	42.64	41.13	40.39	38.31	37.87	37.52	37.86	37.56	37.03	37.35	...	
Share of workers in high-earnings sectors	17.90	19.51	19.77	19.72	19.33	20.07	20.95	21.39	22.06	22.30	22.76	23.11	23.05	...	
Share of low educated workers	52.55	50.59	50.37	50.25	49.37	46.21	44.18	42.95	41.24	40.02	38.35	36.75	37.19	...	
Share of high educated workers	15.72	16.28	16.21	16.40	16.92	18.06	19.63	20.24	21.44	23.38	25.10	26.22	27.51	...	
Share of workers registered with SS	68.56	64.82	61.48	58.83	60.16	60.33	60.85	62.86	66.03	71.13	70.83	72.99	69.12	...	
Mean labor earnings	380.4	402.3	346.0	297.0	330.9	398.2	463.0	501.7	500.4	493.0	469.3	455.7	511.0	...	
Poverty rate 2.5 dollars-a-day	29.83	27.49	36.96	42.56	36.30	28.25	18.09	12.74	11.92	11.92	12.13	12.42	11.05	...	
Poverty rate 4 dollars-a-day	51.67	49.45	58.52	64.79	59.30	48.52	36.33	29.02	27.77	27.57	28.06	28.99	24.66	...	
GINI of household per capita income	0.440	0.464	0.473	0.460	0.453	0.474	0.433	0.415	0.401	0.400	0.384	0.388	0.402	...	
GINI of labor earnings	0.403	0.437	0.438	0.425	0.412	0.436	0.382	0.365	0.352	0.343	0.310	0.319	0.342	...	

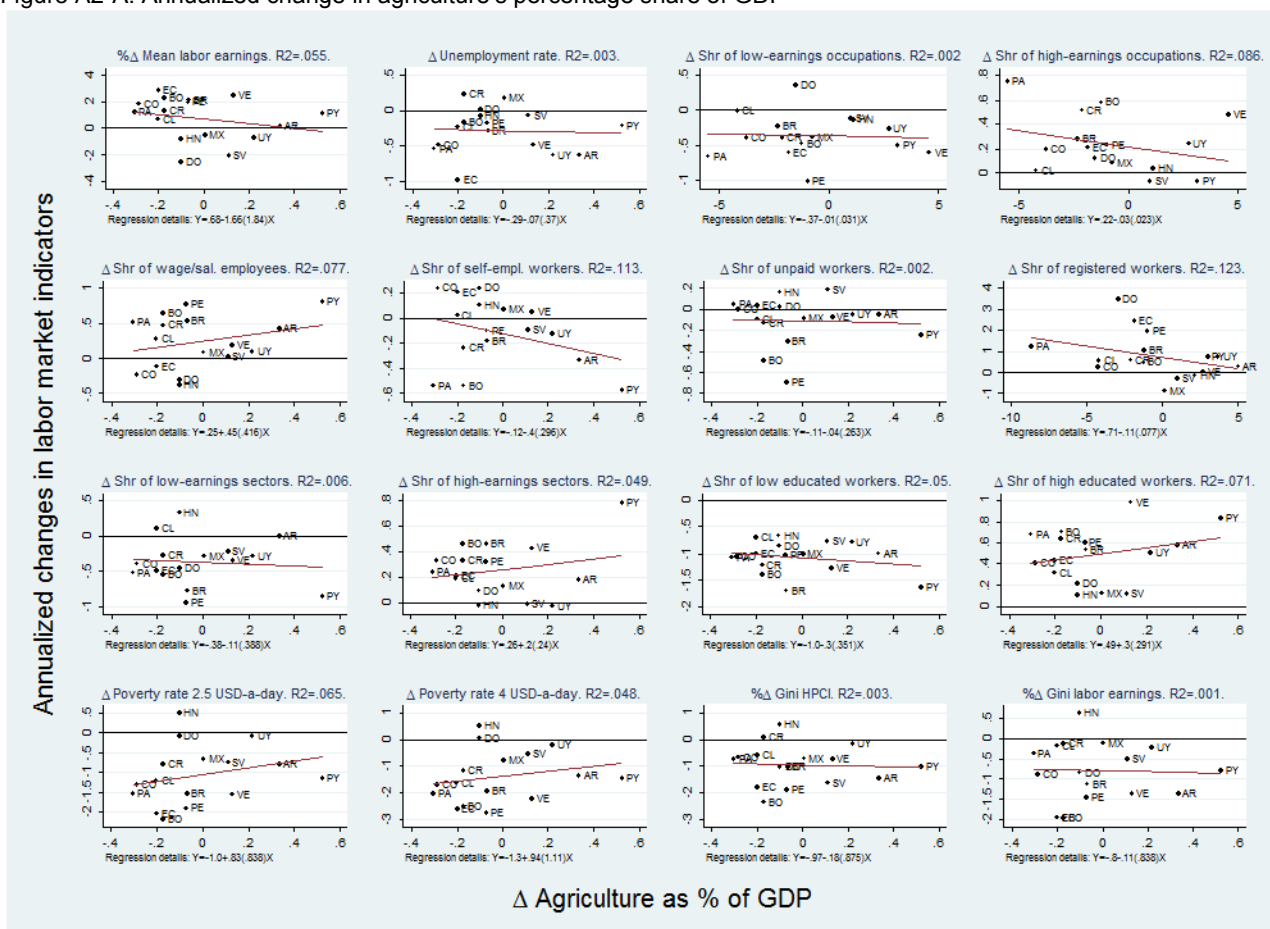
Note: The shaded figures represent statistical significant improvements at 5 per cent between the initial and final years.

Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014).



## Appendix 2: Cross-country relationship between changes in labour market indicators and changes in macroeconomic variables during the 2000s.

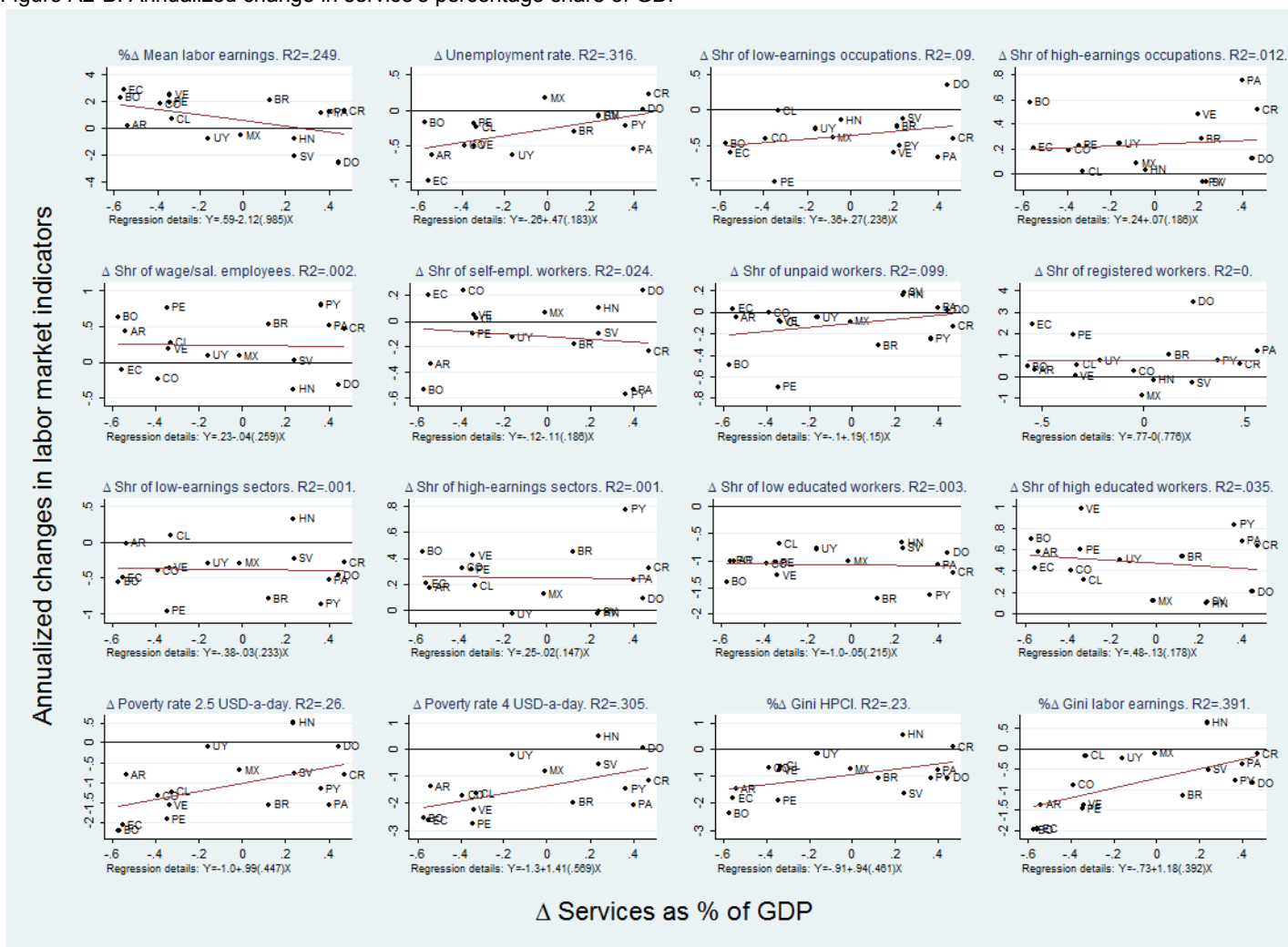
Figure A2-A: Annualized change in agriculture's percentage share of GDP



Note: The vertical axes display the annualized change in each labour market indicator. Δ denotes changes in percentage points and %Δ denotes percentage changes. The line represents the linear regression specified at the bottom of the figure. Robust standard error of the slope coefficient between parentheses. R-squared of the regression indicated along the title.

Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014), World Development Indicators (World Bank 2014), and CEPALSTAT (UN-ECLAC 2015).

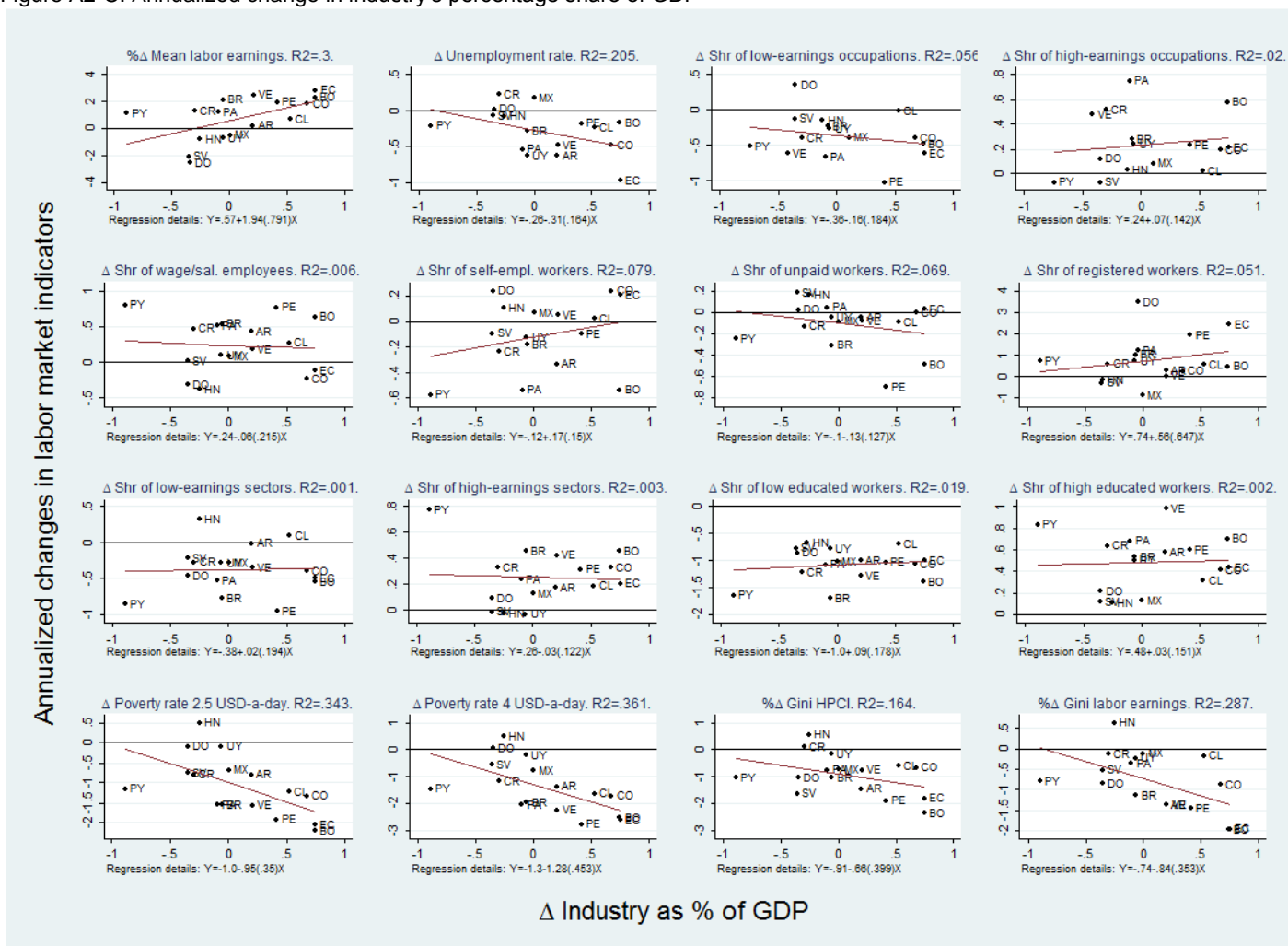
Figure A2-B: Annualized change in service's percentage share of GDP



Note: The vertical axes display the annualized change in each labour market indicator. Δ denotes changes in percentage points and %Δ denotes percentage changes. The line represents the linear regression specified at the bottom of the figure. Robust standard error of the slope coefficient between parentheses. R-squared of the regression indicated along the title.

Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014), World Development Indicators (World Bank 2014), and CEPALSTAT (UN-ECLAC 2015).

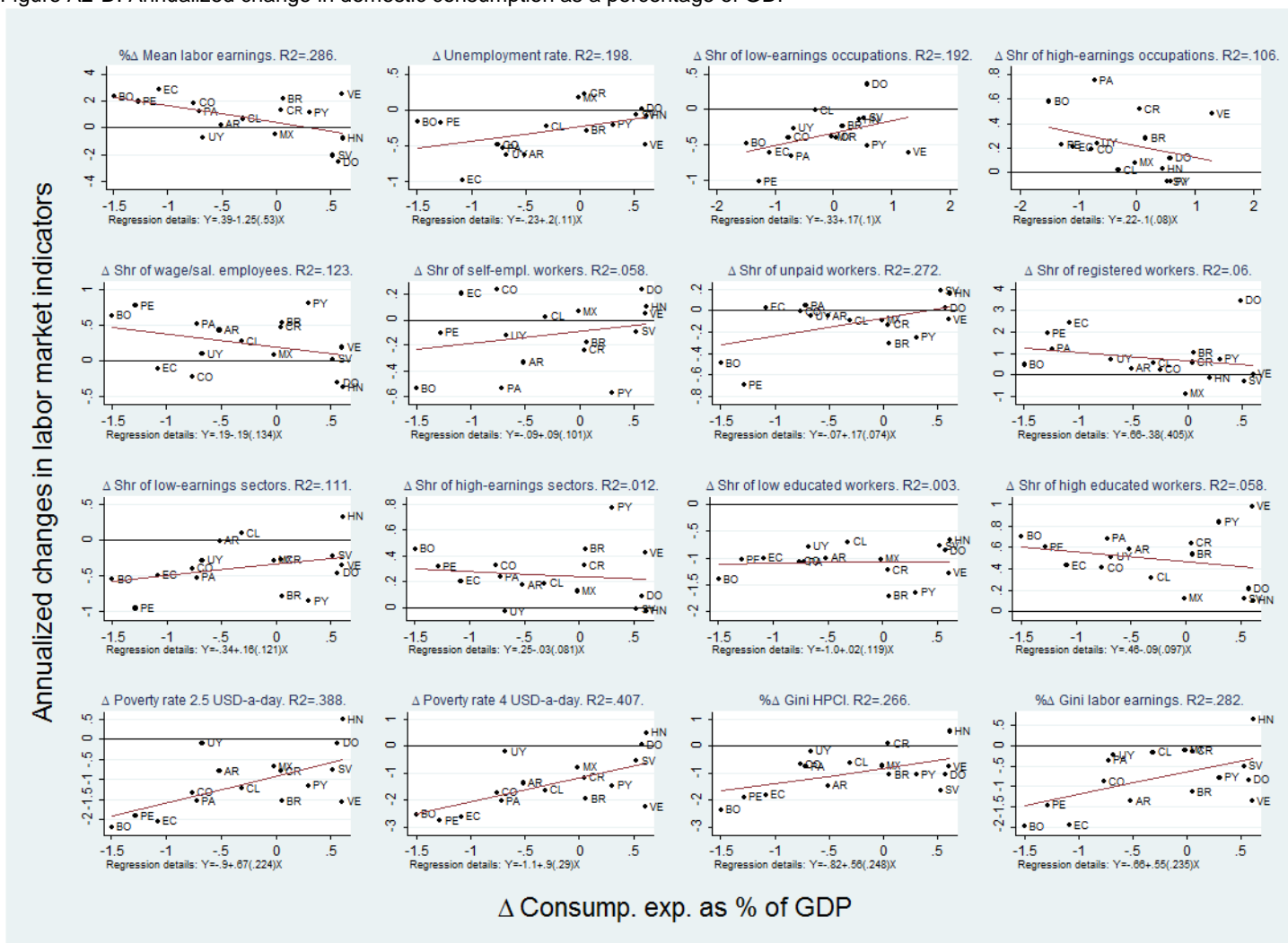
Figure A2-C: Annualized change in industry's percentage share of GDP



Note: The vertical axes display the annualized change in each labour market indicator.  $\Delta$  denotes changes in percentage points and  $\% \Delta$  denotes percentage changes. The line represents the linear regression specified at the bottom of the figure. Robust standard error of the slope coefficient between parentheses. R-squared of the regression indicated along the title.

Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014), World Development Indicators (World Bank 2014), and CEPALSTAT (UN-ECLAC 2015).

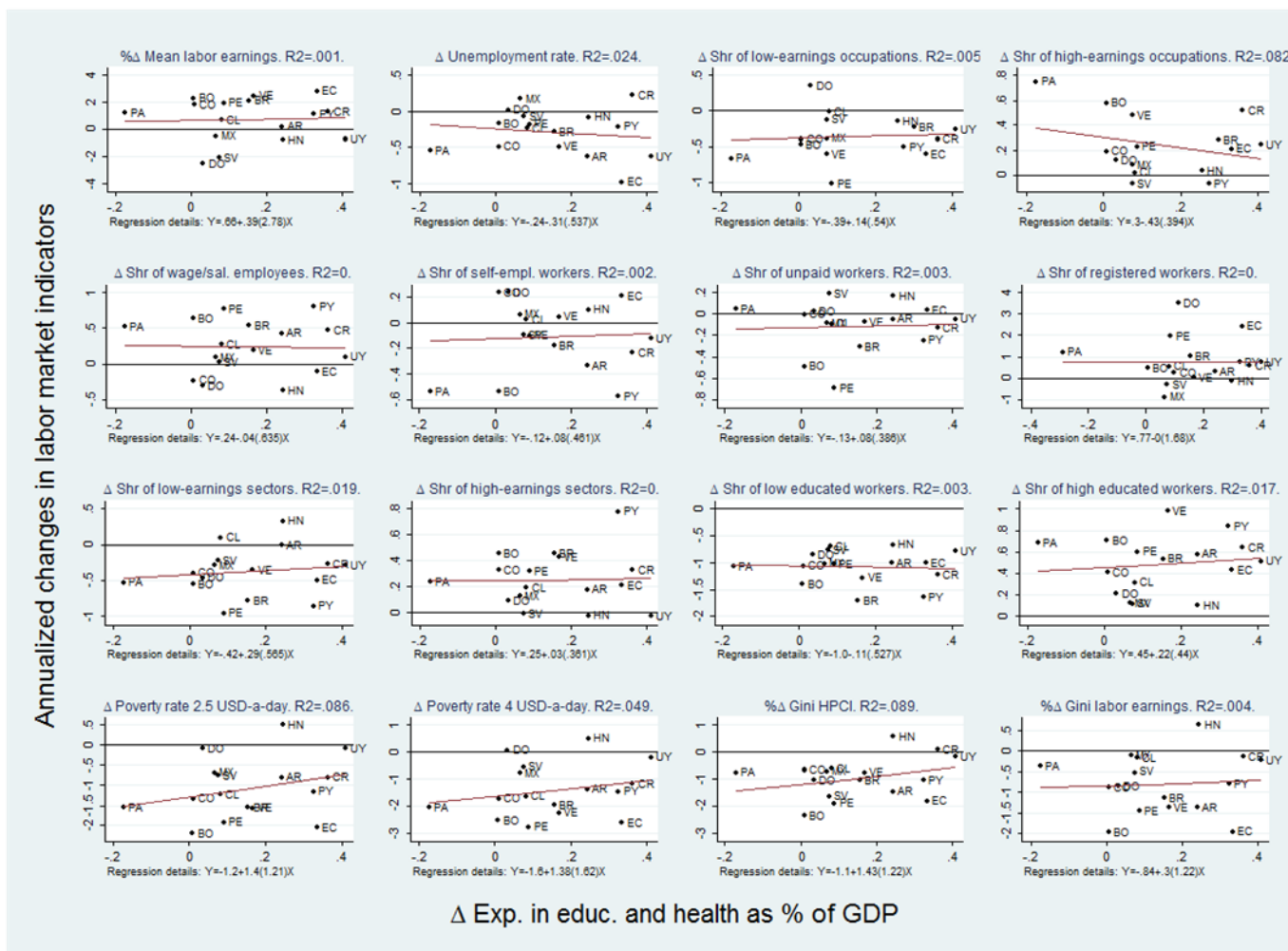
Figure A2-D: Annualized change in domestic consumption as a percentage of GDP



Note: The vertical axes display the annualized change in each labour market indicator.  $\Delta$  denotes changes in percentage points and % $\Delta$  denotes percentage changes. The line represents the linear regression specified at the bottom of the figure. Robust standard error of the slope coefficient between parentheses. R-squared of the regression indicated along the title.

Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014), World Development Indicators (World Bank 2014), and CEPALSTAT (UN-ECLAC 2015).

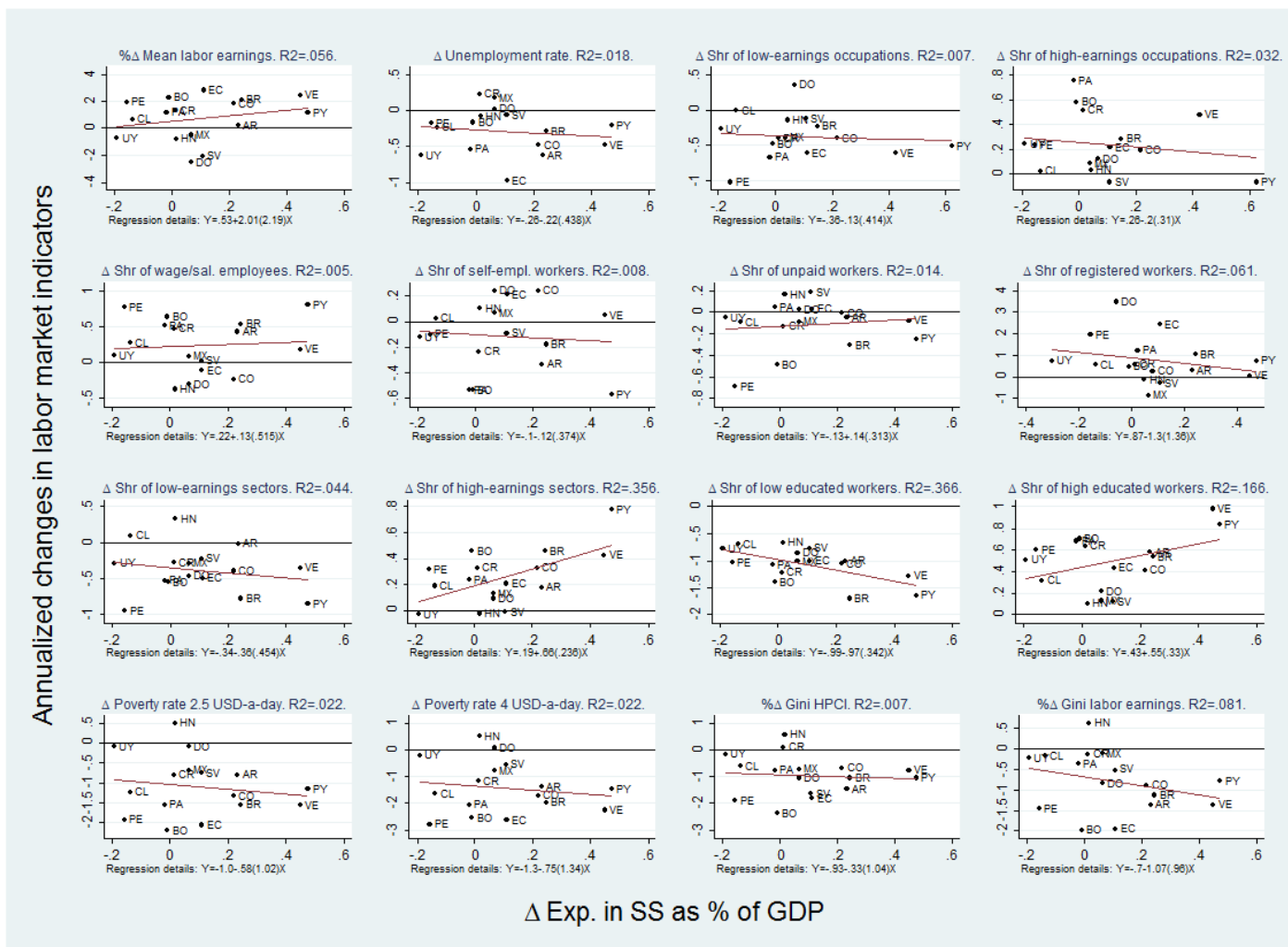
Figure A2-E: Annualized change in public expenditure in education and health as a percentage of GDP



Note: The vertical axes display the annualized change in each labour market indicator. Δ denotes changes in percentage points and %Δ denotes percentage changes. The line represents the linear regression specified at the bottom of the figure. Robust standard error of the slope coefficient between parentheses. R-squared of the regression indicated along the title.

Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014), World Development Indicators (World Bank 2014), and CEPALSTAT (UN-ECLAC 2015).

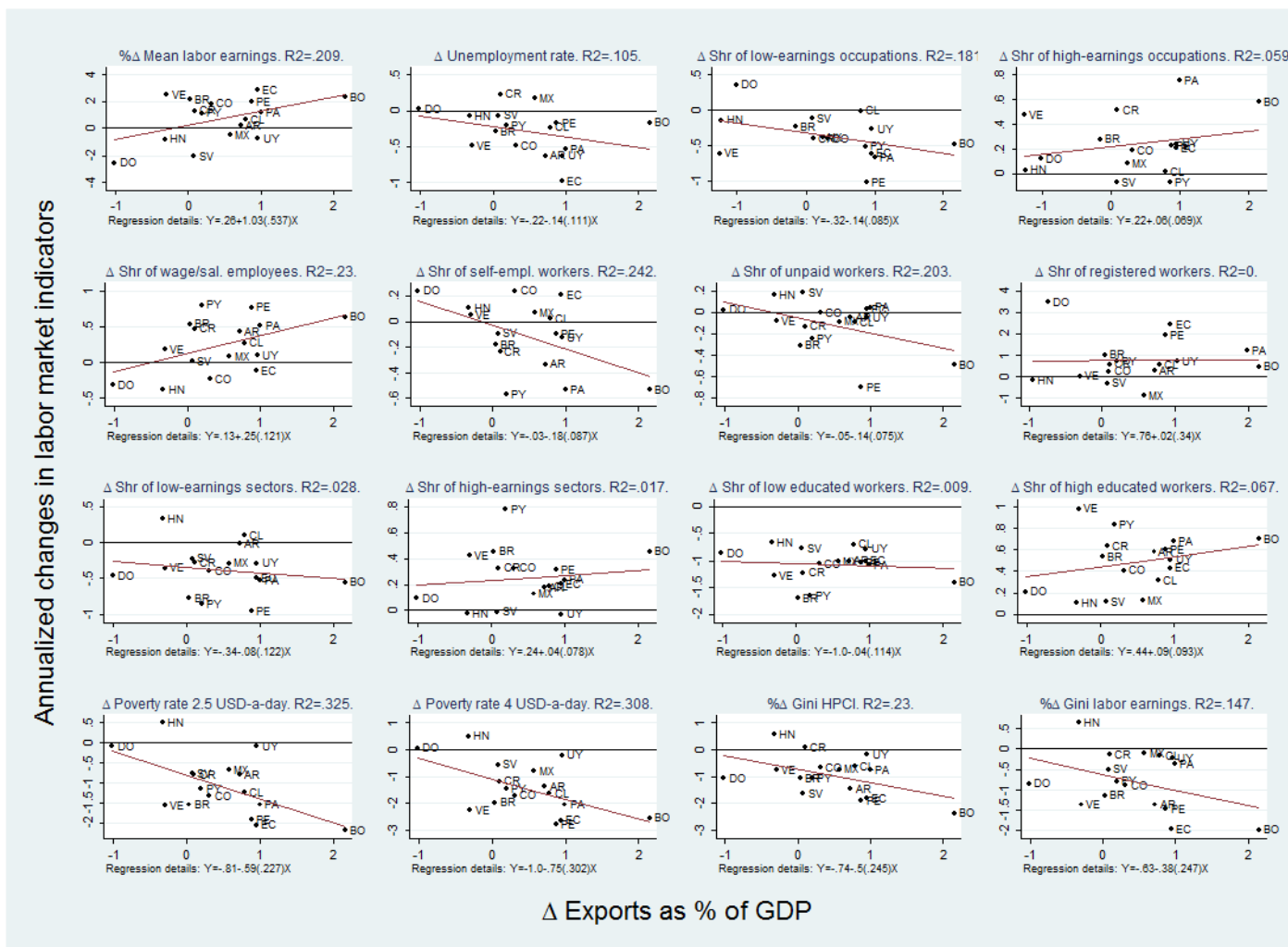
Figure A2-F: Annualized change in public expenditure in social security as a percentage of GDP



Note: The vertical axes display the annualized change in each labour market indicator. Δ denotes changes in percentage points and %Δ denotes percentage changes. The line represents the linear regression specified at the bottom of the figure. Robust standard error of the slope coefficient between parentheses. R-squared of the regression indicated along the title.

Source: Authors' calculations based on SEDLAC (CEDLAC and World Bank 2014), World Development Indicators (World Bank 2014), and CEPALSTAT (UN-ECLAC 2015).

Figure A2-G: Annualized change in exports as a percentage of GDP

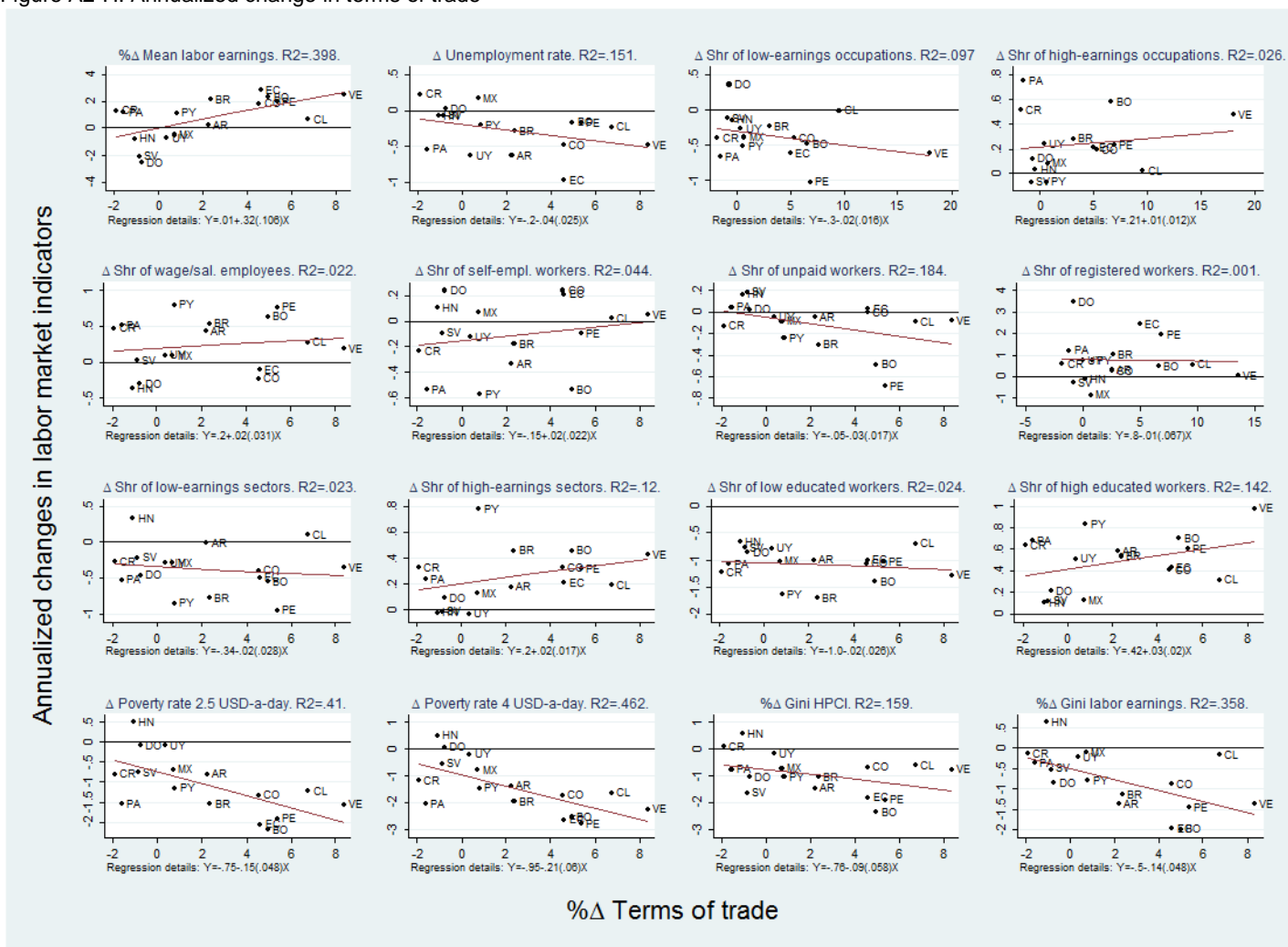


Note: The vertical axes display the annualized change in each labour market indicator.  $\Delta$  denotes changes in percentage points and  $\% \Delta$  denotes percentage changes. The line represents the linear regression specified at the bottom of the figure. Robust standard error of the slope coefficient between parentheses. R-squared of the regression indicated along the title.

Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014), World Development Indicators (World Bank 2014), and CEPALSTAT (UN-ECLAC 2015).



Figure A2-H: Annualized change in terms of trade

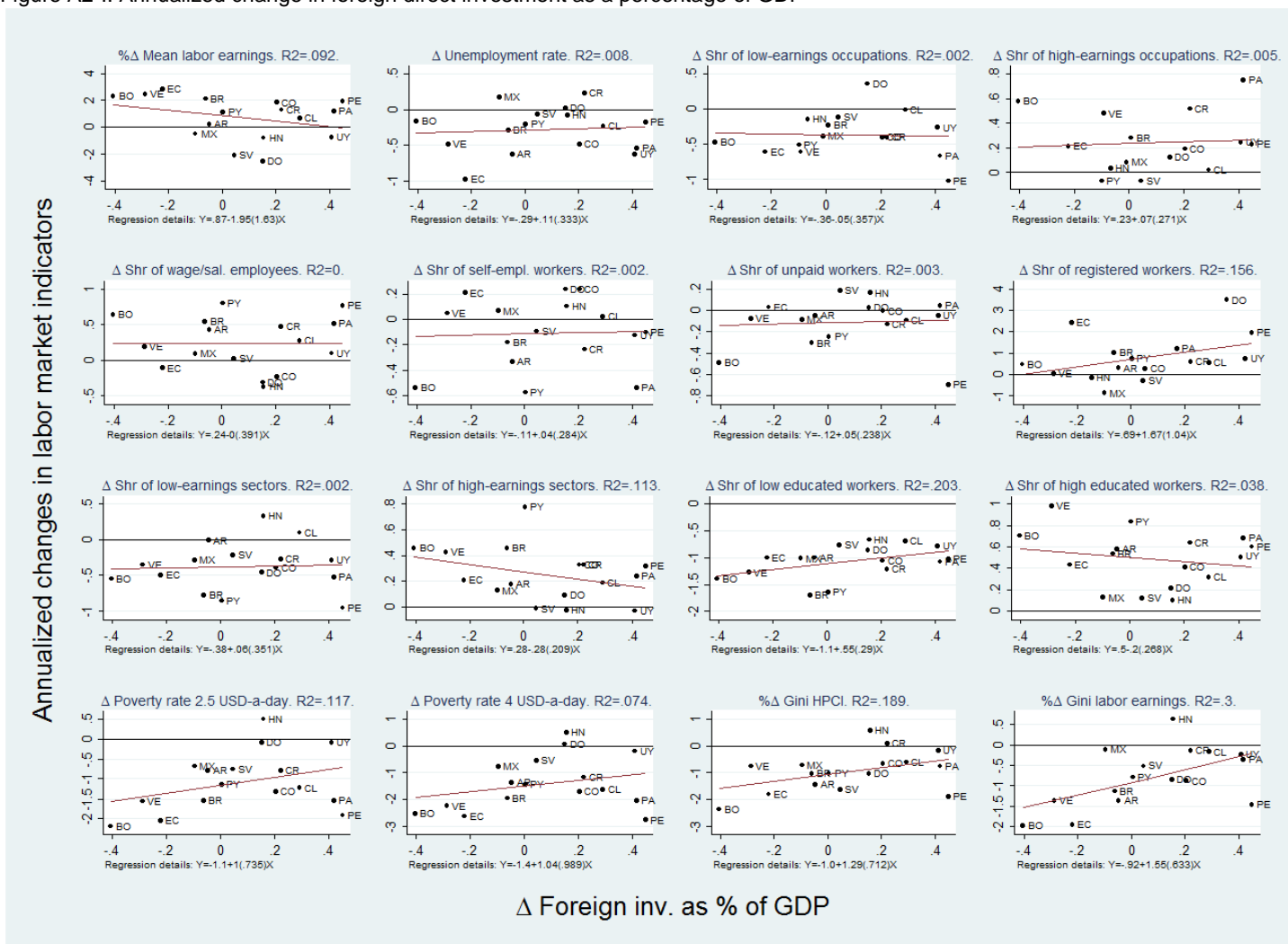


Note: The vertical axes display the annualized change in each labour market indicator.  $\Delta$  denotes changes in percentage points and  $\% \Delta$  denotes percentage changes. The line represents the linear regression specified at the bottom of the figure. Robust standard error of the slope coefficient between parentheses. R-squared of the regression indicated along the title.

Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014), World Development Indicators (World Bank 2014), and CEPALSTAT (UN-ECLAC 2015).



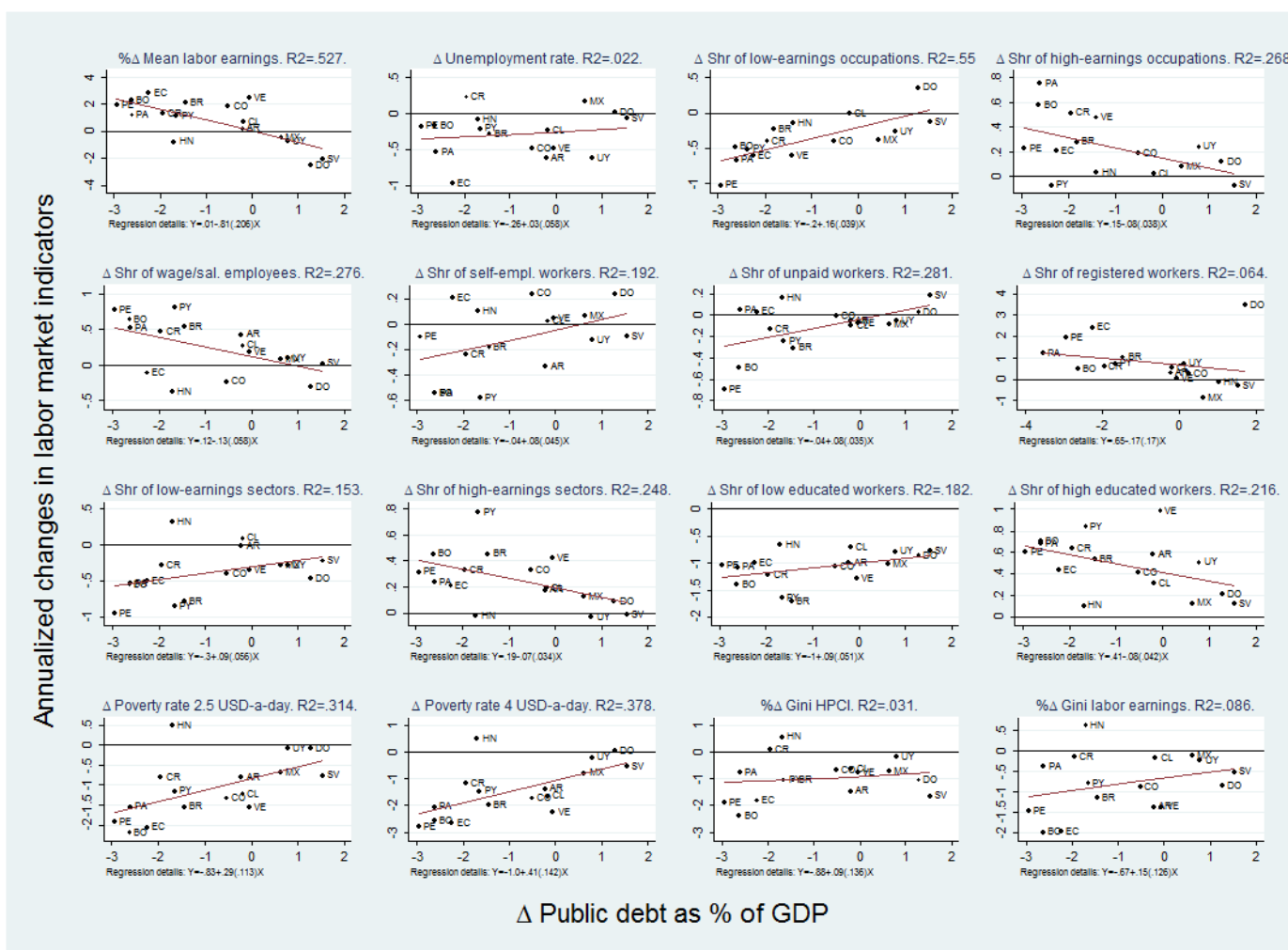
Figure A2-I: Annualized change in foreign direct investment as a percentage of GDP



Note: The vertical axes display the annualized change in each labour market indicator.  $\Delta$  denotes changes in percentage points and  $\% \Delta$  denotes percentage changes. The line represents the linear regression specified at the bottom of the figure. Robust standard error of the slope coefficient between parentheses. R-squared of the regression indicated along the title.

Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014), World Development Indicators (World Bank 2014), and CEPALSTAT (UN-ECLAC 2015).

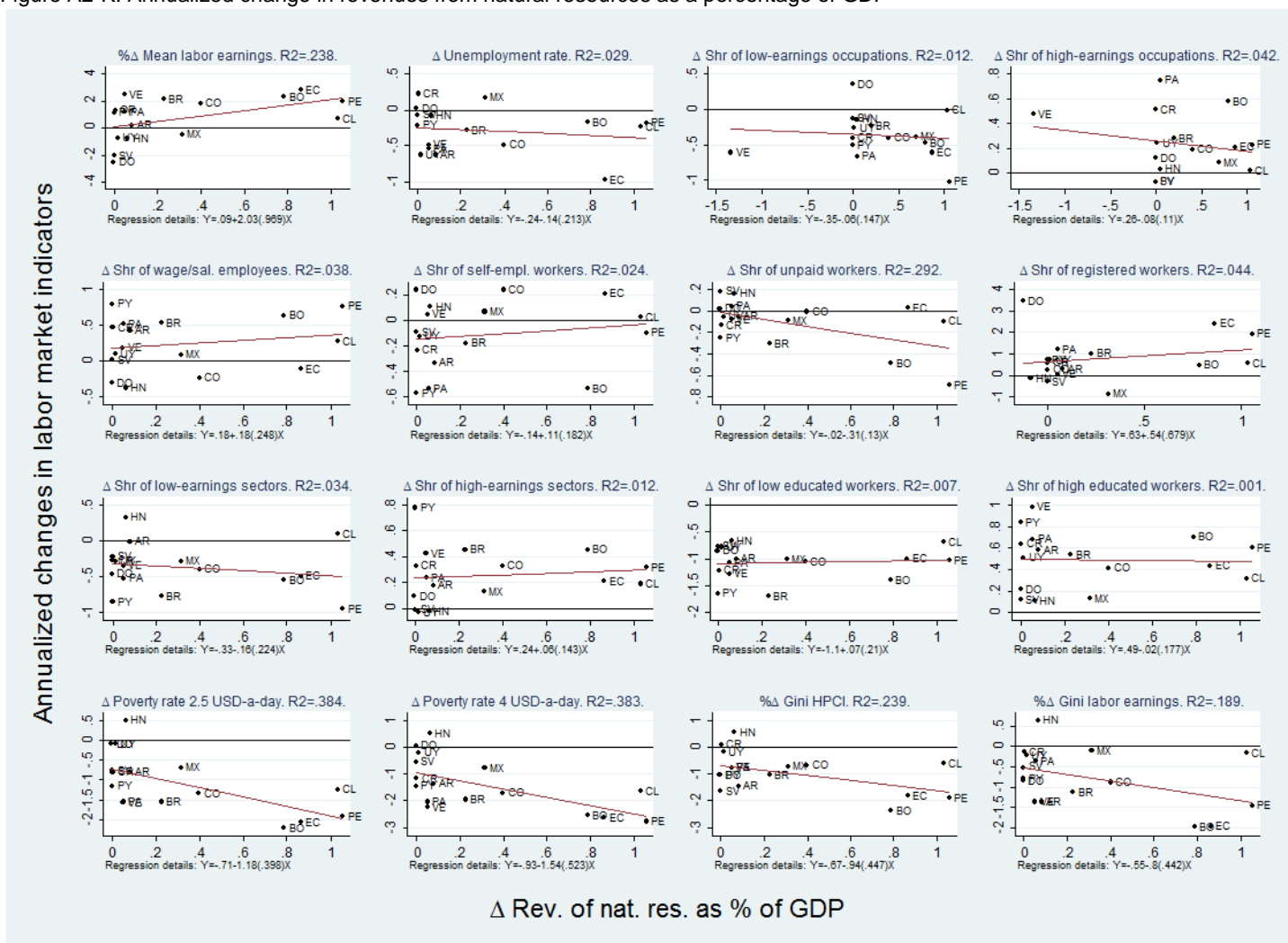
Figure A2-J: Annualized change in the stock of public debt as a percentage of GDP



Note: The vertical axes display the annualized change in each labour market indicator.  $\Delta$  denotes changes in percentage points and % $\Delta$  denotes percentage changes. The line represents the linear regression specified at the bottom of the figure. Robust standard error of the slope coefficient between parentheses. R-squared of the regression indicated along the title.

Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014), World Development Indicators (World Bank 2014), and CEPALSTAT (UN-ECLAC 2015).

Figure A2-K: Annualized change in revenues from natural resources as a percentage of GDP



Note: The vertical axes display the annualized change in each labour market indicator. Δ denotes changes in percentage points and %Δ denotes percentage changes. The line represents the linear regression specified at the bottom of the figure. Robust standard error of the slope coefficient between parentheses. R-squared of the regression indicated along the title.

Source: Authors' calculations based on SEDLAC (CEDLAS and World Bank 2014), World Development Indicators (World Bank 2014), and CEPALSTAT (UN-ECLAC 2015).

## Appendix 3. Evolution of macroeconomic variables over the 2000s by country.

### Argentina

	00	01	02	03	04	05	06	07	08	09	10	11	12
GDP per capita (in dollars at PPP 2005)	10,290	9,739	8,596	9,271	10,019	10,843	11,658	12,556	13,288	13,285	14,376	15,515	15,672
Share of agriculture in GDP	5.1	4.9	10.8	11.0	10.5	9.5	8.5	9.5	9.9	7.6	10.1	10.7	9.1
Share of industry in GDP	28.1	27.0	32.4	34.9	35.8	35.8	35.9	34.0	32.5	32.1	31.2	31.1	30.5
Share of services in GDP	66.9	68.1	56.8	54.1	53.7	54.7	55.6	56.5	57.5	60.3	58.7	58.2	60.4
Domestic expenditure (% GDP)	87.2	77.7	78.2	75.7	75.9	74.5	74.2	75.8	79.7	78.3	78.3	81.0	81.9
Public expenditure in education and health (% GDP)	10.0	10.3	8.9	8.4	8.4	9.3	9.7	10.3	11.1	12.9			
Public expenditure in social security (% GDP)	10.1	10.5	9.8	9.7	9.2	9.1	9.3	10.7	11.1	12.9			
Exports (% of GDP)	11.0	11.6	28.4	25.9	25.7	25.1	24.8	24.6	24.5	21.4	21.7	21.8	19.7
Terms of trade	100.0	99.3	98.7	107.2	109.2	106.9	113.4	117.5	133.2	127.1	126.6	135.0	130.3
Foreing direct investment (% GDP)	3.0	0.7	1.7	1.1	2.3	2.4	2.1	2.0	2.4	1.1	1.7	1.9	2.5
Revenue from natural resources (% GDP)	3.3	3.1	7.0	7.8	8.6	10.4	9.8	8.1	9.1	5.0	4.9	5.0	4.3
Stock of public debt (% GDP)	37.6	44.9	127.8	117.6	106.0	60.2	51.7	44.2	39.0	39.6	36.1	33.3	35.1

Source: Authors' calculations based on World Development Indicators (World Bank 2014) and CEPALSTAT (UN-ECLAC 2015).

### Bolivia

	00	01	02	03	04	05	06	07	08	09	10	11	12
GDP per capita (in dollars at PPP 2005)	3,488	3,476	3,492	3,518	3,596	3,688	3,799	3,907	4,081	4,151	4,252	4,400	4,552
Share of agriculture in GDP	15.0	15.2	14.9	15.4	15.4	14.4	13.9	12.9	13.5	13.8	12.9	12.5	13.0
Share of industry in GDP	55.2	55.6	55.8	55.2	53.7	53.6	51.0	50.7	48.2	49.9	49.9	48.5	48.3
Share of services in GDP	29.8	29.2	29.3	29.4	31.0	32.0	35.1	36.4	38.4	36.2	37.3	38.9	38.7
Domestic expenditure (% GDP)	90.9	91.0	89.8	87.5	84.2	82.3	77.1	77.3	75.5	80.2	76.1	74.7	72.9
Public expenditure in education and health (% GDP)	6.5	7.0	7.9	8.1	8.0	7.7	7.8	7.7	6.7	7.8	7.5	7.2	6.6
Public expenditure in social security (% GDP)	4.8	5.1	5.1	5.0	4.8	4.4	4.0	3.7	4.6	5.0	4.7	4.2	4.7
Exports (% of GDP)	18.3	20.0	21.6	25.6	31.1	35.5	41.8	41.8	44.9	35.7	41.2	44.1	47.3
Terms of trade	100.0	95.8	96.2	98.5	104.1	111.8	139.8	142.1	143.9	139.4	157.6	175.0	179.1
Foreing direct investment (% GDP)	8.8	8.7	8.6	2.4	0.7	-2.5	2.5	2.8	3.1	2.4	3.2	3.6	3.9
Revenue from natural resources (% GDP)	8.0	8.2	8.0	13.7	20.3	38.8	37.8	36.2	39.9	16.6	18.5	21.3	17.4
Stock of public debt (% GDP)	60.6	72.6	77.1	86.4	81.0	75.4	49.7	37.2	34.0	36.3	34.6	34.5	29.1

Source: Authors' calculations based on World Development Indicators (World Bank 2014) and CEPALSTAT (UN-ECLAC 2015).

### Brazil

	00	01	02	03	04	05	06	07	08	09	10	11	12
GDP per capita (in dollars at PPP 2005)	7,906	7,898	7,998	7,985	8,338	8,502	8,745	9,187	9,573	9,456	10,079	10,264	10,264
Share of agriculture in GDP	5.6	6.0	6.6	7.4	6.9	5.7	5.5	5.6	5.9	5.6	5.3	5.5	5.2
Share of industry in GDP	27.7	26.9	27.1	27.8	30.1	29.3	28.8	27.8	27.9	26.8	28.1	27.5	26.3
Share of services in GDP	66.7	67.1	66.3	64.8	63.0	65.0	65.8	66.6	66.2	67.5	66.6	67.0	68.5
Domestic expenditure (% GDP)	83.5	83.3	82.3	81.3	79.0	80.2	80.3	80.2	79.1	82.3	80.8	81.0	83.9
Public expenditure in education and health (% GDP)	8.8	9.2	7.9	9.3	8.9	8.9	9.3	9.9	10.0	10.9	10.9	10.9	10.9
Public expenditure in social security (% GDP)	11.2	11.1	12.3	11.6	11.9	12.3	12.9	12.8	12.8	13.8	13.8	13.8	13.8
Exports (% of GDP)	10.0	12.2	14.1	15.0	16.4	15.1	14.4	13.4	13.7	11.0	10.9	11.9	12.6
Terms of trade	100.0	99.6	98.4	97.0	97.9	99.2	104.4	106.6	110.4	107.8	125.1	134.9	128.9
Foreing direct investment (% GDP)	5.1	4.1	3.3	1.8	2.7	1.8	1.8	3.3	3.1	1.9	2.5	2.9	3.4
Revenue from natural resources (% GDP)	2.5	2.6	3.1	3.6	4.1	5.3	5.5	6.3	7.1	3.7	4.9	5.4	5.1
Stock of public debt (% GDP)	63.5	76.4	78.7	73.1	70.2	67.4	56.7	58.5	58.9	61.3	53.6	53.6	60.5

Source: Authors' calculations based on World Development Indicators (World Bank 2014) and CEPALSTAT (UN-ECLAC 2015).

## Chile

	00	01	02	03	04	05	06	07	08	09	10	11	12
GDP per capita (in dollars at PPP 2005)	10,990	11,224	11,337	11,655	12,228	12,773	13,201	13,746	14,061	13,784	14,443	15,149	15,848
Share of agriculture in GDP	5.9	5.2	5.5	5.3	4.7	4.6	4.1	3.9	3.6	3.5	3.4	3.7	3.6
Share of industry in GDP	32.2	32.8	33.1	32.7	35.3	36.9	44.2	43.0	38.0	37.6	39.1	38.0	35.5
Share of services in GDP	61.9	62.1	61.4	62.0	60.0	58.5	51.7	53.2	58.4	58.8	57.5	58.3	60.9
Domestic expenditure (% GDP)	76.6	77.7	77.5	75.1	71.7	69.9	66.0	66.9	72.1	72.1	71.3	73.1	74.9
Public expenditure in education and health (% GDP)	6.7	7.0	7.2	6.9	6.6	6.2	6.0	6.4	7.1	8.2	7.7	7.6	8.0
Public expenditure in social security (% GDP)	7.9	7.9	7.8	7.3	6.7	6.4	5.8	5.7	6.0	7.0	6.6	6.4	6.3
Exports (% of GDP)	29.3	30.9	31.5	33.9	37.9	38.4	42.4	43.8	41.5	37.2	38.1	38.0	34.2
Terms of trade	100.0	93.3	97.2	102.8	124.9	139.8	183.2	189.5	164.8	166.7	204.0	205.3	182.4
Foreing direct investment (% GDP)	6.1	5.8	3.6	5.5	7.1	5.6	4.7	7.2	8.4	7.5	7.2	9.3	10.7
Revenue from natural resources (% GDP)	7.0	6.5	6.2	7.3	11.8	13.2	21.4	21.2	19.3	14.4	17.8	18.3	15.6
Stock of public debt (% GDP)	13.0	14.4	14.7	12.4	10.5	6.9	4.9	3.9	5.1	5.8	8.7	11.0	11.9

Source: Authors' calculations based on World Development Indicators (World Bank 2014) and CEPALSTAT (UN-ECLAC 2015).

## Colombia

	00	01	02	03	04	05	06	07	08	09	10	11	12
GDP per capita (in dollars at PPP 2005)	6,597	6,598	6,655	6,808	7,060	7,280	7,651	8,059	8,223	8,241	8,450	8,890	9,143
Share of agriculture in GDP	8.9	9.0	9.2	9.0	8.6	8.4	8.1	7.8	7.5	7.5	7.1	6.9	6.5
Share of industry in GDP	29.4	29.4	29.8	31.4	32.4	32.8	33.8	33.7	35.5	34.5	35.0	37.9	37.5
Share of services in GDP	61.6	61.7	61.0	59.6	59.0	58.8	58.1	58.5	57.0	58.0	57.9	55.3	56.0
Domestic expenditure (% GDP)	80.2	82.7	82.6	81.2	80.1	81.1	79.7	80.1	82.2	83.1	82.1	83.0	82.6
Public expenditure in education and health (% GDP)	9.9	10.7	11.4	11.3	10.6	10.3	10.0	10.4	11.7	13.6	13.9	13.7	14.2
Public expenditure in social security (% GDP)	6.0	6.3	5.6	5.4	5.3	5.3	5.2	5.3	5.5	6.4	6.5	6.6	6.7
Exports (% of GDP)	15.9	15.4	14.8	16.6	16.8	16.8	17.6	16.5	17.8	16.0	15.9	18.9	18.3
Terms of trade	100.0	94.2	92.5	95.2	102.3	111.0	115.2	124.4	138.1	118.8	134.4	150.2	151.1
Foreing direct investment (% GDP)	2.6	2.8	3.9	3.3	4.3	4.3	6.5	7.2	7.0	4.6	4.0	5.3	5.9
Revenue from natural resources (% GDP)	7.1	5.3	5.0	6.4	6.9	8.1	9.1	8.0	9.4	6.6	8.0	10.3	9.4
Stock of public debt (% GDP)	42.3	43.0	43.4	41.1	40.9	37.5	33.3	27.6	24.8	27.4	28.8	30.3	35.1

Source: Authors' calculations based on World Development Indicators (World Bank 2014) and CEPALSTAT (UN-ECLAC 2015).

## Costa Rica

	00	01	02	03	04	05	06	07	08	09	10	11	12
GDP per capita (in dollars at PPP 2005)	8,116	8,032	8,102	8,462	8,666	9,019	9,649	10,250	10,369	10,110	10,456	10,763	11,156
Share of agriculture in GDP	9.5	8.8	8.5	8.7	8.6	9.0	8.9	8.5	7.2	7.4	7.2	6.5	6.3
Share of industry in GDP	32.1	29.7	29.1	28.6	29.5	29.1	29.2	29.3	28.7	27.4	26.2	25.3	25.1
Share of services in GDP	58.5	61.5	62.4	62.6	61.8	61.9	61.9	62.2	64.1	65.2	66.7	68.2	68.6
Domestic expenditure (% GDP)	80.2	82.7	82.6	81.2	80.1	81.1	79.7	80.1	82.2	83.1	82.1	83.0	82.6
Public expenditure in education and health (% GDP)	9.9	10.7	11.4	11.3	10.6	10.3	10.0	10.4	11.7	13.6	13.9	13.7	14.2
Public expenditure in social security (% GDP)	6.0	6.3	5.6	5.4	5.3	5.3	5.2	5.3	5.5	6.4	6.5	6.6	6.7
Exports (% of GDP)	48.6	41.5	42.4	46.7	46.3	48.5	49.1	48.7	45.4	42.3	38.2	37.4	37.7
Terms of trade	100.0	98.4	96.9	95.5	91.9	88.3	85.8	84.9	81.7	84.4	81.1	78.1	77.7
Foreing direct investment (% GDP)	2.6	2.8	3.9	3.3	4.3	4.3	6.5	7.2	7.0	4.6	4.0	5.3	5.9
Revenue from natural resources (% GDP)				0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	
Stock of public debt (% GDP)	42.3	43.0	43.4	41.1	40.9	37.5	33.3	27.6	24.8	27.4	28.8	30.3	35.1

Source: Authors' calculations based on World Development Indicators (World Bank 2014) and CEPALSTAT (UN-ECLAC 2015).

## Dominican Republic

	00	01	02	03	04	05	06	07	08	09	10	11	12
GDP per capita (in dollars at PPP 2005)	5,737	5,751	5,991	5,886	5,876	6,326	6,901	7,380	7,660	7,818	8,312	8,573	8,794
Share of agriculture in GDP	7.2	7.5	7.2	6.4	7.0	7.5	7.1	6.6	6.3	6.2	6.2	6.0	6.1
Share of industry in GDP	35.9	34.2	35.0	33.8	33.0	32.1	32.2	31.6	32.2	32.5	32.0	33.1	31.7
Share of services in GDP	56.8	58.4	57.8	59.8	60.0	60.5	60.8	61.9	61.5	61.3	61.7	61.0	62.2
Domestic expenditure (% GDP)	85.5	86.2	86.7	85.4	84.3	89.0	89.6	90.2	95.4	93.2	94.7	93.9	92.4
Public expenditure in education and health (% GDP)	3.8	4.2	4.6	3.2	2.6	3.4	3.4	4.1	3.9	3.8	4.3	4.2	4.2
Public expenditure in social security (% GDP)	1.0	1.4	0.8	1.1	2.0	2.2	2.3	2.0	2.6	2.2	1.8	1.8	1.8
Exports (% of GDP)	37.0	33.7	32.5	43.1	42.3	30.0	30.0	28.8	25.5	22.2	23.0	25.0	24.9
Terms of trade	100.0	100.9	101.5	97.9	96.7	95.8	94.9	98.0	93.6	101.3	97.5	92.4	91.5
Foreing direct investment (% GDP)	4.0	4.3	3.5	2.9	4.1	3.3	4.3	5.5	6.0	3.6	3.6	4.0	5.8
Revenue from natural resources (% GDP)	0.7	0.3	0.4	1.2	1.9	1.6	2.6	3.7	1.1	0.1	0.1	0.9	0.7
Stock of public debt (% GDP)	17.8	19.7	23.5	40.4	24.2	21.1	20.1	18.1	24.4	28.0	28.8	30.0	33.2

Source: Authors' calculations based on World Development Indicators (World Bank 2014) and CEPALSTAT (UN-ECLAC 2015).

## Ecuador

	00	01	02	03	04	05	06	07	08	09	10	11	12
GDP per capita (in dollars at PPP 2005)	6,184	6,307	6,440	6,491	6,895	7,129	7,312	7,344	7,679	7,595	7,692	8,161	8,443
Share of agriculture in GDP	16.3	13.7	12.2	11.7	10.4	10.0	9.9	9.8	9.3	10.5	10.7	10.4	9.9
Share of industry in GDP	35.7	31.5	31.3	30.1	31.8	33.4	35.6	36.2	39.3	34.3	34.9	36.8	36.9
Share of services in GDP	48.0	54.7	56.4	58.2	57.8	56.6	54.5	53.9	51.4	55.2	54.4	52.8	53.3
Domestic expenditure (% GDP)	73.9	82.0	82.7	82.5	81.4	79.2	76.6	76.0	73.3	76.0	75.8	72.8	72.7
Public expenditure in education and health (% GDP)	2.3	3.2	3.9	3.5	3.7	3.7	3.8	3.9	4.6	6.1	6.2	6.2	6.5
Public expenditure in social security (% GDP)	0.4	0.6	0.3	0.4	0.3	0.7	0.7	1.1	1.0	1.4	1.7	1.5	1.4
Exports (% of GDP)	32.1	23.2	21.5	22.6	24.6	27.6	30.3	31.9	34.2	25.2	28.7	32.2	31.2
Terms of trade	100.0	84.6	86.8	89.8	91.5	102.4	109.9	113.0	124.0	109.7	120.8	132.9	134.7
Foreing direct investment (% GDP)	-0.1	2.2	2.7	2.7	2.3	1.2	0.6	0.4	1.6	0.5	0.2	0.8	0.7
Revenue from natural resources (% GDP)	19.3	12.0	10.1	11.5	17.4	22.8	24.7	23.8	26.8	15.1	17.7	21.4	19.3
Stock of public debt (% GDP)	63.7	49.4	43.9	40.4	36.4	32.4	26.5	25.2	20.6	14.9	17.8	17.3	20.2

Source: Authors' calculations based on World Development Indicators (World Bank 2014) and CEPALSTAT (UN-ECLAC 2015).

## Honduras

	00	01	02	03	04	05	06	07	08	09	10	11	12
GDP per capita (in dollars at PPP 2005)	2,880	2,898	2,946	3,019	3,143	3,268	3,414	3,554	3,631	3,473	3,531	3,593	3,657
Share of agriculture in GDP	15.9	14.6	13.5	12.8	13.4	13.7	13.0	13.0	13.1	11.7	12.5	15.3	14.8
Share of industry in GDP	32.5	30.7	30.1	30.1	29.1	28.7	30.0	28.6	28.0	28.1	27.6	27.8	27.9
Share of services in GDP	51.7	54.7	56.4	57.2	57.5	57.6	57.0	58.4	58.9	60.3	59.9	56.9	57.3
Domestic expenditure (% GDP)	84.2	87.2	88.3	88.8	89.0	90.9	92.7	94.4	97.0	97.2	96.0	93.7	93.9
Public expenditure in education and health (% GDP)	7.6	8.5	8.4	10.0	9.7	9.4	9.4	9.6	9.9	11.5	11.2		
Public expenditure in social security (% GDP)	0.3	0.4	0.3	0.3	0.3	0.4	0.3	0.7	0.8	0.7	0.6		
Exports (% of GDP)	54.0	51.4	52.7	54.1	58.4	59.0	56.1	53.5	51.3	39.5	45.8	51.3	50.4
Terms of trade	100.0	94.8	92.0	88.0	87.2	87.2	83.2	81.6	76.6	81.9	84.2	91.2	84.3
Foreing direct investment (% GDP)	5.4	4.0	3.5	4.9	6.2	6.2	6.6	7.9	8.7	3.4	3.1	5.9	5.8
Revenue from natural resources (% GDP)	0.1	0.1	0.1	0.2	0.3	0.4	1.3	1.1	0.7	0.6	0.9	0.9	0.8
Stock of public debt (% GDP)	55.5	53.6	55.3	60.5	59.5	44.7	28.7	17.4	20.1	23.9	29.2	31.5	34.9

Source: Authors' calculations based on World Development Indicators (World Bank 2014) and CEPALSTAT (UN-ECLAC 2015).

## Mexico

	00	01	02	03	04	05	06	07	08	09	10	11	12
GDP per capita (in dollars at PPP 2005)	11,810	11,575	11,440	11,460	11,807	12,017	12,462	12,695	12,711	11,962	12,412	12,747	13,067
Share of agriculture in GDP	3.5	3.6	3.5	3.5	3.6	3.4	3.4	3.3	3.3	3.5	3.5	3.4	3.6
Share of industry in GDP	35.7	33.9	33.7	34.6	35.8	35.5	36.3	36.1	36.6	34.3	34.8	35.7	35.7
Share of services in GDP	60.8	62.5	62.7	61.9	60.7	61.2	60.3	60.6	60.2	62.2	61.7	60.9	60.7
Domestic expenditure (% GDP)	78.1	80.3	81.5	79.6	79.1	79.2	77.8	78.2	77.9	78.6	79.2	79.0	77.9
Public expenditure in education and health (% GDP)	5.4	5.8	5.7	5.9	5.6	5.9	5.9	5.9	6.0	6.7	6.5	6.6	6.2
Public expenditure in social security (% GDP)	2.3	2.3	2.1	2.2	2.2	2.2	2.3	2.5	2.6	3.0	3.1	3.3	3.1
Exports (% of GDP)	26.0	23.4	23.2	24.6	26.1	26.4	27.6	27.7	27.9	27.3	30.0	31.5	32.9
Terms of trade	100.0	97.4	97.9	98.8	101.6	103.6	104.1	105.1	105.9	94.0	101.2	108.5	109.1
Foreing direct investment (% GDP)	2.6	4.1	3.2	2.6	3.2	2.8	2.2	3.1	2.6	1.9	2.2	2.0	1.5
Revenue from natural resources (% GDP)	4.5	3.6	3.5	4.8	6.1	8.0	8.6	8.4	10.0	6.4	7.3	8.7	8.3
Stock of public debt (% GDP)	20.6	20.2	21.4	21.7	20.3	19.6	20.2	20.6	24.0	27.2	27.2	27.5	28.2

Source: Authors' calculations based on World Development Indicators (World Bank 2014) and CEPALSTAT (UN-ECLAC 2015).

## Panama

	00	01	02	03	04	05	06	07	08	09	10	11	12
GDP per capita (in dollars at PPP 2005)	7,869	7,758	7,776	7,947	8,383	8,819	9,396	10,346	11,192	11,424	12,067	13,154	14,320
Share of agriculture in GDP	7.2	7.7	7.5	7.8	8.0	7.0	6.5	6.0	5.4	5.0	4.7	4.1	3.9
Share of industry in GDP	18.9	16.8	15.8	16.9	18.2	16.6	16.6	16.5	17.8	17.2	16.9	16.7	17.8
Share of services in GDP	73.9	75.5	76.7	75.4	73.8	76.5	76.9	77.5	76.7	77.7	78.4	79.2	78.3
Domestic expenditure (% GDP)	73.1	75.6	79.1	75.9	77.6	75.2	73.3	70.6	66.0	63.9	74.6	74.2	67.7
Public expenditure in education and health (% GDP)	7.6	8.0	8.2	8.2	8.4	8.3	6.4	5.8	6.1	6.7	6.5	6.6	6.2
Public expenditure in social security (% GDP)	2.2	1.8	1.6	1.6	1.4	1.5	1.2	1.8	1.6	3.0	3.1	3.3	3.1
Exports (% of GDP)	72.6	72.7	67.5	63.6	67.6	75.5	76.7	81.2	85.2	81.0	76.5	84.2	83.5
Terms of trade	100.0	102.7	101.6	97.2	95.3	93.5	90.8	90.0	85.9	90.0	88.3	86.4	86.2
Foreing direct investment (% GDP)	5.4	4.0	0.8	6.3	7.2	7.1	17.1	9.6	9.9	4.2	8.8	13.2	8.6
Revenue from natural resources (% GDP)		0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.4	0.4	0.5	0.6
Stock of public debt (% GDP)	61.4	65.7	64.7	62.4	65.2	61.0	56.5	49.0	41.4	41.7	39.7	37.9	37.0

Source: Authors' calculations based on World Development Indicators (World Bank 2014) and CEPALSTAT (UN-ECLAC 2015).

## Peru

	00	01	02	03	04	05	06	07	08	09	10	11	12
GDP per capita (in dollars at PPP 2005)	5,514	5,447	5,644	5,797	6,013	6,349	6,765	7,288	7,916	7,904	8,503	8,982	9,431
Share of agriculture in GDP	8.5	8.2	7.8	7.6	7.3	7.2	7.0	7.0	7.2	7.3	6.8	7.0	7.0
Share of industry in GDP	29.9	29.6	30.4	30.8	33.0	34.3	37.0	37.0	36.6	34.2	36.1	36.6	34.6
Share of services in GDP	61.6	62.2	61.8	61.5	59.7	58.5	56.0	56.0	56.2	58.5	57.2	56.4	58.4
Domestic expenditure (% GDP)	84.0	85.2	83.5	83.4	80.6	78.4	72.0	70.6	72.3	75.2	71.7	70.2	71.8
Public expenditure in education and health (% GDP)	4.4	4.4	4.5	4.5	4.5	4.5	4.3	4.4	4.7	5.4	5.0	4.9	5.3
Public expenditure in social security (% GDP)	3.6	4.3	4.4	4.3	4.4	4.3	3.8	3.6	3.0	3.3	3.2	3.0	2.9
Exports (% of GDP)	16.0	15.7	16.1	17.7	21.5	25.1	28.5	29.1	27.2	23.9	25.7	28.6	25.6
Terms of trade	100.0	95.6	98.4	102.2	111.3	119.4	152.1	157.6	136.6	129.1	152.5	171.9	163.7
Foreing direct investment (% GDP)	1.6	2.2	4.0	2.3	2.4	3.5	4.0	5.4	5.7	5.3	5.7	4.8	6.4
Revenue from natural resources (% GDP)	2.4	1.7	1.5	2.1	4.3	7.0	13.9	14.7	12.9	9.4	12.2	14.4	11.7
Stock of public debt (% GDP)	37.4	35.7	44.7	45.4	41.9	38.4	31.4	27.4	25.6	25.2	22.9	20.1	18.9

Source: Authors' calculations based on World Development Indicators (World Bank 2014) and CEPALSTAT (UN-ECLAC 2015).

## Paraguay

	00	01	02	03	04	05	06	07	08	09	10	11	12
GDP per capita (in dollars at PPP 2005)	10,290	9,739	8,596	9,271	10,019	10,843	11,658	12,556	13,288	13,285	14,376	15,515	15,672
Share of agriculture in GDP	15.8	14.8	14.9	18.3	20.4	19.6	19.1	21.2	23.5	18.9	22.5	21.4	17.4
Share of industry in GDP	35.7	38.0	40.5	37.3	34.6	34.8	33.3	31.7	29.7	32.0	30.1	27.5	28.1
Share of services in GDP	48.5	47.3	44.6	44.4	45.1	45.7	47.6	47.1	46.7	49.0	47.4	51.0	54.5
Domestic expenditure (% GDP)	75.6	74.7	67.5	67.8	70.1	70.8	73.2	74.4	79.1	79.4	80.2	80.7	81.8
Public expenditure in education and health (% GDP)			6.1	4.8	5.4	6.1	6.5	6.6	6.5	8.3	7.6	8.4	10.0
Public expenditure in social security (% GDP)			1.6	3.7	3.4	4.0	5.2	5.2	4.8	6.6	5.4	6.2	7.3
Exports (% of GDP)	46.1	44.2	52.9	54.3	53.8	57.3	58.3	56.3	54.3	51.2	54.6	48.9	46.6
Terms of trade	100.0	100.2	96.7	101.4	104.3	97.4	95.5	100.1	107.3	105.0	105.0	107.5	110.5
Foreing direct investment (% GDP)	1.3	1.1	0.2	0.4	0.5	0.1	1.8	0.8	1.4	0.3	1.7	1.8	2.0
Revenue from natural resources (% GDP)													
Stock of public debt (% GDP)	35.3	33.5	47.0	38.7	34.3	29.3	23.2	15.9	14.3	14.6	14.1	12.1	12.6

Source: Authors' calculations based on World Development Indicators (World Bank 2014) and CEPALSTAT (UN-ECLAC 2015).

## El Salvador

	00	01	02	03	04	05	06	07	08	09	10	11	12
GDP per capita (in dollars at PPP 2005)	5,155	5,220	5,322	5,425	5,506	5,682	5,880	6,080	6,129	5,906	5,953	6,048	6,125
Share of agriculture in GDP	10.5	10.1	9.1	9.0	9.5	10.6	10.7	11.9	12.5	12.4	12.6	12.5	11.8
Share of industry in GDP	31.4	31.9	32.2	31.8	30.4	29.7	29.1	28.2	27.7	27.0	26.7	26.9	27.2
Share of services in GDP	58.1	57.9	58.7	59.2	60.0	59.7	60.2	59.9	59.7	60.6	60.7	60.6	61.0
Domestic expenditure (% GDP)	98.1	99.1	98.3	98.9	101.1	102.4	103.7	106.1	107.6	102.0	103.6	104.3	104.4
Public expenditure in education and health (% GDP)					7.0	7.1	7.4	6.9	7.0	8.1	8.0	8.0	7.9
Public expenditure in social security (% GDP)					3.5	3.8	4.0	3.6	4.3	4.1	4.2	4.7	4.8
Exports (% of GDP)	27.4	25.8	26.4	27.1	27.0	25.6	25.7	25.9	26.9	23.2	25.9	28.0	28.4
Terms of trade	100.0	102.5	101.6	97.7	96.8	96.8	95.5	94.6	91.9	94.9	91.3	91.3	90.2
Foreing direct investment (% GDP)	1.3	2.0	3.3	0.9	2.3	3.0	1.3	7.7	4.2	1.8	-0.5	0.5	1.9
Revenue from natural resources (% GDP)													
Stock of public debt (% GDP)	27.2	30.7	35.2	37.2	38.1	37.5	37.7	34.9	34.4	42.6	42.6	41.7	45.7

Source: Authors' calculations based on World Development Indicators (World Bank 2014) and CEPALSTAT (UN-ECLAC 2015).

## Uruguay

	00	01	02	03	04	05	06	07	08	09	10	11	12
GDP per capita (in dollars at PPP 2005)	9,551	9,168	8,457	8,530	8,962	9,626	10,006	10,634	11,361	11,577	12,569	13,344	13,821
Share of agriculture in GDP	7.0	6.5	8.7	11.1	12.9	10.4	10.7	10.2	10.9	8.4	7.9	9.4	8.4
Share of industry in GDP	24.5	24.5	24.3	26.1	25.6	27.1	26.4	27.2	25.8	25.6	26.1	23.9	24.7
Share of services in GDP	68.5	69.0	67.0	62.8	61.5	62.5	62.9	62.6	63.3	66.0	66.0	66.8	66.9
Domestic expenditure (% GDP)	88.9	88.4	85.7	81.7	79.8	80.4	81.9	81.5	81.6	79.6	80.6	81.4	82.3
Public expenditure in education and health (% GDP)	6.0	6.5	6.6	6.4	6.2	6.3	6.9	7.4	8.7	9.6	9.8	10.5	
Public expenditure in social security (% GDP)	13.2	14.1	14.5	12.8	11.7	11.7	11.8	12.9	11.7	12.0	12.2	11.1	
Exports (% of GDP)	16.7	16.8	20.6	27.4	32.1	30.4	30.3	29.1	30.2	28.3	27.2	27.2	26.3
Terms of trade	100.0	104.0	102.6	103.5	99.9	90.7	88.6	88.7	94.1	96.9	100.0	101.8	104.2
Foreing direct investment (% GDP)	1.2	1.4	1.4	3.5	2.4	4.8	7.7	5.8	7.1	5.3	5.6	5.7	5.4
Revenue from natural resources (% GDP)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Stock of public debt (% GDP)	31.6	38.9	96.0	95.5	74.7	66.7	61.6	52.9	51.6	46.7	40.9	40.3	39.2

Source: Authors' calculations based on World Development Indicators (World Bank 2014) and CEPALSTAT (UN-ECLAC 2015).



## Venezuela

	00	01	02	03	04	05	06	07	08	09	10	11	12
GDP per capita (in dollars at PPP 2005)	9,527	9,667	8,650	7,835	9,104	9,869	10,658	11,396	11,799	11,237	10,894	11,173	11,623
Share of agriculture in GDP	4.2	4.5	4.1	4.6	4.0	4.0	4.0	4.1	4.4	6.1	5.8	9.4	8.4
Share of industry in GDP	49.7	46.1	49.8	51.6	55.5	57.8	56.5	53.3	54.1	44.2	52.2	23.9	24.7
Share of services in GDP	46.1	49.4	46.1	43.9	40.5	38.2	39.5	42.6	41.5	49.7	42.1	66.8	66.9
Domestic expenditure (% GDP)	64.2	69.1	66.5	67.7	61.2	57.8	58.7	63.6	63.4	76.6	67.1	66.7	71.5
Public expenditure in education and health (% GDP)	8.5	9.3	9.6	8.8	9.9	9.0	10.7	10.8	9.9	9.8	8.7	9.9	10.5
Public expenditure in social security (% GDP)	3.8	5.0	4.3	5.9	5.8	5.7	7.5	7.7	6.8	6.9	7.1	8.7	9.2
Exports (% of GDP)	29.7	22.7	30.4	33.9	36.2	39.7	36.5	31.1	30.8	18.1	28.5	29.9	26.2
Terms of trade	100.0	82.2	87.6	98.7	118.1	154.4	184.4	202.1	249.5	181.7	215.9	259.5	262.1
Foreing direct investment (% GDP)	4.0	3.0	0.8	2.4	1.3	1.9	0.1	1.1	0.4	-0.8	0.5	1.2	0.6
Revenue from natural resources (% GDP)	28.0	22.3	26.8	32.7	39.3	47.5	43.9	34.4	34.9	18.8	20.3	33.7	28.6
Stock of public debt (% GDP)	28.1	31.2	41.7	47.4	38.8	33.1	24.0	19.1	14.0	18.2	32.0	25.1	27.5

Source: Authors' calculations based on World Development Indicators (World Bank 2014) and CEPALSTAT (UN-ECLAC 2015).