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

Mexico country study

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**Abstract:** During the 2000s Mexico grew less than the average for Latin America. Labour market indicators exhibited mixed changes, with improvements over the period for some of them and deterioration for others. The country was severely hurt by the international crisis of 2008, but Mexico surpassed its pre-crisis output levels by 2012. Most labour market indicators were affected negatively by the crisis, and labour earnings and poverty indicators had not recovered their pre-crisis levels by 2012.

**Keywords:** Mexico, Latin America, inclusive growth, labour market, poverty

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## 1 Introduction

Latin America in the 2000s witnessed an unprecedented period of growth with poverty and inequality reduction. The region also suffered from the economic crises in Europe and the United States from 2007/08 onwards.

Economic development has been defined as a widespread improvement in the material standards of living of a country's individuals. Economic growth is defined as an increase in the total amount of goods and services produced in an economy.

This paper on labour markets and growth in Mexico since 2000 is one of sixteen studies of Latin American countries, each of which aims to answer 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? How do the rate and character of economic growth, changes in the various labour market indicators, and changes in poverty relate to each other?

More specifically:

- What was the country's economic growth experience?
  - Characteristics of economic growth: breakdown by sector (agriculture, industry, services).
- How have the following indicators of labour market conditions changed in the course of each country's economic growth?
  - 1. Employment and unemployment:
    - a. Unemployment rate, using International Labour Organization definition.
    - b. Employment-to-population ratio.
    - c. Labour force participation rate.
  - 2. Employment composition:
    - a. Occupational group—professional, managerial, and clerical, etc.
    - b. Occupational position—wage/salaried employee, self-employed, unpaid family worker, etc.
    - c. Sector of employment—agriculture, manufacturing, services, etc.
    - d. Education level—low, medium, high.

- e. Registered/unregistered with the nation's social security system.
- 3. Labour market earnings, real:
    - a. Overall.
    - b. Disaggregated by gender.
    - c. Disaggregated by age (youth/non-youth).
    - d. Disaggregated by occupational group.
    - e. Disaggregated by occupational position.
    - f. Disaggregated by sector (agriculture etc.).
    - g. Disaggregated by education level (low, middle, high).

The answers to the preceding questions are by no means obvious. Claims have been made that economic growth in Latin America has been jobless, that productivity has grown at the expense of employment, and that Latin America, having even greater economic inequality than the United States, may have been following the US's course of rising incomes for those at the very top of the income distribution and stagnating or even falling incomes for the great majority, especially the poor. It has also been claimed that Latin America is caught in a middle-income bind, squeezed between the advanced economies on the one hand and emerging economies, especially China, on the other.

Recent evidence has shown that economic growth generally leads to an improvement in labour market conditions and reductions in poverty within developing countries (Fields 2012). The relatively scarce evidence for Latin America, however, indicates some heterogeneity at the country level. In the case of Argentina, the strong growth that followed the economic meltdown of 2001–02 was accompanied by large employment gains and increases in labour earnings, with higher gains (in relative terms) for less skilled workers. This process led to a large reduction in poverty in the 2003–06 period (Gasparini and Cruces 2010). In Brazil, economic growth during the period 1996–2004 was relatively low. In this context, unemployment remained high and labour earnings low, while poverty increased (Fields and Raju 2007). Nicaragua also experienced economic growth during the period 2001–06, and although there were increases in employment levels, overall poverty did not fall significantly (Gutierrez et al. 2008). 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). 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). Finally, the period of economic growth in Colombia between 2002 and 2011 led to a reduction in unemployment and poverty levels (Ham 2013). This mixed evidence indicates that the growth-employment-poverty nexus is fairly complex and the experiences of Latin American countries are far from homogeneous.

Limited evidence is available on the mechanisms underlying the growth-labour markets-poverty nexus in Latin America. For instance, a World Bank (2011) study finds that the increase in men's labour income was higher than that of women's in the 2000s, and that this was the most important factor in lifting households out of poverty, even though World Bank (2013) shows that the increase in the labour force over this period was mainly led by women. Inchauste (2012) reports that job-related events were the main escape route from poverty for Latin American households over the same period, and these events included household heads getting a new job, other family members starting to work, and those employed achieving higher labour earnings than before.

Overall, previous studies generally show a positive association between economic growth, improvement in labour market indicators, and reduction in poverty in Latin American countries. However, the tightness of these relationships is not always clear from these studies. Moreover, these regional aggregates mask the heterogeneity at the country level, which implies that little can be said about the underlying mechanisms at play. This paper on Mexico is one of sixteen case studies which, taken together, will allow us to separate and identify country-specific from region-wide factors in the relationship between the economy's overall performance and labour market outcomes in the decade of 2000s.

## **2 Data and methodology**

All the statistics in this paper are obtained using microdata from the Encuesta Nacional de Ingresos y Gastos de los Hogares (ENIGH) for the years 2000, 2002, 2004–06, 2008, 2010, and 2012. The nationwide surveys were incorporated into the SEDLAC—Socio Economic Database for Latin American and the Caribbean (CEDLAS and the World Bank 2014); three of the authors of this paper were involved in this project at CEDLAS (Center for Distributive, Labor, and Social Studies), Universidad Nacional de la Plata in Argentina. The ENIGH has national coverage. The survey's sample size has increased over time; it went from 10,108 households and 42,266 persons in 2000 to 29,468 households and 118,927 persons in 2008 (Table 1). The sample size of the last two rounds (2010 and 2012) was reduced, especially the ENIGH of 2012. Despite the smaller samples, the ENIGH surveys continued to be representative of the total population of the country.

For this study, we processed the microdata from Mexico to construct time series of comparable data for a wide range of labour market and income distribution indicators. The resulting indicators are compiled into a large number of tables and figures, provided at the end of this paper, which form the basis for the text that follows. We use a vertical line in a figure or a horizontal line in a table when the series are consistent on each side of the line but not from one side of the line to the other, e.g. when the country changed a classification so that it is not possible to use a consistent definition throughout the full time period. Each time a line is used, a note stating its meaning is added to the table or figure.

Several definitions and classifications are used in order to assess whether the labour market has improved or deteriorated. Unemployment is defined as usual, i.e. the share of unemployed persons over the economically active population. A person is unemployed if s/he is 15 years old or more and during the reference period (one month in the Mexican survey), s/he was without work, available for

work, and seeking work. Youths are those between 15 and 24 years old, while adults are those between 25 and 65 years old.

Occupational groups are defined according to the following classification:<sup>1</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. In the case of Mexico, we map the official classification used in each survey to this one. A methodological change in the year 2010 prevents us from comparing the series up to 2008 with the years 2010–12. In 2010, the ENIGH replaced its occupational classification system from the *Clasificación Mexicana de Ocupaciones* to the International Standard Classification of Occupations of 2008.

The 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 position will identify a decrease of self-employment and an increase in wage/salaried employees as an improvement in the labour market. In the case of Mexico, the comparison between the periods 2000–06 and 2008–12 is problematic because of a methodological change in the country's household survey. In 2008, the survey questionnaire was modified with different questions geared to identify occupational positions. The new classification system modified the relative importance of some of the occupational categories.

The sector of employment was divided into primary activities; low-tech industry; high-tech industry; construction; commerce; utilities and transportation; skilled services; public administration; education and health; and domestic workers. When looking at the sectoral distribution of employment, an improvement in the labour market is implied by an increase in the share of the sectors with higher earnings.

Turning now 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 thirteen years of schooling); and high (more than thirteen years of schooling). An increase in the education levels 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 employed workers according to whether they are registered with the social security system (IMSS-*Instituto Mexicano de Seguridad Social*, and other related systems and institutions) or not. 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, so an increase in this indicator will be interpreted as an improvement in the labour market.

Labour earnings are expressed on a monthly basis in 2005 purchasing power parity (PPP) dollars, and higher earnings represent an improvement in the labour market. To compute poverty and inequality statistics, we use the per capita household income. Household income is the sum of

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<sup>1</sup> This is the International Standard Classification of Occupations of 2008 (ISCO-08) at one digit level.

labour income plus non-labour income; included in non-labour incomes are capital income, pensions, public and private transfers, and the imputed rent from own-housing.

Poverty rates are estimated considering the national lines for moderate and extreme poverty. We compute the poverty headcount ratio for each. The national poverty lines in Mexico measure absolute moderate and extreme poverty as gauged by the food price index (FPI) but not by the consumer price index (CPI), and by using the Engel coefficient to construct the moderate poverty line from the extreme poverty line. We also calculate the share of working poor households (those with at least one member employed and a per capita family income below the moderate poverty line), and the poverty rate according to the international poverty lines of 4 dollars-a-day and 2.5 dollars-a-day. Income inequality is calculated using the Gini coefficient of per capita household income and labour earnings.

### 3 Empirical results

*Mexico experienced slow economic growth from 2000 to 2012. The country's economy was affected by the 2000–01 recession in the US, and it was severely hurt by the international crisis of 2008, although by 2012 output levels had surpassed pre-crisis levels (Figures 1 and 2).*

During the period 2000 to 2012, Mexico experienced slow economic growth by Latin American standards. GDP per capita increased by 10.6 per cent, while the average for the eighteen Latin American countries was 36.2 per cent during the same period. GDP (measured at PPP dollars of 2005) grew by 28.7 per cent, and GDP per employed person rose by 6.1 per cent. The annual growth rate of GDP per capita was 1.1 per cent, and it varied from a minimum of -5.9 per cent in 2009 to a maximum of 3.8 per cent in 2010 (Table 2). Mexico (jointly with Guatemala) exhibited the worst economic performance among all of the countries in Latin America in terms of GDP per capita growth during the 2000s. The period under study was characterized by marked fluctuations in the growth rate which were closely related to variations in the US growth rate. In fact, changes in US growth have been one of the factors explaining the variation in Mexico's growth rate since the formation of the North American Free Trade Agreement (NAFTA) in 1994 (Blecker 2008).<sup>2</sup> A first episode of slow growth occurred from 2001 to 2003, during which Mexico's economy was affected by the 2000–01 recession in the US. Though GDP grew at an average rate of 0.3 per cent per year from 2001 to 2003, annual GDP per capita fell by 1.0 per cent. While the economy bounced back and resumed growth in the following years, another sharp decline ensued in 2009 as a consequence of the economic crisis in Europe and the US. Indeed, Mexico was affected more by the international crisis than any other Latin American country. The impact of the crisis was felt in Mexico through several channels. First, the deep recession in the US led to a drop in the demand for Mexico's exports. The high dependence of Mexico on exports to the US (Mexican exports to the US accounted for almost 80 per cent of total exports before the crisis) as well as their composition (a considerable proportion of those exports are durable goods) are factors that help explain why the growth collapse was more pronounced in Mexico compared to other countries in Latin America

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<sup>2</sup> The North American Free Trade Agreement (NAFTA) is a trilateral free trade agreement that eliminated trade and investment barriers between Canada, Mexico, and the United States.

(Martorano 2014). Second, the global recession also led to a drop in international energy prices; because Mexico is an oil exporter, this drop coupled with a decline in domestic oil production had an unfavourable effect on Mexico's export earnings. Third, due to the labour market downturn in the US, Mexican migrants to the US faced greater difficulties in finding and keeping jobs, which negatively affected the flow of remittances to Mexico (Sidaoui et al. 2011).<sup>3</sup> The effect of the international crisis was also felt through some financial channels. The crisis led to an increase in the risk premium of emerging markets debt and to a reversal in capital flows to these economies. In Mexico, big conglomerates were affected the most due to their dependence on external funds for their operation. The depreciation of the Mexican peso also impacted negatively on the private sector, which owed more than 50 per cent of Mexico's external debt, a large fraction of it in foreign currency (Moreno-Brid and Paunovic 2009). GDP per capita fell by 5.9 per cent in 2009, although pre-crisis levels were regained relatively quickly by the year 2011, and economic growth continued throughout 2012. The recovery resulted primarily from three factors. First, a rebound in manufacturing exports, mostly to the US but also to other markets. Second, a strengthening internal market fuelled by a healthy domestic financial sector and the growth in employment rates.<sup>4</sup> Third, significant capital inflows from advanced economies seeking higher rates of return in emerging markets such as Mexico (Cañas et al. 2011; IMF 2013).

During the 2000–12 period, the sectoral composition of GDP remained largely unchanged. The share of the service sector, the largest in the Mexican economy, diminished during the period from 60.8 per cent in 2000 to 60.7 per cent in 2012 (Table 2). The share of the industry sector increased from 35.7 per cent in 2000 to 35.8 per cent in 2012, and the agricultural sector's share also rose slightly from 3.5 per cent in 2000 to 3.6 in 2012. The industrial sector was the one most affected by the economic crisis of 2008; it lost 6.0 per cent of its value added between 2008 and 2009. The sharp drop in exports of manufactured products to the US explained the large drop in industrial production, particularly in high-value-added industries (Villareal 2010). This sector recovered quickly, though, and by 2012 its value added exceeded pre-crisis level. While the services sector showed a similar pattern of quick recovery after losing 4.0 per cent of its value added, the agricultural sector did not recover until 2012.

*The unemployment rate increased substantially between 2000 and 2012 overall and for all population groups. Within the period, the unemployment rate increased from 2000 to 2004, fell from 2004 to 2006, exhibited an upward trend again until 2010, and dropped in the last year of the period. The international crisis of 2008 led to an increase in the unemployment rate (Figure 3).*

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<sup>3</sup> Remittances represented 3.9 per cent of private consumption in 2007. Even though this figure does not seem high, the consumption of low-income families in the regions of Mexico with high migration rates depends heavily on the flow of remittances from the United States (Sidaoui et al. 2011).

<sup>4</sup> The stimulus package of the Mexican government included infrastructure spending, support to small- and medium-sized enterprises and to the export sector, introduction or expansion of employment programmes (*Programa de Preservación del Empleo* and *Programa Temporal de Empleo*), expansion of the *Oportunidades* cash transfer programme, regulations to facilitate the withdrawal of savings from individual pension accounts, extension of coverage of the medical insurance and maternity benefits for dismissed workers, and guaranteed pension to elderly individuals who became unemployed and had contributed at least for twenty-four years (Martorano 2014). There is no evidence indicating to what extent each of these policy measures contributed to the recovery of the economy.



The unemployment rate (measured as the ratio of unemployment to labour force) grew from 2.2 per cent in 2000 (861,563 unemployed persons) to 4.2 per cent in 2012 (2,327,977 unemployed persons). Even though these unemployment rates are relatively low by developed country standards, the unemployment rate almost doubled in the 12 years under study. The movements along this increasing trend followed the business cycle. The unemployment rate rose from 2.2 per cent to 3.8 per cent between 2000 and 2004 when the country suffered the effects of the US recession of 2000–01. It then stabilized at around 3.5 per cent and even decreased slightly in 2006. However, it shot up once again during and after the Great Recession, reaching a maximum for the period of 5.7 per cent in 2010 (2,816,714 unemployed persons). The increase in the unemployment rate after the international crisis was driven mainly by the destruction of jobs in the manufacturing sector (Freije et al. 2011). Unemployment fell to 4.2 per cent in 2012—while lower than the level of 2008, this is still higher than the pre-crisis rate (3.0 per cent in 2006).

Between 2000 and 2012, the unemployment rate increased for young and adult workers, and for men and women. The youth unemployment rate increased from 5.5 per cent in 2000 to 8.5 per cent in 2012. The unemployment rate for adult workers rose from 1.3 to 3.2 per cent over the same period. The unemployment rate for men and women increased from 2.5 in 2000 to 5.3 per cent in 2012 and from 1.6 to 2.6 per cent respectively. Within the period, the unemployment rate followed the aggregate trend for each population group, with an increase in the early years of the period, a reduction between 2004 and 2006 for young workers, between 2005 and 2006 for adults and men, and between 2004 and 2005 for women, an upward trend up to 2010, and a reduction in 2012.

The international crisis led to an increase in the aggregate unemployment rate and in the unemployment rate of all population groups. Between 2006 and 2010, the aggregate unemployment rate increased by 2.3 percentage points (1,219,001 new unemployed persons). Both the number of persons in the labour force and the number of employed persons increased over the same period by 1,583,117 and 364,116 respectively. These figures suggest that the increase in the unemployment rate between 2006 and 2010 was explained by the new entrants into the labour market that could not find a job. The rise in the youth unemployment rate was of 3.0 percentage points. The increases in the unemployment rate for adults, men, and women were 2.3, 2.9, and 1.3 percentage points respectively. The larger increase in the unemployment rate of men compared to women can be explained by the largest destruction of jobs in sectors employing male workers primarily, like the manufacturing sector. By 2012, the youth unemployment rate and the unemployment rate for women were below the pre-crisis value of 2006; the adult unemployment rate was above the level of 2006 and 2008; the unemployment rate for men was below the level of 2008 but above the level of 2006.

*The employment composition by occupational group improved moderately between 2000 and 2008 in the aggregate and for all population groups, and deteriorated between 2010 and 2012 overall and for adult workers, men, and women (Figure 4).*

The share of the following occupations shrank between 2000 and 2008: agricultural occupations (drop of 3.9 percentage points); crafts and trades occupations (drop of 1.8 percentage points); and plant and machine operators (drop of 0.7 percentage points). The share of the following occupations grew: services and sales workers (increase of 4.2 percentage points); and elementary (increase of 1.5 percentage points). The share of the other occupational groups remained largely unchanged (Table

3). These changes in the occupational composition of employment can be interpreted as a slight improvement since low-earning occupations (agricultural, elementary, and plant and machine operators) reduced their share in total employment by 3.1 percentage points between 2000 and 2008, while mid-earning (crafts and trades workers, services and sales, clerical, and armed forces) and high-earning occupations (management, professionals, and technicians) gained share in total employment (increase of 2.4 and 0.7 percentage points respectively) (Table 6).

Between 2000 and 2008, all population groups improved their employment structure by occupational groups. From 2000 to 2008, the share of low-earning occupations in total employment fell for young workers (6.9 percentage points), adults (1.6 percentage points), men (3.9 percentage points), and women (0.1 percentage points). The share of high-earning occupations in total employment fell slightly for young workers and men, by 0.3 percentage points in both cases, resulting in an increase in the share of mid-earning occupations in total employment. For adult workers and women, the share of high-earning occupations in total employment increased by 0.7 and 1.9 percentage points respectively.

Due to a methodological change in the household survey, the series up to 2008 is not fully comparable with the years 2010–12. Unfortunately, the effect of the crisis is difficult to disentangle from the methodological change.<sup>5</sup> Nonetheless, from 2010 to 2012 there was an increase in the share of low-earning occupations in total employment of 1.7 percentage points and a decrease in the share of high-earning occupations of 1.1 percentage points. The increase in the share of workers in low-earning occupations is explained mainly by the rise in the share of agricultural occupations. These changes suggest a worsening in the employment composition after the crisis, with no sign of recovery in the short term. Disaggregating by population group, the changes in the employment structure by occupational group between 2010 and 2012 show a worsening for adult workers and women, a slight worsening for men, and an improvement for young workers. The worsening in the composition of employment by occupation group for adults and women between 2010 and 2012 occurred through an increase in the share of low-earning occupations (1.8 and 4.0 percentage points respectively) and a decrease in the share of high-earning occupations (1.4 and 3.0 percentage points respectively). The slight worsening in the employment structure by occupational group for men over the same period took place through a larger increase in the share of low-earning occupations (0.7 percentage points) compared to high-earning occupations (0.2 percentage points). Finally, the improvement for young workers was the result of a reduction in the share of low-earning occupations (1.7 percentage points) and an increase in the share of high-earning occupations (1.0 percentage point).

*The employment structure by occupational position remained essentially unchanged from 2000 to 2006 and worsened from 2008 to 2012, in the aggregate and for all population groups. After the international crisis of 2008, the employment structure by occupational position improved overall and for young workers, adults, and women, but it remained largely unchanged for men (Figure 5).*

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<sup>5</sup> Until 2010, the participation of occupations related to services and sales was the largest in relation to total employment. However, in 2010 the participation of elementary occupations increased by 12.0 percentage points in two years to become the main occupational category. The methodological change in the classification seems to be behind this evolution.

Between 2000 and 2006, the employment structure by occupational position exhibited small changes. The share of low-earning positions in total employment (self-employed and unpaid workers) dropped by only 0.3 percentage points. From 2008 to 2012, the employment structure by occupational position worsened, as the share of low-earning categories increased by 2.7 percentage points (Table 4).

Between 2000 and 2006, the employment structure by occupational position improved for young workers and men, while it remained largely unchanged for adults and women, and worsened between 2008 and 2012 for all population groups. From 2000 to 2006, the share of low-earning positions in total employment dropped by 1.7 percentage points for young workers and 1.5 percentage points for men. The share of high-earning positions increased accordingly, determining an improvement in the employment structure by occupational position for these population groups between 2000 and 2006. Between 2008 and 2012, the share of low-earning positions increased for all groups. The rise was of 3.8 per cent for young workers, 2.2 per cent for adults and men, and 2.9 per cent for women. The increase is explained by the rise in the share of self-employment for all population groups. In a context of increasing unemployment, as was the period 2008–10 in Mexico, economic necessity may have compelled workers to take up free-entry self-employment activities. These changes can be characterized as a worsening in the composition of employment by occupational position between 2008 and 2012 for all population groups.

After the international crisis of 2008, the employment structure by occupational position exhibited a slight improvement in the aggregate, for young and adult workers and women, and small changes for men. Between 2008 and 2010 (a comparison between 2006 and 2010 is not possible due to a methodological change in the survey), the share of low-earning positions in total employment dropped by 0.7 percentage points in the aggregate and for young workers, 0.6 percentage points for adults, and 2.2 percentage points for women. For adult workers, the share of low-earning positions in total employment remained essentially unchanged. For young workers, men, and women, there was a substantial increase in the share of low-earning positions in total employment by the end of the period (between 2010 and 2012) due to the rise in the share of self-employment.

*The employment composition by economic sector improved over the course of the period studied overall and for all population groups. The international crisis of 2008 did not interrupt the improving trend in the employment structure by economic sector in the aggregate and for young workers, adults, and women, but it led to a slight worsening for men (Figure 6).*

The period from 2000 to 2012 witnessed a reduction (from 31.5 per cent to 28.1 per cent) in the share of workers in low-earning sectors (domestic workers, primary activities, and low-tech industry). There was, during the same period, an increase (from 20.7 per cent to 22.2 per cent) in the share of high-earning sectors (skilled services, public administration, and education and health) in the total. These changes resulted in an increase in the share of mid-earning sectors in total employment (from 47.8 per cent to 49.6 per cent) over the same period (Tables 5 and 6).

The employment composition by economic sector improved between 2000 and 2012 for young and adult workers, men, and women, as they moved from low-earning sectors to high-earning sectors. For young workers, the share in low-earning sectors dropped from 34.3 per cent in 2000 to 27.4 per cent in 2012. For adult workers, the share in low-earnings sectors fell from 29.0 per cent in 2000 to

26.6 per cent in 2012. At the other end of the scale, the share of young and adult workers in high-earning sectors increased from 15.1 per cent in 2000 to 18.3 per cent in 2012 and from 23.2 per cent to 23.9 per cent respectively. For both age groups, the share of mid-earning sectors in total employment increased over the period. For both men and women, the share working in low-earning sectors fell: from 31.8 per cent in 2000 to 27.2 per cent in 2012 for men, and from 31.0 per cent to 29.5 per cent for women. The share of high-earning sectors in total employment grew from 17.3 per cent to 19.8 per cent for men, while it had a small decrease for women, from 26.8 per cent to 25.8 per cent. For both men and women, there was an increase in the share of mid-earning sectors in total employment.

The international crisis of 2008 did not affect the improving trend in the employment composition by economic sector in the aggregate and for young workers, adults, and women, but it led to a slight worsening for men. The continued improvement in the structure of employment by economic sector despite the international crisis in the aggregate and for young workers, adults, and women can be explained by the reduction in the share of workers in the low-tech industry sector in total employment. That occurred as a consequence of the sharp drop in exports to the US. As the low-tech industry sector is a low-earning sector in Mexico, the reduction in its share in total employment implied an improvement in the labour market for those workers who remained employed.

By contrast, between 2006 and 2010 the share of low-earning sectors in total employment increased by 1.3 percentage points for men. The share of high-earning sectors increased by slightly less (1.1 percentage points). Together, these changes resulted in a drop in the share of mid-earning sectors in total employment for men. The share of low- and high-earning sectors continued to increase by the end of the period for men, but the increase in the share of high-earning sectors was always below that of the low-earning sectors.

*The educational level of the employed population in Mexico improved steadily over the period for all population groups, and especially among young workers. The improving trend was not adversely affected by the international crisis of 2008 (Figure 7).*

The share of employed workers with low educational levels (eight years of schooling or less) dropped from 49.5 per cent in 2000 to 37.2 per cent in 2012, while the shares of workers with medium and high educational levels (nine to thirteen years of schooling and over thirteen years of schooling) grew from 35.5 per cent in 2000 to 46.3 per cent in 2012 and from 15.0 per cent to 16.6 per cent respectively.<sup>6</sup> We interpret this result as an improvement for the employed population as the level of education is an important predictor of labour earnings. Consequently, the changes in the employment structure by educational level implied an increase in the share of workers that tend to have high levels of earnings and a decline in the share of workers with low earnings levels.<sup>7</sup>

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<sup>6</sup> The most frequent value of years of education for employed workers in Mexico was 6 in 2000 (18.9 per cent of employed workers had six years of education) and 9 from 2002 to 2012 (around 21.8 per cent of employed workers had nine years of education).

<sup>7</sup> The improvement in the employment structure by educational level is related to changes in the relative demand and supply of workers with high levels of education with corresponding implications for the wage gap by educational group

The educational level of the employed population improved between 2000 and 2012 for all groups and especially for young workers. For the youth population, the share of employed persons with low educational levels dropped from 40.2 per cent in 2000 to 20.7 per cent in 2012 (a drop of 19.5 percentage points). The share of employed youth with medium and high educational levels grew by 18.7 and 0.8 percentage points respectively. The reduction in the share of adult employed workers with low educational levels was smaller compared to young workers, only 11.5 percentage points over the period. There was, overall, an increase in the share of adult employed persons with medium and high educational levels of 9.9 percentage points and 1.7 percentage points respectively. The more rapid reduction in the share of workers with low levels of education for youth compared to adults could be indicating that the insertion of young workers into the labour market is more difficult as they need higher education to become employed compared to adults (for whom their educational level is largely predetermined). However, Lopez-Calva et al. (2013b) indicated that the improvement in the educational level of the employed population seems to be associated with higher public spending per student in basic education and an increase in education coverage in rural areas. These factors eased supply-side constraints while the conditional cash transfer programme *Oportunidades* reduced demand-side constraints by compensating poor households for schooling costs and for the opportunity cost of children's labour. Disaggregating by gender, the reduction in the share of employed workers with low educational levels was 10.3 percentage points for women and 13.2 for men, while the share of workers with medium and high levels of education climbed by 7.0 and 3.3 percentage points respectively for women and by 12.8 and 0.3 percentage points for men.

The pattern of improvement in the level of education of the employed population in Mexico continued even during the international crisis of 2008, overall and for all population groups.

*The percentage of wage/salaried employees registered with the social security system decreased between 2000 and 2012 overall and for all population groups. The worsening trend continued during the international crisis of 2008 (Figure 8).*

Mexico has several social security systems, which are intended to provide pensions and health care as well as other benefits to workers and their families (ISSA 2014). Some of the systems are: 1) the IMSS, which covers workers in private enterprises, and a series of full sub-systems; 2) the ISSSTE, which covers public employees; 3) the ISSFAM, which covers armed forces employees; 4) Pemex (Mexico's state oil company), which covers Pemex's workers; and 5) RJP IMSS, which covers IMSS employees. In addition to these traditional institutions of contributory social security (the social security system, for short), recent programmes have provided some social insurance benefits for those not covered by the system. Most notably, the *Seguro Popular* provides health insurance only for poor persons, informal, and self-employed workers.

The benefits are provided by the social security systems through contributory and non-contributory schemes. The contributory scheme is mandatory for private sector employees who contribute to the system jointly with employers and the government to cover health risks and old-age pensions. For

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and the unemployment rate of each educational level. We introduce a discussion about the role of these factors in Mexico in the paragraph on labour earnings.

other workers, like self-employed persons, household workers, and employers, the contribution is voluntary. The non-contributory schemes cover persons living in households with income below a legally defined threshold and are funded totally by the government. An intermediate system is the *Seguro Popular* that covers health risks for informal workers, self-employed and poor persons. The system is funded by the government and by the families according to their socioeconomic level.

Mexican social security system records show that the percentage of wage/salaried employees who are registered with traditional institutions of contributory social security fell from 45.6 per cent in 2000 to 34.9 per cent in 2012. This trend abated in 2006, but resumed at a steady rate in 2008 during the Great Recession. Indeed, in terms of registered employment, Mexico was one of the countries most affected by the economic crisis (ECLAC-ILO 2012), and there was no sign of a major recovery in this employment indicator as of 2012. There was a lower rate of registration with the social security system among wage/salaried employees in Mexico in 2012 than in 2000 for two reasons. First, registered wage/salaried employees increased much less compared to wage/salaried unregistered workers from 2000 to 2012. The number of registered workers grew by 876,414 while the number of unregistered workers increased by 9,472,012. Second, those workers who were unemployed or inactive and who wanted to enter the labour market found it more difficult to obtain registered (formal) jobs so they took up unregistered (informal) wage and salaried employment or self-employment instead (Lederman et al. 2011). Consequently, the mix of employment involved larger numbers of unregistered employees compared to the number of registered employees.

The rate of registration with the social security system dropped for all population groups (young and adult workers, men, and women). The share of registered workers fell from 34.0 per cent in 2000 to 22.0 per cent in 2012 for young workers and from 50.8 to 39.5 per cent for adults. The reduction in the share of workers registered over the period was larger for women compared to men. The percentage of workers registered with the social security system fell from 51.1 to 35.1 per cent between 2000 and 2012 for women, while for men the reduction was from 43.1 per cent in 2000 to 34.8 per cent in 2012. The pattern of reduction in the percentage of wage/salaried employees registered with the social security system continued during the international crisis of 2008 overall and for all population groups. The number of registered workers contracted by 136,143 between 2006 and 2010, while the number of unregistered workers increased by 3,045,103 over the same period.

*Labour earnings decreased between 2000 and 2012 for workers as a whole. Within the period, there was a reduction in the early years of the period (from 2000 to 2002), an increase from 2002 to 2008, a fall in 2010, and an upward change in the last year. Over the full period (2000 to 2012), labour earnings decreased for adult workers and men, but increased for young workers and women. The evidence of earning changes by employment categories over the period indicates that labour earnings reductions tended to be larger in percentages for high-earning categories compared to low-earning categories. All population groups and employment categories were affected negatively by the 2008 crisis in terms of earnings (Figure 9).*

Average monthly earnings, expressed in dollars at 2005 purchasing power parity (PPP), decreased by 5.8 per cent, from US\$599 in 2000 to US\$564 in 2012 (Table 6). Labour earnings fell at the beginning of the period—between 2000 and 2002—rose between 2002 and 2008, fell during the international crisis, and increased in the last year of the period studied. Interestingly, in a context of moderate inflation, as was the Mexican case during the 2000s, the adjustment of the labour market

took place through changes in the level of employment mainly rather than changes in real hourly wages, in contrast to what happened in the 1980s and 1990s (Samaniego 2009; Messina and Gambetti 2014).

Disaggregating, we find that adult workers and men suffered a reduction in their labour earnings, while young workers and women enjoyed an increase between 2000 and 2012. Labour earnings dropped by 5.8 per cent for men between 2000 and 2012, while they increased by 2.2 per cent for women over the same period. Labour earnings increased for young workers by 1.4 per cent and fell for adult workers by 7.2 per cent. Labour earnings fell between 2000 and 2002 for young workers, adults, and men, increased for all population groups in the following years, and experienced a new reduction during the international crisis.

Between 2000 and 2012, average earnings increased for some employment categories and decreased for others. The earnings decreases (increases) tended to be larger for workers in high-earning (low-earning) categories compared to low-earning (high-earning) categories. Among occupational groups, we can only compare 2000 with 2008 and 2010 with 2012. Agricultural, forestry and fishery workers, workers in elementary occupations, and plant and machine operators (low-earning occupational groups) had an average increase in their labour earnings of 29.1 per cent between 2000 and 2008 and an earnings reduction of 2.1 per cent between 2010 and 2012. Workers in management, professionals, and technicians (high-earning occupational groups) suffered an earnings reduction of 8.5 per cent on average between 2000 and 2008, and an increase of 9.1 per cent between 2010 and 2012. When the working population is broken down by occupational position, we can make comparisons between 2000 and 2006, and between 2008 and 2012. The self-employed had an increase in labour earnings of 4.5 per cent between 2000 and 2006 and a reduction of 22.9 per cent between 2008 and 2012. Employers and paid employees enjoyed an earnings gain of 1.0 per cent on average between 2000 and 2006 and suffered an earnings loss of 15.7 per cent between 2008 and 2012. Among economic sectors, domestic workers and workers from primary activities and low-tech industry (low-earning sectors) increased their labour earnings over the period by 5.0 per cent on average. Workers in skilled services, public administration, and education and health (high-earning sectors) had an earnings increase of only 0.6 per cent on average. Finally, labour earnings of workers with high educational levels fell by 14.1 per cent, while workers with medium and low levels of education had a reduction in their labour earnings of 13.7 and 2.0 per cent respectively.

The evidence of falling labour earnings for all educational groups can be interpreted in light of previous findings of improving educational levels of the Mexican employed population and improving employment structure by economic sector over the period. The improving employment structure by economic sector implied an increase in the share of sectors that can be expected to employ workers with high educational levels, such as skilled services, public administration, and education and health, and a reduction in the share of sectors that employ workers with low educational levels, such as primary activities and low-tech industries. This evidence indicates that the demand for workers with high and medium educational levels relative to those with low educational levels increased between 2000 and 2012. On the other hand, the educational level of people in the labour force improved over the same period, indicating an increase in the relative supply of workers with high and low levels of education (Table 8). The prediction of a supply and demand analysis is that the relative wages of workers with high and medium educational levels relative to those with low educational levels will rise or fall depending on which effect dominates (increase in the relative

demand versus increase in the relative supply). In the Mexican labour market the relative wages of workers with high and medium educational levels relative to those with low educational levels fell over the period (Table 7). The adjustment process also led to an increase in the unemployment rate of all educational groups with a larger increase for workers with high levels of education (Table 9).

The international crisis of 2008 led to a reduction in labour earnings in the aggregate and for all population groups and employment categories. Between 2006 and 2010, labour earnings fell by 10.1 per cent. Men suffered a larger earnings reduction compared to women (drop of 13.4 and 3.7 per cent respectively) and none of them recovered their pre-crisis level of earnings by the end of the period. Adult workers experienced a larger earnings loss compared to young workers (drop of 11.4 and 4.0 per cent respectively), and none of the age groups returned to their pre-recession level of earnings by 2012. Among occupational positions, employers were hit the most by the international crisis (drop of 35.4 per cent in their labour earnings between 2008 and 2010). Disaggregating by economic sectors, workers in high-tech industries, skilled services, and public administration suffered the largest earnings reduction between 2006 and 2010 (18.7, 16.0, and 13.3 per cent respectively). Finally, workers with high levels of education suffered an earnings loss of 18.9 per cent during the international crisis, while workers with medium and low levels of education experienced earnings reductions of 13.4 and 4.9 per cent respectively. The only employment category that recovered its pre-crisis level of earnings by 2012 was the public administration sector.<sup>8</sup>

*For all poverty lines, the poverty rate was lower in 2012 than in 2000, and so too was the percentage of households classified as working poor. Within the period, the poverty indicators decreased between 2000 and 2006 and then either increased or decreased at a slower pace than before, depending on the poverty line used (Figure 10).*

The moderate poverty rate (measured by the country's official poverty line) fell from 55.6 per cent in 2000 to 52.0 per cent in 2012; the extreme poverty rate dropped from 24.6 per cent to 20.2 per cent; the percentage of working poor (defined as the proportion of persons in the population living in poor households where at least one member works) decreased from 43.8 per cent to 40.8 per cent over the same period. The analysis of trends based on the 2.5 and 4 dollars-a-day PPP international poverty lines also shows a reduction between 2000 and 2012. A closer look at the evolution of poverty indicators based on the official poverty lines over the period under study indicates a U-shaped pattern with the lowest poverty levels in 2006. Poverty levels increased markedly with the economic crisis of 2008 and the substantial increase in food prices. The number of poor persons according to the official moderate poverty line increased from 47.6 million in 2006 to 56.8 million in 2010. Poverty indicators responded more slowly than GDP did. The moderate poverty rate continued to increase until 2012, when it reached 52.0 per cent. The patterns are very similar for the evolution of the proportion of the working poor, and for the proportion of the extreme poor. The analysis of trends based on the 2.5 and 4 dollars-a-day PPP international poverty lines shows an almost monotonic reduction over the period. These poverty rates increased slightly in 2008, and then resumed the downward trend of the previous period, although at a slower pace: the poverty rate based on the 2.5 dollars-a-day line fully recovered from the crisis (drop of 2.1 percentage points between 2008 and 2012), while the poverty level based on the 4 dollars-a-day PPP line had only

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<sup>8</sup> We did not include the effect of the international crisis on labour earnings by occupational categories due to comparability problems in the series.



partially recovered, not reaching its pre-crisis level (drop of 0.9 percentage points between 2008 and 2012).

The poverty patterns reported in the last paragraph can be interpreted by examining incomes from various sources as well as government programmes. The analysis of sources of household total income indicates that labour income and transfers from poverty alleviation programmes increased between 2000 and 2008 (Figure 11). There is evidence showing that half of the reduction in the moderate poverty rate measured by the official poverty line between 2002 and 2004 can be explained by the *Oportunidades* programme (del Río et al. 2011). Moreover, government transfers enabled 2.6 million persons to escape poverty in 2008 (CONEVAL 2009). On the other hand, income from capital declined from 2000 to 2008, while income from pensions was stable. Between 2008 and 2010, labour earnings exhibited a substantial decrease; capital income and transfers from poverty alleviation programmes like *Oportunidades*, *Programa para adultos mayores*, and other programmes suffered a small decline. However, government transfers recovered in 2012. Despite the poverty reduction effort of Mexico's government, the poverty rates based on Mexico's official poverty lines increased between 2006 and 2012. When the analysis is based on the international poverty lines, poverty increases were smaller and temporary (they increased between 2006 and 2008 only) compared to the poverty increases based on the official lines. These differing patterns of poverty indicators between 2006 and 2012 can be explained by the different procedure applied to adjust the poverty lines over time. International lines are constant in real terms using the CPI. Official poverty lines are constant in real terms using the FPI. The increase in food prices that occurred starting in 2008 determined a more rapid increase in the official poverty lines compared to the international lines in current pesos. Consequently, poverty rates measured by the official poverty lines increased from 2006 and 2012, while poverty indicators based on international poverty lines decreased.

*Household per capita income inequality diminished over the period, while inequality of labour earnings did not change substantially (Figure 12).*

Household per capita income inequality decreased in conjunction with the increase in GDP up to 2006. It did not follow a clear pattern afterwards: inequality increased slightly between that year and 2008, and then dropped markedly until 2010, when it increased once again. The overall evolution is captured by the Gini coefficient, which fell from 0.536 in 2000 to 0.491 in 2012. The origin of the decline in household per capita income inequality from 2000 to 2006 has been attributed to the enactment of the North American Free Trade Agreement (NAFTA) (Esquivel 2009) and to the progressiveness of public spending (Esquivel et al. 2010; Lopez-Calva et al. 2013a). In 1994, the Mexican government launched *Procampo*, an income-support programme aimed to help farmers deal with the transition costs resulting from the opening of agricultural trade under NAFTA. *Progresa* (known as *Oportunidades* since 2002) was established in 1997. It is a large anti-poverty conditional cash transfer programme, which reached around 19.0 per cent of households in 2012. Labour markets also played an important role for the evolution of income inequality. Esquivel et al. (2010), Campos et al. (2012), Lopez-Calva et al. (2013a), and Cornia (2013) found that labour incomes contributed to income equalization during the 2000s. Remittances proved also to be equalizing in Mexico during the 2000s (Esquivel et al. 2010; Cornia 2013).

The level of inequality of labour earnings also diminished over the period under study but in a smaller magnitude. The Gini of labour earnings among employed workers was 0.520 in 2000 and

0.512 in 2012. It was mostly stable over these years, with the exception of a pronounced fall in 2010, after the economic crisis, when it reached a level of 0.474. According to our previous evidence, after the international crisis, workers with medium and low levels of education increased their earnings relative to those with high levels of education. However, it is interesting to notice that earnings declined for all workers, regardless of their level of education. Consequently, the reduction in labour earnings inequality occurred at the expense of lower labour incomes. The main driver of the reduction in labour earnings inequality during the 2000s was the reduction in the education wage premium (or the ‘price effect’). The gap between the wages of skilled workers (those with secondary or higher education) and unskilled workers (those with no schooling or incomplete primary schooling) fell systematically over the period under study (Esquivel et al. 2010). This change in the wage structure has been explained by market forces—i.e. an increase in the relative supply of skilled workers along with a reduction in the relative demand for skilled labour (Gasparini et al. 2011; Campos et al. 2012; Cornia 2013)—rather than by institutional factors (Campos et al. 2012). The distribution of the stock of education (the ‘quantity effect’) in the labour force became more equal too (Gasparini and Lustig 2011). The reduction in the relative supply of workers with low levels of skills (measured by school attainment) might be associated with changes in public spending on education combined with the effects of the conditional cash transfer programme *Oportunidades*, which tied monetary transfers to keeping children of poor households in school. Although the distribution of educational attainment has become more equal, this change has had a disequalizing or neutral effect (Campos et al. 2012; Azevedo et al. 2013).<sup>9</sup> Then, the reduction of income inequality in Mexico is explained by the falling education wage premium or price effect.

#### 4 Conclusions

By Latin American standards, Mexico experienced slow economic growth during the 2000s. The country was severely hurt by the international crisis of 2008, but Mexico surpassed their pre-crisis output levels by 2012.

The evidence regarding the changes in labour market indicators between 2000 and 2012 was mixed. Some of them improved while others deteriorated over the period. The improvements were as follows. The employment composition by occupational group improved moderately between 2000 and 2008 as workers moved from agricultural, forestry and fishery occupations, and occupations related to plant and machine operation to better-paying occupations like professional jobs. The employment structure by occupational position improved from 2000 to 2006 through the increase in the share of employers and wage/salaried employees in total employment. The employment composition by economic sector improved from 2000 to 2012 as the share of high-earning sectors like skilled services, public administration, and education and health increased and the share of low-earning sectors like primary activities and low-tech industries diminished. The educational level of the Mexican employed population improved steadily from 2000 to 2012. The moderate and extreme poverty rates and the rate of working poor households showed important reductions between 2000 and 2012, as the Gini coefficient of per capita household income, while the Gini coefficient of

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<sup>9</sup> This means that had the skill premium remained unchanged, educational upgrading would have been disequalizing. Because this sounds counter-intuitive, this finding is known as the ‘paradox of progress’.

labour earnings remained essentially unchanged. The worsening was as follows. The unemployment rate increased substantially between 2000 and 2012. The employment composition by occupational group deteriorated between 2010 and 2012. The employment structure by occupational position worsened from 2008 to 2012. The percentage of wage/salaried employees registered with the social security system decreased between 2000 and 2012 and labour earnings fell.

Looking specifically at the international crisis of 2008, most labour market indicators were affected negatively. The unemployment rate increased and recovered its pre-crisis level by 2012. The employment structure by occupational group worsened between 2010 and 2012. The worsening trend in the percentage of wage/salaried employees registered with the social security system continued during the international crisis. Labour earnings fell between 2006 and 2010 and never recovered their pre-crisis level. The poverty indicators increased during the international crisis of 2008. The comparison between the effects of the international crisis of 2008 on labour market indicators and the effects generated by the recession in the US at the beginning of the period (2001–03) reveals that the Great Recession impacted Mexico more strongly. The reduction in GDP, the increase in the unemployment rate and the decrease in labour earnings were larger during the international crisis compared to the recession of 2001–03. Moreover, the moderate poverty rate (measured by the country's official poverty line) increased during the international crisis, while it continued to decrease during the first recessionary episode. The reasons behind the larger negative impacts of the international crisis compared to the recession at the beginning of the decade were the fall in the demand for Mexican exports and the domestic demand, and the reduction in remittances and the emigration of workers to the US due to the recessive labour market conditions in that country.

Young workers had worse labour market outcomes over the period compared to adults, but they do not seem to be more vulnerable to macroeconomic crises. Men and women exhibited a balanced situation in their labour market outcomes, and the negative impacts of the crises were evenly distributed among them. The unemployment rate was higher for young compared to adult workers, the shares of young employed workers in low-earning occupational groups and economic sectors were larger than the shares of adult workers; the percentage of young workers registered with the social security system was lower when compared to adults, and labour earnings of young workers were below those of adults. On the other hand, the share of young workers in low-earning occupational positions was lower than the share for adults and their educational level improved more rapidly. Despite the generally inferior situation of young workers in the labour market, only two youth labour market indicators were more affected by the episodes of crises. They were the unemployment rate, which increased more for young workers than for adults during the recession at the beginning of the period and during the international crisis of 2008, and the percentage of registered workers, which decreased more for young workers during the international crisis. Disaggregating by gender, we found that men were better than women in some cases, e.g. the share of male workers in low-earning positions was lower compared to women, and labour earnings of men were higher than labour earnings of women; in other cases, the opposite occurred, e.g. the female unemployment rate was lower, and the percentage of workers registered with the social security system was larger for women compared to men. The negative impacts of the crises were also evenly distributed between men and women. Men were hit hardest by both crises in the case of the unemployment rate, the percentage of workers in low-earning sectors, and labour earnings. Women were the main losers during the crises episodes when we analysed the percentage of workers

in low-earning occupational groups and the percentage of workers registered with the social security system.

In summary, Mexico exhibited mixed labour market changes during the 2000s and some deterioration during the international crisis of 2008, and while all population groups were vulnerable to macroeconomic crises, no group was clearly more vulnerable than any other.

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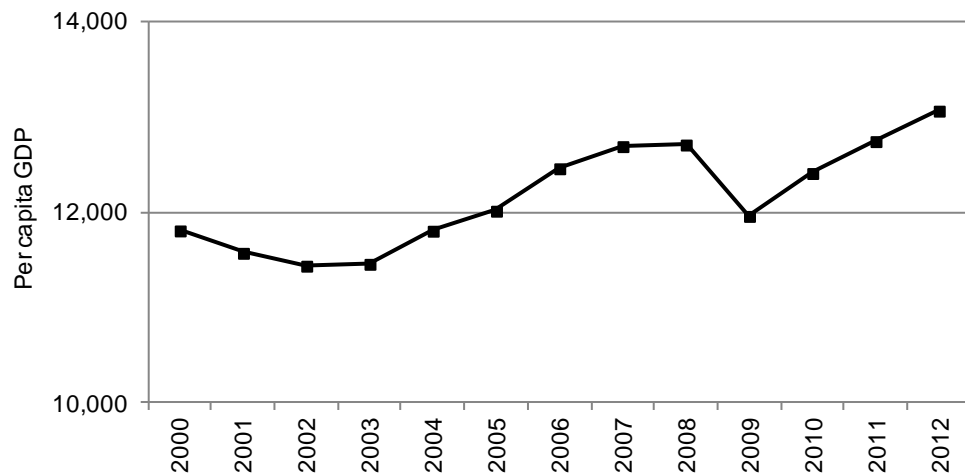
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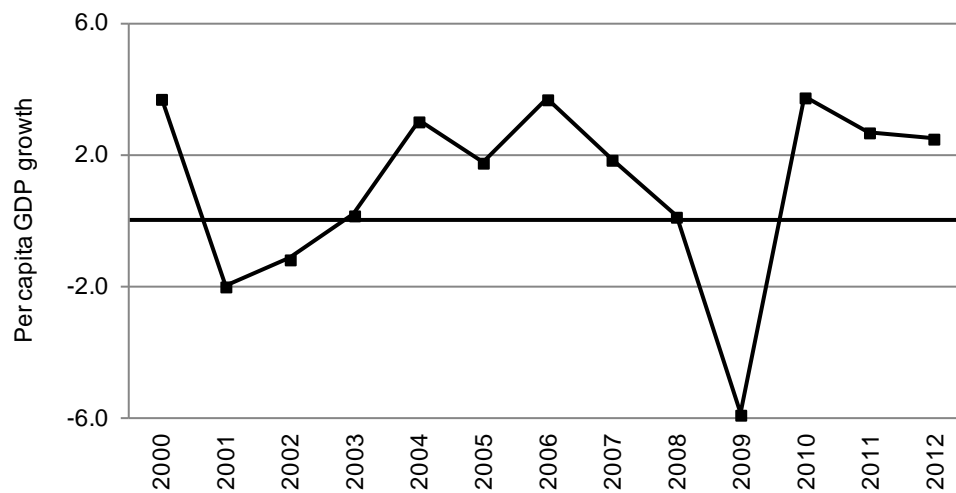
## Figures

Figure 1: Per capita GDP at PPP dollars of 2005, 2000–12



Source: World Development Indicators (the World Bank 2014).

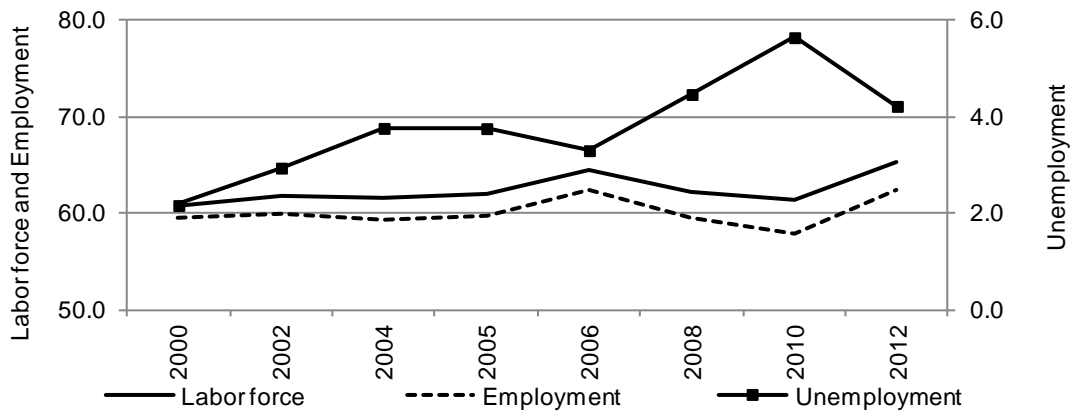
Figure 2: Annual growth of GDP per capita at PPP dollars of 2005, 2000–12.



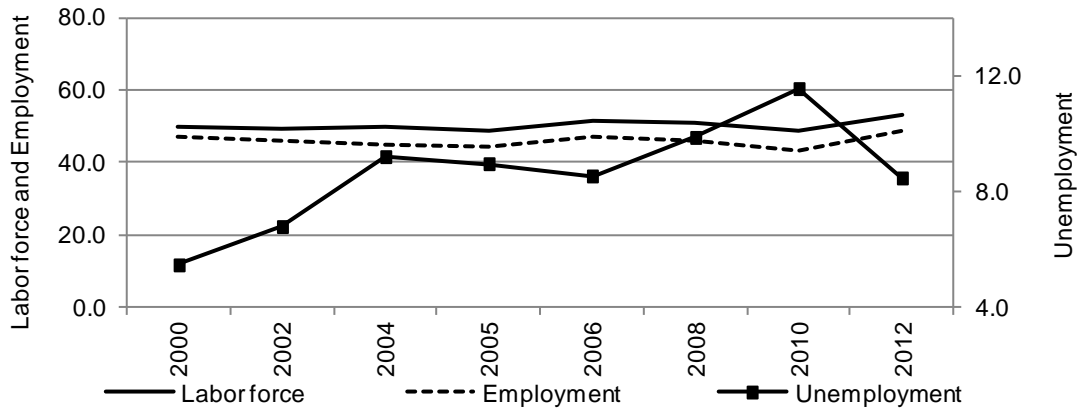
Source: World Development Indicators (the World Bank 2014).

Figure 3: Labour force rate, employment to population rate and unemployment rate: population 15 years old or more, 2000, 2002, 2004–06, 2008, 2010, and 2012

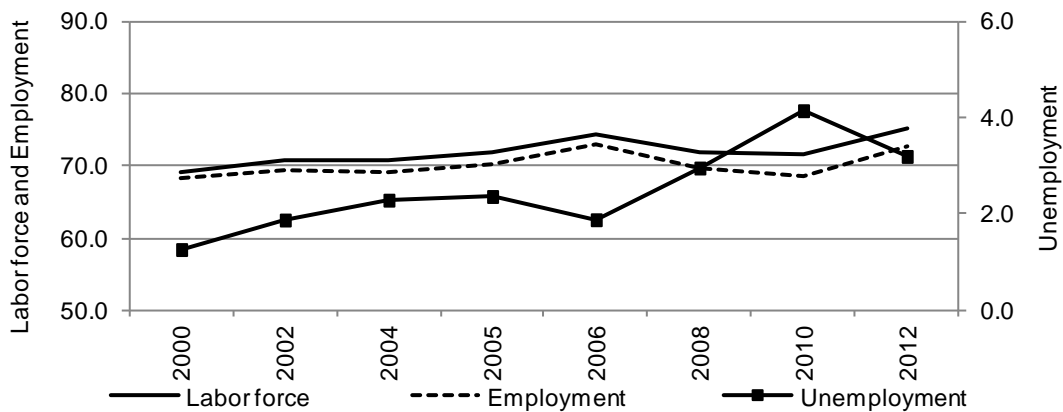
(a) All



(b) Youth (15 to 24 years old)

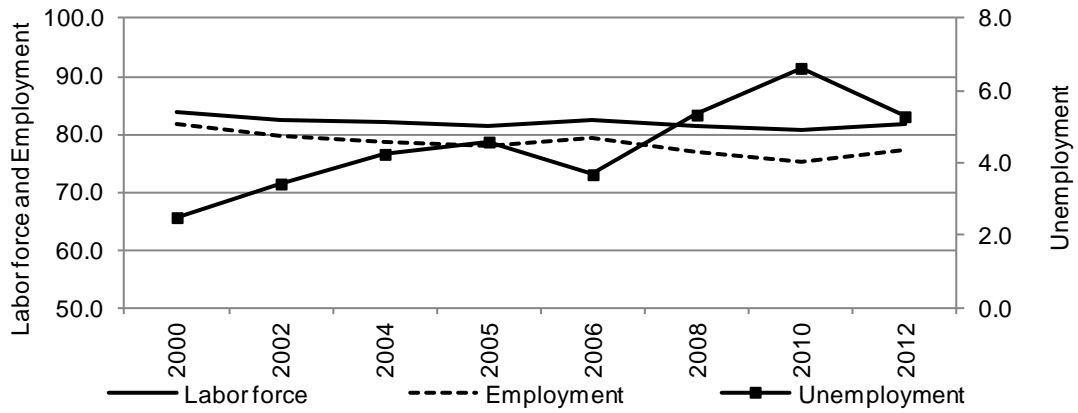


(c) Adults (25 to 64 years old)





(d) Men

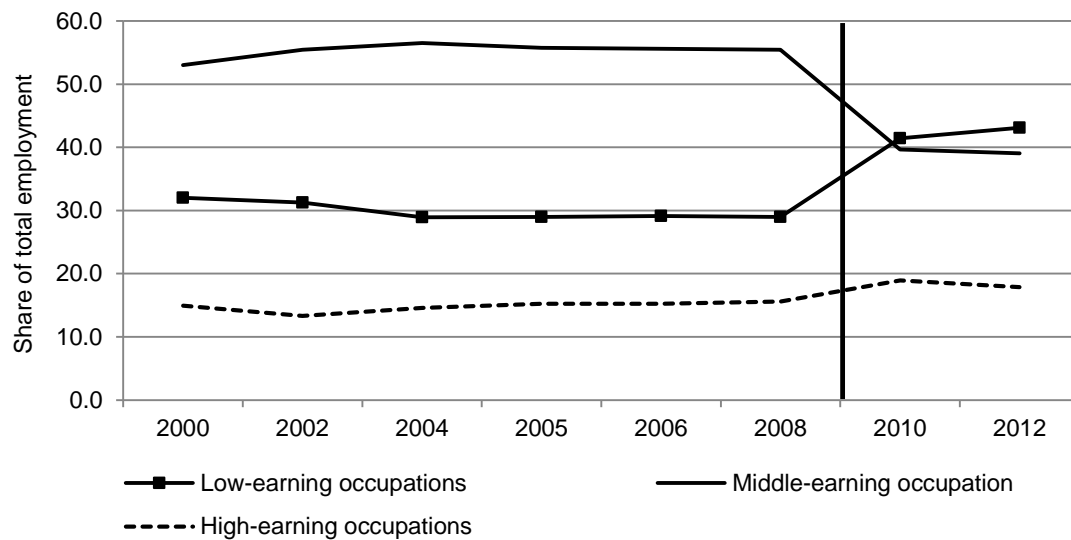


(e) Women



Source: Authors' calculations from SEDLAC (CEDLAS and the World Bank 2014).

Figure 4: Share of employment by occupational group (categories grouped by earning level): all employed workers, 15 years old or more, 2000, 2002, 2004–06, 2008, 2010, and 2012

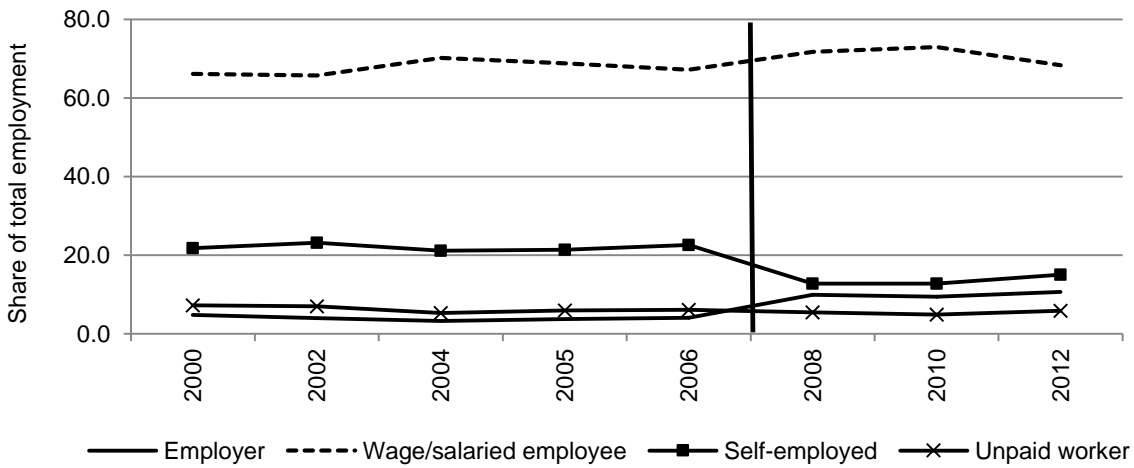


Notes: Low-earning occupations: agricultural, forestry and fishery occupations, elementary, plant and machine operators and assemblers. Medium-earning occupations: craft and trades jobs, services and sales, clerical, armed forces. High-earning occupations: management, professionals, technicians and associate professionals.

The employment structure by occupational group between 2000 and 2008 is not comparable to the employment structure between 2010 and 2012.

Source: Authors' calculations from SEDLAC (CEDLAS and the World Bank 2014).

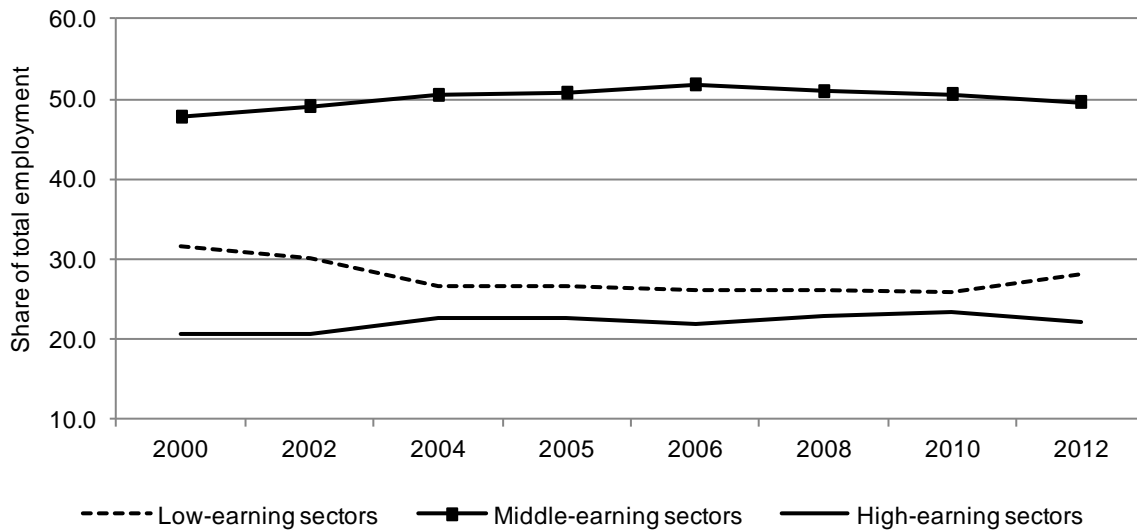
Figure 5: Share of employment by occupational position: all employed workers, 15 years old or more, 2000, 2002, 2004–06, 2008, 2010, and 2012



Notes: The employment structure by occupational position between 2000 and 2006 is not comparable to the employment structure between 2008 and 2012.

Source: Authors' calculations from SEDLAC (CEDLAS and the World Bank 2014).

Figure 6: Share of employment by economic sector (categories grouped by earning levels): all employed workers, 15 years old or more, 2000, 2002, 2004–06, 2008, 2010, and 2012

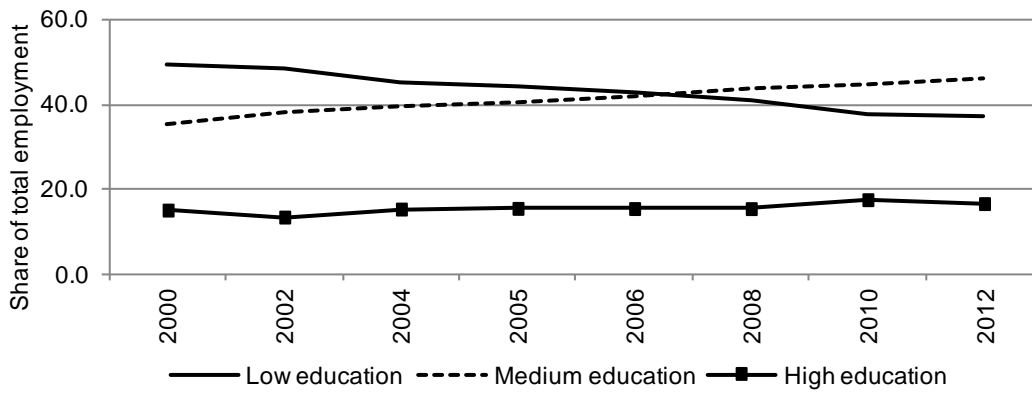


Note: Low-earning sectors: domestic workers, primary activities, low-tech industry. Middle-earning sectors: commerce, construction, high-tech industry, utilities and transportation. High-earning sectors: skilled services, public administration, education and health.

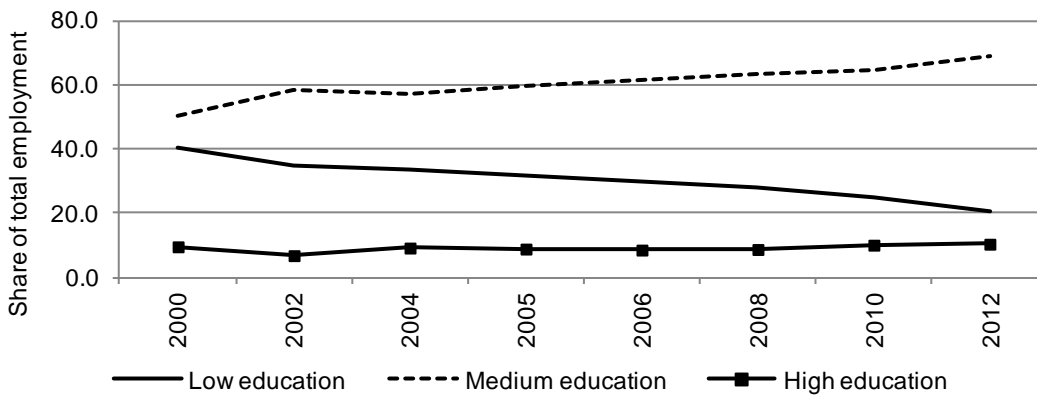
Source: Authors' calculations from SEDLAC (CEDLAS and the World Bank 2014).

Figure 7: Share of employment by educational level: employed workers, 15 years old or more. 2000, 2002, 2004–06, 2008, 2010, and 2012

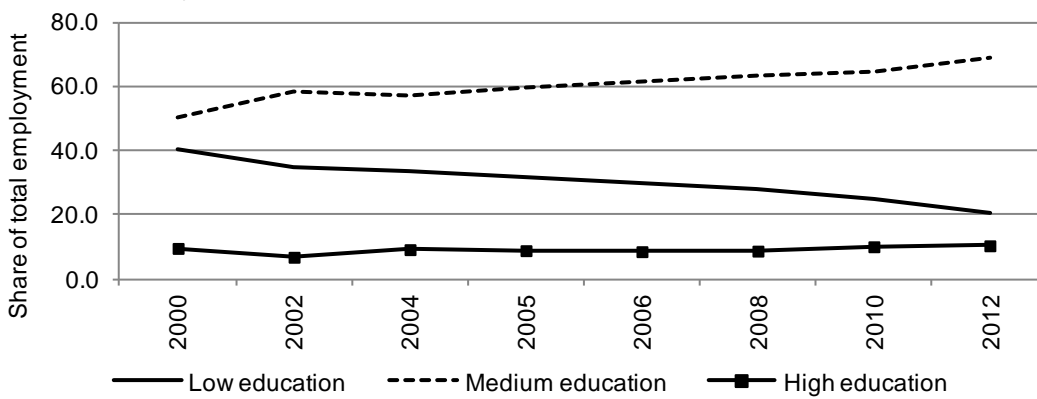
(a) All employed workers



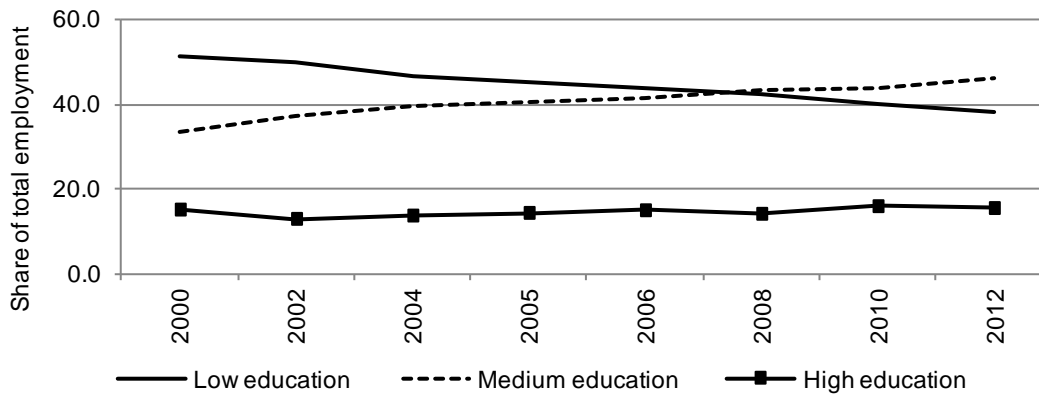
(b) Youth (15 to 24 years old)



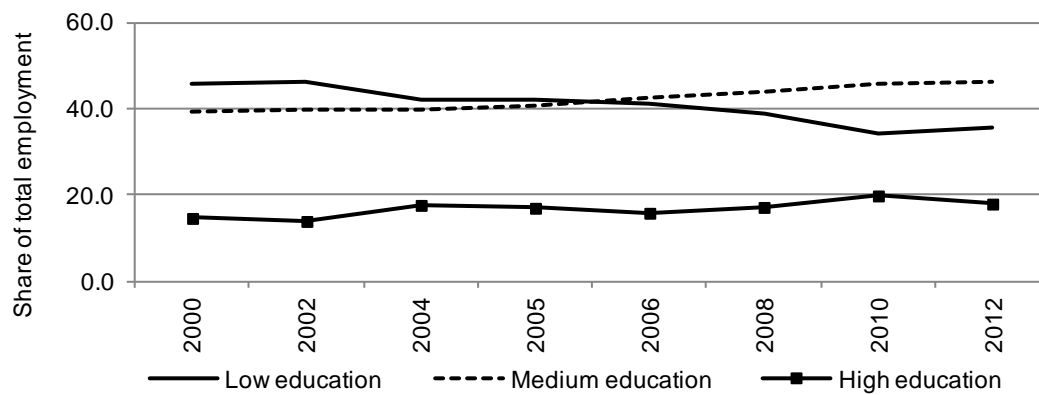
(c) Adults (25 to 64 years old)



(d) Men



(e) Women

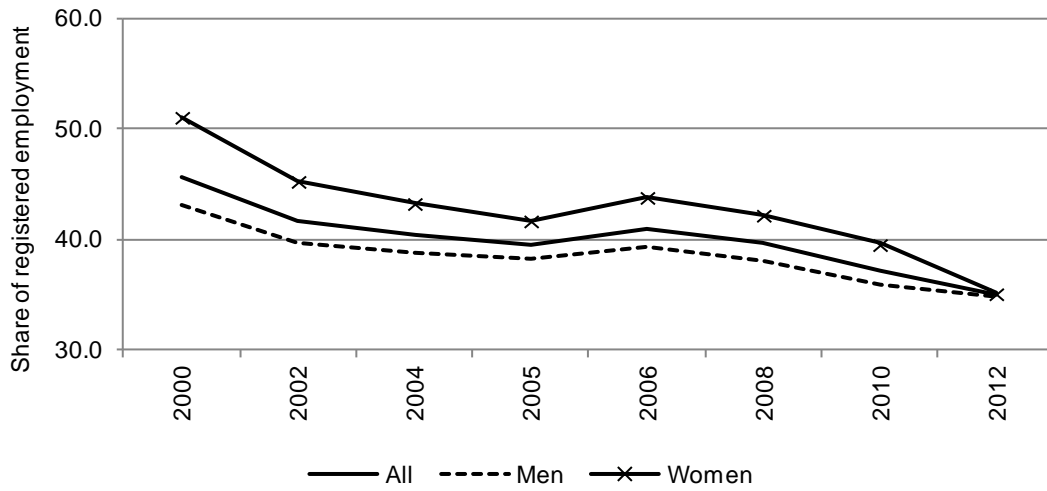


Note: Low: eight years of schooling or less. Medium: from nine to thirteen years of schooling. High: Over thirteen years of schooling.

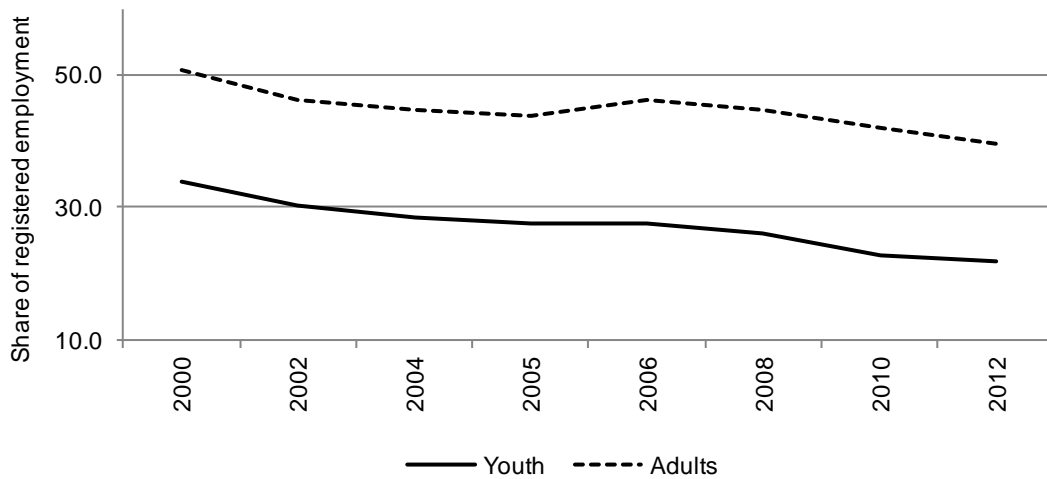
Source: Authors' calculations from SEDLAC (CEDLAS and the World Bank 2014).

Figure 8: Share of employment registered with the national social security system: wage/salaried employees, 15 years old or more, 2000, 2002, 2004–06, 2008, 2010 and 2012

(a) Overall and by gender



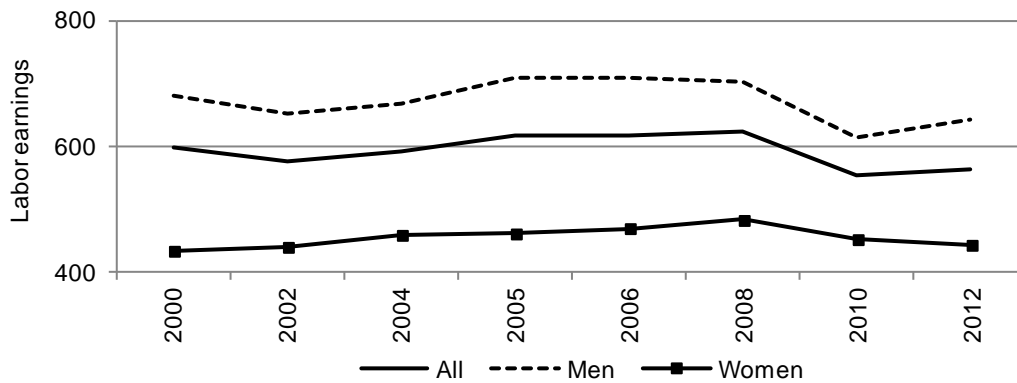
(b) By age group



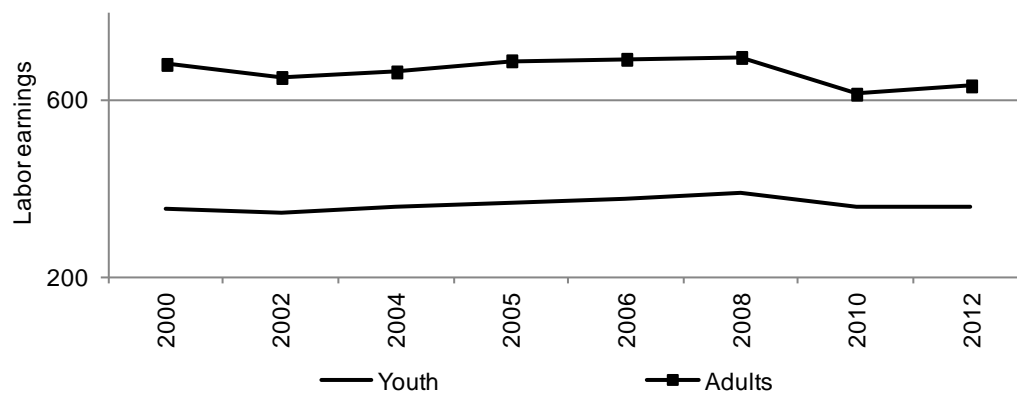
Source: Authors' calculations from SEDLAC (CEDLAS and the World Bank 2014).

Figure 9: Monthly labour earnings at PPP dollars of 2005. 2000, 2002, 2000–06, 2008, 2010, and 2012

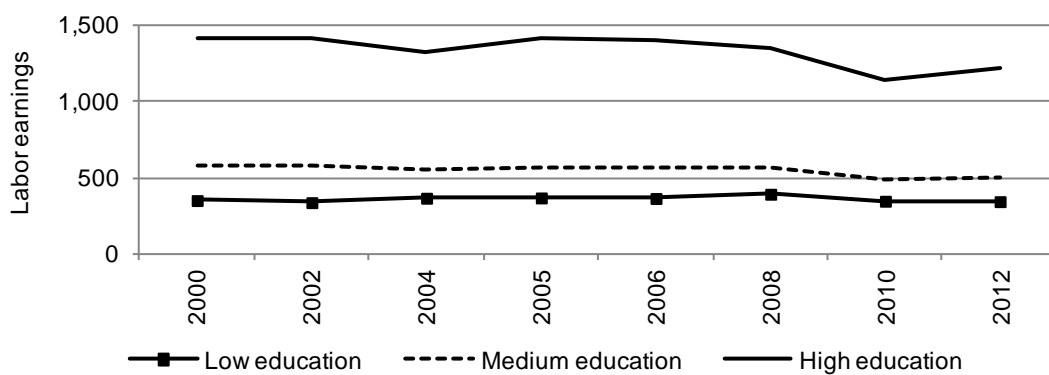
(a) Overall and by gender



(b) By age



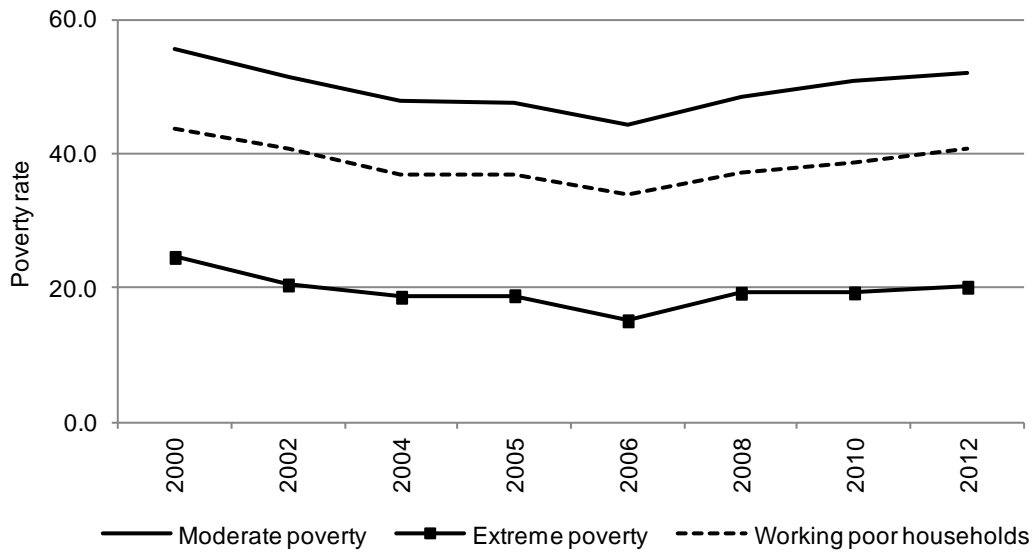
(c) By educational level



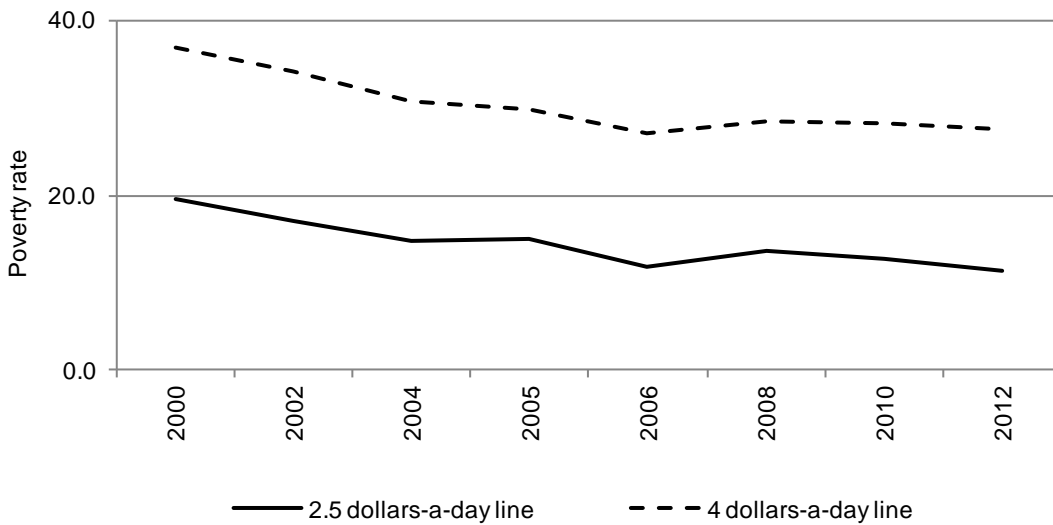
Source: Authors' calculations from SEDLAC (CEDLAS and the World Bank 2014).

Figure 10: Poverty rates and working poor households, 2000, 2002, 2004–06, 2008, 2010, and 2012

(a) Official lines



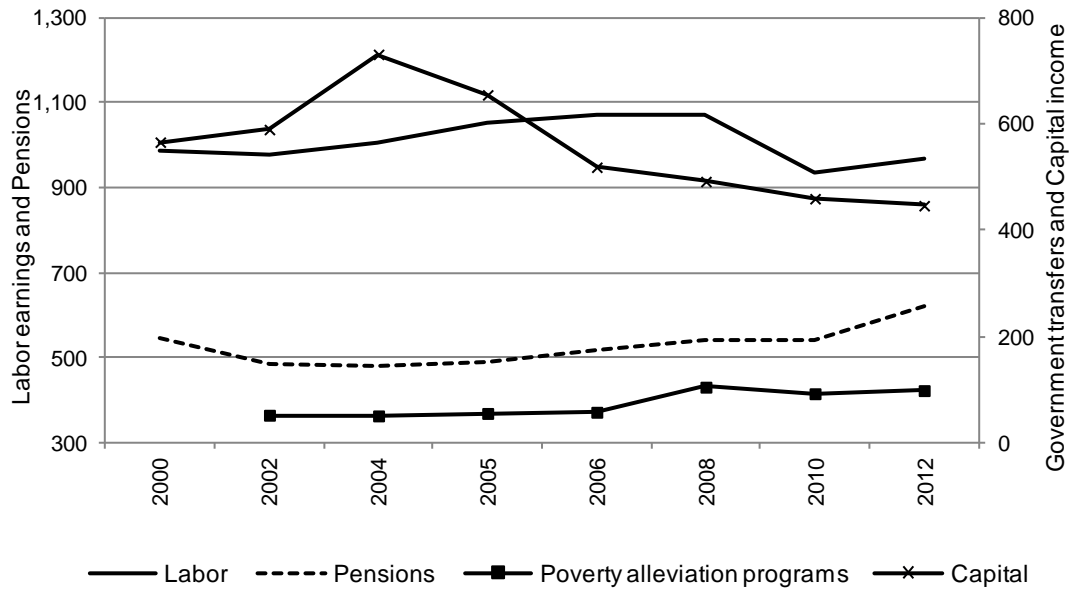
(b) International lines



Source: Authors' calculations from SEDLAC (CEDLAS and the World Bank 2014).



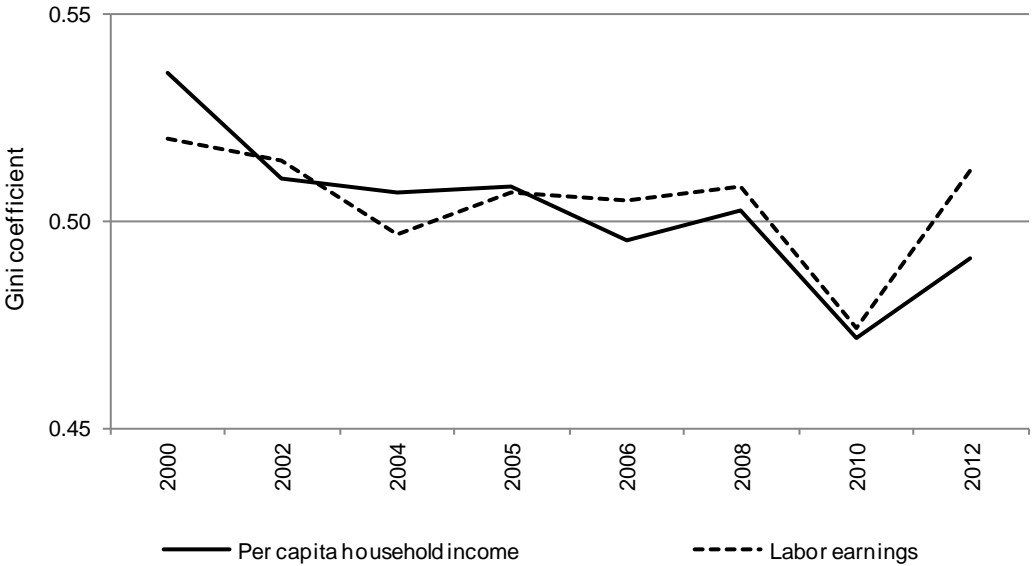
Figure 11: Sources of monthly household total income at PPP dollars of 2005. 2000, 2002, 2004–06, 2008, 2010, and 2012



Note: Poverty alleviation programmes include *Oportunidades*, *Programa para adultos mayores* and other programmes according to the classification in the ENIGH; this information is not available in the ENIGH 2000.

Source: Authors' calculations from SEDLAC (CEDLAS and the World Bank 2014).

Figure 12: Gini coefficient of household per capita income and labour earnings, 2000, 2002, 2004–06, 2008, 2010, and 2012



Note: Gini coefficients of household per capita income and labour earnings are calculated among persons with positive household per capita income and positive labour earnings respectively.

Source: Authors' calculations from SEDLAC (CEDLAS and the World Bank 2014).

## Tables

Table 1: Household surveys' description

	Number of households	Number of persons
2000	10,108	42,266
2002	17,167	72,232
2004	22,595	91,738
2005	23,174	94,308
2006	20,875	83,624
2008	29,468	118,927
2010	27,665	107,781
2012	9,002	33,726

Source: Authors' calculations from SEDLAC (CEDLAS and the World Bank 2014).

Table 2: Macroeconomic variables, 2000-12

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
GDP <sup>1,2</sup>	1,226,761	1,219,333	1,220,941	1,238,311	1,291,505	1,330,671	1,397,223	1,441,211	1,461,392	1,392,702	1,463,262	1,521,534	1,579,113
GDP per capita <sup>1</sup>	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
GDP per person employed <sup>1</sup>	28,560	28,535	28,110	28,296	28,475	29,242	29,698	30,189	29,888	28,348	29,590	30,080	30,305
GDP growth	5.30	-0.61	0.13	1.42	4.30	3.03	5.00	3.15	1.40	-4.70	5.07	3.98	3.78
GDP per capita growth	3.72	-1.99	-1.17	0.17	3.03	1.78	3.70	1.86	0.13	-5.89	3.76	2.70	2.51
Exports of goods and services <sup>1,2</sup>	200,580	193,769	197,754	199,508	217,728	230,169	247,819	256,856	253,393	223,540	269,391	291,539	303,770
Agriculture, value added (% of GDP)	3.49	3.62	3.53	3.54	3.55	3.35	3.36	3.32	3.29	3.52	3.47	3.38	3.56
Industry, value added (% of GDP)	35.71	33.88	33.73	34.57	35.77	35.47	36.33	36.10	36.56	34.29	34.80	35.73	35.75
Services, value added (% of GDP)	60.80	62.50	62.74	61.89	60.67	61.17	60.30	60.58	60.15	62.19	61.73	60.90	60.69
Agriculture, value added <sup>1,2</sup>	26,932	27,636	27,526	28,320	29,378	27,974	29,910	30,579	30,981	30,207	30,372	29,668	31,629
Industry, value added <sup>1,2</sup>	277,800	273,676	273,714	277,374	288,727	295,816	308,701	313,188	311,726	292,360	304,936	314,521	323,331
Services, etc., value added <sup>1,2</sup>	463,431	462,481	463,601	470,051	491,049	510,116	537,222	560,249	574,659	552,239	584,073	612,171	637,952
Total population <sup>2</sup>	103.87	105.34	106.72	108.06	109.38	110.73	112.12	113.53	114.97	116.42	117.89	119.36	120.85
Working age population (15-64) <sup>2</sup>	63.36	64.54	65.68	66.80	67.94	69.10	70.29	71.52	72.78	74.08	75.41	76.80	78.22

1: Purchasing power parity dollars of 2005.

2: In millions.

Source: World Development Indicators (the World Bank 2014).

Table 3: Share of employment by occupational group: all employed workers, 15 years old or more, 2000, 2002, 2004–06, 2008, 2010, and 2012

(a) All employed workers

	Management	Professionals	Technicians & associate professionals	Clerical	Service & sales workers	Agricultural, forestry & fishery workers	Craft & related trades workers	Plant & machine operators, and assemblers	Elementary	Armed forces
2000	2.41	6.34	6.20	6.84	27.02	17.17	17.19	4.32	10.55	1.97
2002	1.94	6.22	5.14	6.38	31.43	16.08	15.48	3.90	11.28	2.15
2004	2.01	7.05	5.55	6.33	32.74	13.26	15.12	4.01	11.64	2.30
2005	2.50	6.65	6.11	6.58	31.90	13.41	15.03	4.01	11.56	2.25
2006	2.52	6.58	6.15	6.20	31.65	13.14	15.66	3.86	12.15	2.08
2008	2.27	7.03	6.30	6.48	31.25	13.32	15.44	3.66	12.00	2.25
2010	4.16	8.13	6.65	6.21	21.88	8.02	11.43	9.21	24.18	0.12
2012	3.47	7.35	7.04	5.81	22.30	10.15	10.85	8.21	24.71	0.11

(b) Youth (15 to 24 years old)

	Management	Professionals	Technicians & associate professionals	Clerical	Service & sales workers	Agricultural, forestry & fishery workers	Craft & related trades workers	Plant & machine operators, and assemblers	Elementary	Armed forces
2000	0.18	3.21	5.65	8.50	25.27	18.98	13.66	8.34	15.16	1.06
2002	0.16	2.20	3.46	8.72	33.79	15.59	11.88	6.26	16.45	1.49
2004	0.43	3.10	4.16	7.79	33.54	14.82	12.32	6.62	15.90	1.31
2005	0.59	2.69	4.52	8.27	32.62	14.49	11.14	6.54	17.75	1.39
2005	2.72	5.26	5.95	3.91	29.65	17.36	17.69	3.86	10.12	3.47
2006	2.87	5.52	5.82	4.03	27.83	16.82	18.51	3.78	11.61	3.21
2008	2.45	5.39	6.11	4.27	28.27	17.61	18.45	3.53	10.56	3.35
2010	4.37	6.90	7.45	3.74	16.25	11.21	13.80	12.20	23.88	0.19
2012	3.95	6.55	8.42	3.43	16.60	12.49	12.86	11.65	23.86	0.18

## (c) Adults (25 to 64 years old)

	Management	Professionals	Technicians & associate professionals	Clerical	Service & sales workers	Agricultural, forestry & fishery workers	Craft & related trades workers	Plant & machine operators, and assemblers	Elementary	Armed forces
2000	3.11	7.65	6.63	6.72	27.60	14.98	18.33	3.35	9.35	2.29
2002	2.54	7.78	5.84	6.08	31.07	14.29	16.50	3.46	10.02	2.41
2004	2.46	8.41	6.14	6.25	32.35	11.51	16.15	3.53	10.62	2.59
2005	3.08	7.97	6.75	6.44	31.52	11.83	16.20	3.56	10.14	2.52
2006	3.12	7.98	6.85	5.99	31.10	11.47	16.63	3.65	10.96	2.26
2008	2.77	8.53	6.82	6.30	30.31	11.97	16.66	3.54	10.60	2.49
2010	5.03	9.42	7.13	5.96	21.36	7.54	12.09	9.67	21.69	0.11
2012	4.27	8.59	7.32	5.73	21.55	9.55	11.82	8.81	22.32	0.03

## (d) Men

	Management	Professionals	Technicians & associate professionals	Clerical	Service & sales workers	Agricultural, forestry & fishery workers	Craft & related trades workers	Plant & machine operators, and assemblers	Elementary	Armed forces
2000	2.96	5.09	6.16	3.72	24.22	21.78	19.42	4.06	9.71	2.87
2002	2.37	4.93	4.92	4.05	28.24	20.28	18.17	3.64	10.20	3.21
2004	2.25	5.19	5.43	3.90	29.05	17.92	18.70	3.71	10.48	3.37
2005	2.72	5.26	5.95	3.91	29.65	17.36	17.69	3.86	10.12	3.47
2006	2.87	5.52	5.82	4.03	27.83	16.82	18.51	3.78	11.61	3.21
2008	2.45	5.39	6.11	4.27	28.27	17.61	18.45	3.53	10.56	3.35
2010	4.37	6.90	7.45	3.74	16.25	11.21	13.80	12.20	23.88	0.19
2012	3.95	6.55	8.42	3.43	16.60	12.49	12.86	11.65	23.86	0.18

(e) Women

	Management	Professionals	Technicians & associate professionals	Clerical	Service & sales workers	Agricultural, forestry & fishery workers	Craft & related trades workers	Plant & machine operators, and assemblers	Elementary	Armed forces
2000	1.38	8.64	6.28	12.57	32.15	8.70	13.08	4.78	12.11	0.31
2002	1.22	8.41	5.53	10.31	36.83	8.99	10.93	4.33	13.10	0.34
2004	1.61	10.13	5.75	10.36	38.86	5.52	9.18	4.51	13.56	0.52
2005	2.15	8.87	6.37	10.87	35.53	7.06	10.74	4.26	13.88	0.28
2006	2.00	8.15	6.64	9.40	37.30	7.72	11.45	3.99	12.94	0.42
2008	1.99	9.65	6.60	10.01	36.03	6.44	10.61	3.88	14.30	0.49
2010	3.81	10.16	5.33	10.28	31.13	2.79	7.53	4.29	24.67	0.00
2012	2.76	8.54	5.01	9.32	30.72	6.70	7.87	3.11	25.97	

Note: The employment structure by occupational group between 2000 and 2008 is not comparable to the employment structure between 2010 and 2012.

Source: Authors' calculations from SEDLAC (CEDLAS and the World Bank 2014).

Table 4: Share of employment by occupational position, all employed workers, 15 years old or more, 2000, 2002, 2004–06, 2008, 2010, and 2012

(a) All employed workers

	Employer	Wage/salaried employee	Self-employed	Unpaid worker
2000	4.79	66.14	21.81	7.26
2002	4.04	65.73	23.21	7.02
2004	3.29	70.22	21.17	5.31
2005	3.81	68.86	21.39	5.94
2006	4.07	67.16	22.61	6.17
2008	9.93	71.78	12.80	5.49
2010	9.43	72.94	12.76	4.87
2012	10.72	68.31	15.06	5.91

(b) Youth (15 to 24 years old)

	Employer	Wage/salaried employee	Self-employed	Unpaid worker
2000	0.48	78.20	6.07	15.26
2002	0.68	77.30	6.04	15.99
2004	0.46	81.80	5.90	11.84
2005	0.46	80.76	5.55	13.24
2006	0.51	79.90	5.96	13.63
2008	1.59	83.52	3.70	11.19
2010	2.17	83.67	3.99	10.17
2012	2.45	78.88	6.32	12.35

(c) Adults (25 to 64 years old)

	Employer	Wage/salaried employee	Self-employed	Unpaid worker
2000	5.88	64.91	24.35	4.86
2002	4.81	64.77	25.87	4.54
2004	3.73	69.72	22.92	3.63
2005	4.32	68.14	23.54	4.00
2006	4.59	66.67	24.70	4.05
2008	11.35	70.90	13.91	3.84
2010	10.44	72.37	13.76	3.43
2012	11.82	68.25	15.78	4.15

(d) Men

	Employer	Wage/salaried employee	Self-employed	Unpaid worker
2000	5.88	64.91	24.35	4.86
2002	4.81	64.77	25.87	4.54
2004	3.73	69.72	22.92	3.63
2005	4.32	68.14	23.54	4.00
2006	4.59	66.67	24.70	4.05
2008	11.35	70.90	13.91	3.84
2010	10.44	72.37	13.76	3.43
2012	11.82	68.25	15.78	4.15

(e) Women

	Employer	Wage/salaried employee	Self-employed	Unpaid worker
2000	2.27	60.29	25.67	11.77
2002	1.77	60.90	26.89	10.44
2004	1.72	65.34	25.68	7.26
2005	2.27	63.18	25.61	8.93
2006	2.09	60.69	28.04	9.18
2008	7.51	68.15	15.89	8.45
2010	7.70	70.16	15.74	6.40
2012	9.27	63.50	19.40	7.83

The employment structure by occupational position between 2000 and 2006 is not comparable to the employment structure between 2008 and 2012.

Source: Authors' calculations from SEDLAC (CEDLAS and the World Bank 2014).



Table 5: Share of employment by economic sector: all employed workers, 15 years old or more, 2000, 2002, 2004–06, 2008, 2010, and 2012

(a) All employed workers

	Primary activities	Low-tech industry	High-tech industry	Construction	Commerce	Utilities & transportation	Skilled services	Public administration	Education & Health	Domestic workers
2000	17.82	10.12	9.45	7.79	26.10	4.46	5.42	4.29	10.96	3.58
2002	16.79	8.86	8.61	7.52	28.18	4.81	5.08	4.45	11.21	4.48
2004	13.91	9.28	9.20	7.62	28.82	4.89	5.88	4.84	12.02	3.54
2005	14.33	8.33	8.78	7.65	29.49	4.87	5.86	4.54	12.24	3.90
2006	13.89	8.10	9.19	8.71	29.12	4.82	5.75	4.27	11.90	4.25
2008	14.16	7.45	8.68	8.71	29.06	4.54	6.12	4.92	11.86	4.50
2010	13.79	7.63	8.26	8.53	29.20	4.66	6.45	4.53	12.44	4.50
2012	16.00	7.50	7.63	7.51	30.00	4.50	6.41	4.42	11.41	4.62

(b) Youth (15 to 24 years old)

	Primary activities	Low-tech industry	High-tech industry	Construction	Commerce	Utilities & transportation	Skilled services	Public administration	Education & Health	Domestic workers
2000	19.13	12.39	13.42	8.08	25.64	3.40	5.55	2.45	7.14	2.80
2002	15.92	11.42	10.68	8.08	32.19	3.28	4.73	2.58	7.43	3.69
2004	15.05	11.60	11.41	7.31	32.65	2.61	5.72	2.62	8.17	2.86
2005	15.28	10.12	10.90	8.53	32.47	2.97	5.59	2.34	7.73	4.07
2005	18.63	7.01	10.36	12.02	24.83	7.19	6.09	4.94	8.35	0.57
2006	17.88	6.45	10.97	14.18	23.80	7.26	5.81	4.71	8.15	0.79
2008	18.79	6.25	9.97	13.66	24.52	6.75	6.08	5.23	8.17	0.59
2010	19.04	6.80	9.69	13.17	24.20	6.77	6.52	4.74	8.47	0.61
2012	20.04	6.53	9.16	12.25	24.59	7.00	6.71	4.66	8.45	0.63

(c) Adults (25 to 64 years old)

	Primary activities	Low-tech industry	High-tech industry	Construction	Commerce	Utilities & transportation	Skilled services	Public administration	Education & Health	Domestic workers
2000	15.78	9.46	8.75	7.86	26.31	4.92	5.62	5.05	12.48	3.77
2002	15.12	8.34	8.28	7.72	27.42	5.41	5.23	5.13	12.59	4.76
2004	12.23	8.75	9.03	7.94	27.69	5.67	5.95	5.59	13.44	3.71
2005	12.81	8.00	8.55	7.62	28.59	5.56	5.99	5.25	13.74	3.88
2006	12.31	7.76	8.81	8.79	27.77	5.51	6.15	5.01	13.34	4.55
2008	12.89	7.26	8.72	8.59	27.63	5.09	6.02	5.74	13.35	4.72
2010	12.56	7.24	8.30	8.23	28.04	5.08	6.69	5.27	13.71	4.87
2012	14.49	7.24	7.97	7.70	28.91	4.96	6.46	4.97	12.45	4.83

(d) Men

	Primary activities	Low-tech industry	High-tech industry	Construction	Commerce	Utilities & transportation	Skilled services	Public administration	Education & Health	Domestic workers
2000	22.66	8.42	10.14	11.79	22.48	6.48	5.60	4.40	7.33	0.71
2002	21.29	7.12	9.93	11.65	23.93	7.20	4.77	4.80	8.20	1.11
2004	18.70	8.38	10.54	11.77	23.54	7.31	5.90	5.15	7.89	0.82
2005	18.63	7.01	10.36	12.02	24.83	7.19	6.09	4.94	8.35	0.57
2006	17.88	6.45	10.97	14.18	23.80	7.26	5.81	4.71	8.15	0.79
2008	18.79	6.25	9.97	13.66	24.52	6.75	6.08	5.23	8.17	0.59
2010	19.04	6.80	9.69	13.17	24.20	6.77	6.52	4.74	8.47	0.61
2012	20.04	6.53	9.16	12.25	24.59	7.00	6.71	4.66	8.45	0.63

(e) Women

	Primary activities	Low-tech industry	High-tech industry	Construction	Commerce	Utilities & transportation	Skilled services	Public administration	Education & Health	Domestic workers
2000	8.94	13.25	8.20	0.43	32.76	0.76	5.09	4.07	17.65	8.85
2002	9.20	11.81	6.38	0.56	35.37	0.77	5.60	3.87	16.29	10.16
2004	5.97	10.77	6.97	0.75	37.56	0.87	5.84	4.32	18.88	8.06
2005	7.42	10.44	6.25	0.62	36.98	1.15	5.48	3.90	18.50	9.26
2006	8.02	10.53	6.57	0.64	36.96	1.22	5.67	3.61	17.43	9.36
2008	6.73	9.37	6.62	0.80	36.31	1.01	6.17	4.44	17.78	10.77
2010	5.17	9.00	5.92	0.90	37.42	1.18	6.33	4.20	18.98	10.90
2012	10.03	8.94	5.38	0.50	38.01	0.80	5.97	4.06	15.80	10.52

Source: Authors' calculations from SEDLAC (CEDLAS and the World Bank 2014).

Table 6: Monthly labour earnings at PPP dollars of 2005. 2000, 2002, 2004–06, 2008, 2010, and 2012

(a) All employed workers, by gender, age group, occupational position, and educational level

	All	Gender		Age		Occupational position			Educational level		
		Men	Women	Youth	Adults	Employer	Wage/salaried employee	Self-employed	Low	Medium	High
2000	598.6	681.3	433.4	353.0	681.5	1645.0	593.5	384.4	351.4	576.9	1413.1
2002	575.4	652.5	439.6	343.2	651.8	1586.3	588.4	382.0	337.8	574.5	1411.0
2004	591.7	669.3	458.7	360.1	664.4	1522.8	599.3	429.9	366.9	556.5	1325.7
2005	616.5	707.8	460.9	368.1	689.6	1800.7	607.3	446.9	368.7	567.6	1414.0
2006	616.6	710.4	469.4	374.6	693.0	1567.4	633.6	401.9	365.0	569.4	1403.7
2008	622.0	703.6	482.5	390.2	697.2	1074.6	606.3	381.3	393.0	565.6	1352.5
2010	554.6	614.9	451.9	359.7	613.9	694.5	577.6	323.8	347.0	493.1	1138.7
2012	563.9	641.5	442.9	357.8	632.7	758.8	594.6	294.0	344.3	497.7	1214.4

(b) By economic sector

	Primary activities	Low-tech industry	High-tech industry	Construction	Commerce	Utilities & transportation	Skilled services	Public administration	Education & Health	Domestic workers
2000	278.3	556.4	690.1	581.6	588.2	653.0	1053.1	829.1	814.2	201.7
2002	260.7	414.8	707.8	537.2	575.3	700.9	935.9	829.0	846.2	225.2
2004	328.3	492.7	704.8	569.6	516.3	740.7	847.4	894.9	807.8	263.1
2005	348.4	529.6	711.5	610.6	526.0	706.9	1081.4	931.4	797.5	264.2
2006	348.5	471.5	724.5	633.7	525.3	721.4	1002.2	1014.1	841.6	254.2
2008	443.7	486.2	679.4	646.9	547.8	723.4	890.5	917.5	821.3	260.0
2010	328.7	426.2	589.0	575.5	483.2	635.5	841.6	879.4	758.7	250.3
2012	314.2	435.1	646.9	634.5	478.8	602.1	830.4	1061.1	773.7	250.1

(c) By occupational group

	Management	Professionals	Technicians & associate professional	Clerical	Service & sales workers	Skilled agricultural, forestry & fishery workers	Craft & related trades	Plant & machine operators, and assemblers	Elementary	Armed forces
2000	2766.4	1182.1	975.3	567.7	550.8	246.5	536.1	468.2	283.1	552.1
2002	2328.7	1330.1	1054.6	594.5	509.8	230.5	543.0	472.5	292.8	573.3
2004	2211.2	1261.3	959.8	597.3	507.7	277.6	577.5	462.8	320.3	642.0
2005	2751.3	1222.8	960.6	597.8	514.1	286.7	569.6	466.1	320.6	607.4
2006	2489.2	1275.1	989.4	621.1	505.1	289.9	570.1	496.9	343.2	601.9
2008	2278.5	1160.3	917.2	607.7	519.5	399.8	616.1	498.8	335.4	632.2
2010	1675.3	1066.3	696.7	549.4	481.9	281.0	472.5	551.6	316.5	941.0
2012	1962.2	1192.1	686.0	563.8	496.3	262.2	457.5	545.6	321.6	1471.6

Notes: The employment structure by occupational group between 2000 and 2008 is not comparable to the employment structure between 2010 and 2012.

The employment structure by occupational position between 2000 and 2006 is not comparable to the employment structure between 2008 and 2012.

Source: Authors' calculations from SEDLAC (CEDLAS and the World Bank 2014).

Table 7: Hourly wage in main occupation at PPP dollars of 2005. 2000, 2002, 2004–06, 2008, 2010, and 2012

(a) All employed workers, by gender, by age group, by occupational position, and educational level

	All	Gender		Age		Occupational position			Educational level		
		Men	Women	Youth	Adults	Employer	Wage/salaried employee	Self-employed	Low	Medium	High
2000	3.72	4.05	3.07	2.29	4.19	11.73	3.45	2.81	2.14	3.37	9.42
2002	3.53	3.70	3.23	2.11	3.97	8.80	3.46	2.96	2.17	3.44	8.56
2008	3.87	4.07	3.53	2.45	4.26	6.80	3.63	2.96	2.40	3.45	8.71
2010	3.35	3.39	3.27	2.20	3.67	4.09	3.40	2.58	2.14	2.88	6.93
2012	3.53	3.74	3.20	2.24	3.94	4.59	3.60	2.49	2.27	2.92	7.88

(b) By economic sector

	Primary activities	Low-tech industry	High-tech industry	Construction	Commerce	Utilities & transportation	Skilled services	Public administration	Education & Health	Domestic workers
2000	1.85	3.32	3.78	3.07	3.53	5.53	6.41	4.37	5.84	1.62
2002	1.84	2.48	3.72	3.02	3.35	4.04	6.24	4.31	5.84	2.39
2008	3.07	2.80	3.73	3.62	3.23	3.92	5.17	5.70	6.20	2.23
2010	1.99	2.38	3.15	3.01	2.85	3.52	4.73	4.80	5.67	2.16
2012	2.24	2.87	3.38	3.63	2.86	2.86	5.03	6.89	5.44	2.45

(c) By occupational category

	Management	Professionals	Technicians & associate professionals	Clerical	Service & sales workers	Skilled agricultural, forestry & fishery workers	Craft & related trades	Plant & machine operators, and assemblers	Elementary	Armed forces
2000	15.36	8.17	7.04	3.35	3.47	1.71	3.03	2.60	1.73	2.51
2002	13.32	8.64	6.16	3.46	3.18	1.71	3.14	2.52	2.05	2.55
2008	14.11	8.38	5.36	3.59	3.17	2.91	3.49	2.57	2.25	3.04
2010	9.50	7.63	4.07	3.18	2.85	1.77	2.67	2.73	2.05	3.62
2012	10.76	9.18	4.42	3.21	2.89	2.18	2.57	2.57	2.18	2.96

Notes: Data on hourly wages is not available for 2004–06.

The employment structure by occupational group between 2000 and 2008 is not comparable to the employment structure between 2010 and 2012.

The employment structure by occupational positions between 2000 and 2006 is not comparable to the employment structure between 2008 and 2012.

Source: Authors' calculations from SEDLAC (CEDLAS and the World Bank 2014).

Table 8: Share of persons in the labour force by educational levels: population 15 years old or more, 2000, 2002, 2004–06, 2008, 2010, and 2012

	Low	Medium	High
2000	49.24	35.75	15.02
2002	48.00	38.35	13.65
2004	44.72	40.00	15.28
2005	43.64	40.79	15.57
2006	42.25	42.36	15.39
2008	40.75	43.91	15.34
2010	37.66	44.90	17.44
2012	36.85	46.42	16.73

Source: Authors' calculations from SEDLAC (CEDLAS and the World Bank 2014).

Table 9: Unemployment rate by educational level: population 15 years old or more, 2000, 2002, 2004-2006, 2008, 2010, and 2012

	Low	Medium	High
2000	1.69	2.89	2.09
2002	1.99	3.47	4.88
2004	3.15	4.45	3.85
2005	2.84	4.44	4.63
2006	2.29	4.33	3.32
2008	3.94	5.07	4.22
2010	5.15	6.16	5.45
2012	3.34	4.59	5.20

Source: Authors' calculations from SEDLAC (CEDLAS and the World Bank 2014).