

# ***The Growth-Employment-Poverty Nexus in Latin America in the 2000s***

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# WORKING HARD, WORKING POOR



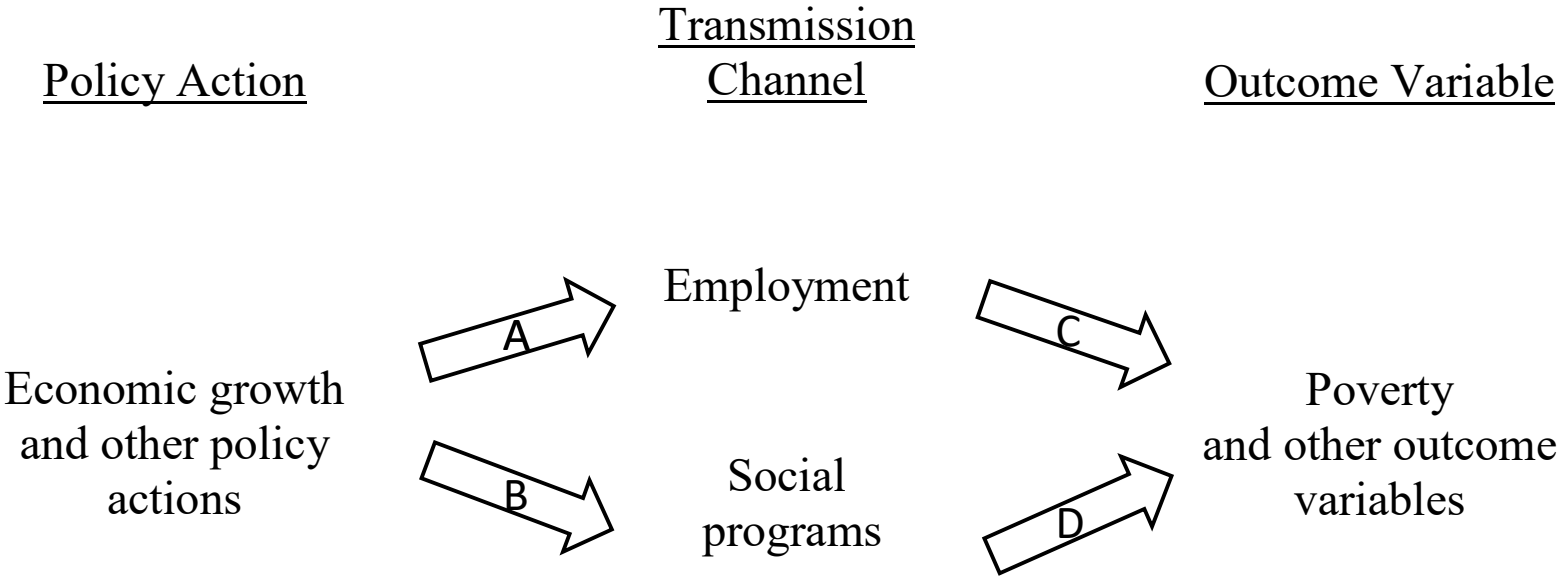
— A GLOBAL JOURNEY —

GARY S. FIELDS

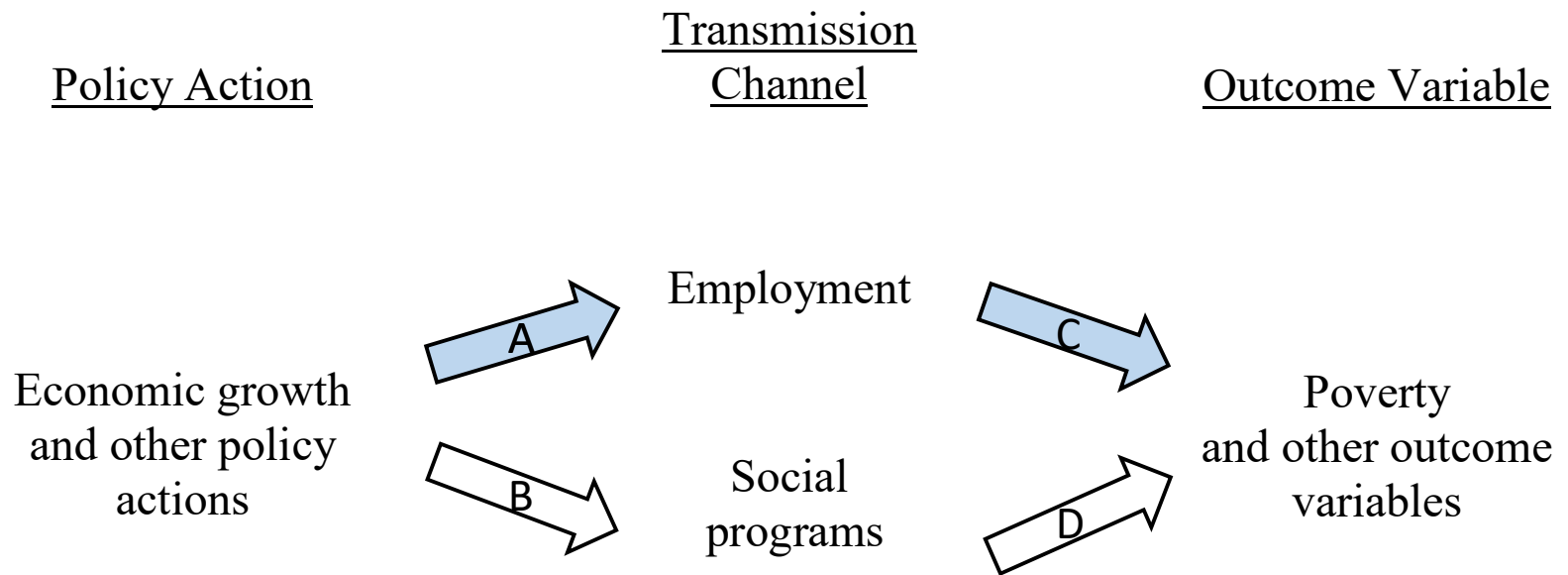
# Motivation

- Interest in the links between growth, employment, and poverty.
- Main questions:
  - Has economic growth resulted in economic development via improved labor market conditions in the 2000s?
  - 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?

# Analytical Framework (Fields, 2016)

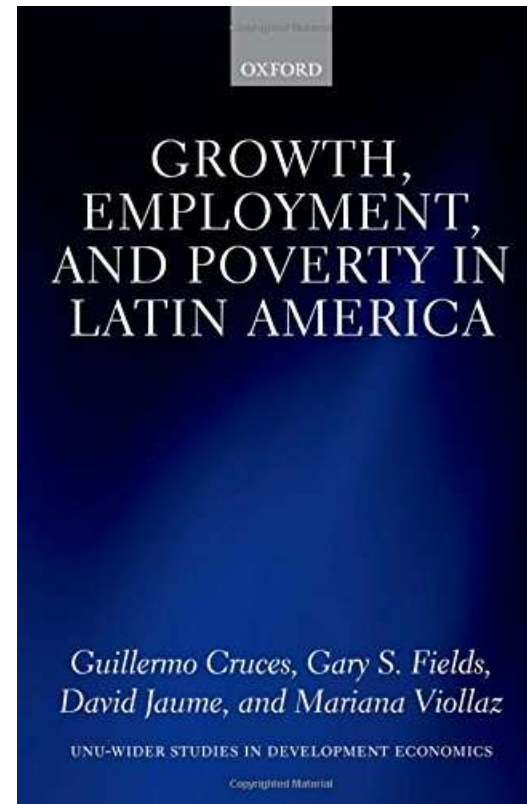


# In this research



# Our outputs

- 17 WIDER working papers :
  - 16 country papers
  - 1 cross-country paper



- A book: **“Growth, employment and Poverty in Latin America”** published by *Oxford University Press* in July 2017.

# Data sources

- Microeconomic data from SEDLAC (CEDLAS and World Bank) for 16 countries, from 2000 to 2012/2013:
  - More than 150 household surveys, 5 million households and 18 million people.
  - Comparable time series for a wide range of labor market, poverty and income inequality indicators.
- Aggregate macroeconomic indicators from WDI (World Bank) and data on social expenditure from ECLAC (United Nations).

# Labor market indicators and Evaluation criteria

Labor market indicators ( $Y_{ik}$ )	Change from initial to final year	Welfare improving change
<b>Employment and earnings indicators</b>		
Unemployment rate	$\Delta Y_{ik}$	Reduction
Shr of low-earnings occupations	$\Delta Y_{ik}$	Reduction
Shr of high-earnings occupations	$\Delta Y_{ik}$	Increase
Shr of paid employees	$\Delta Y_{ik}$	Increase
Shr of self-employment	$\Delta Y_{ik}$	Reduction
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Shr of workers registered with SS	$\Delta Y_{ik}$	Increase
Real monthly labor earnings	$\Delta \% Y_{ik}$	Increase
<b>Poverty and inequality indicators</b>		
2.5 USD-a-day poverty rate	$\Delta Y_{ik}$	Reduction
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<b>Index of improving changes (<math>Z_i</math>)</b>	$(1/K)\sum Y_{ik}^+$	Increase



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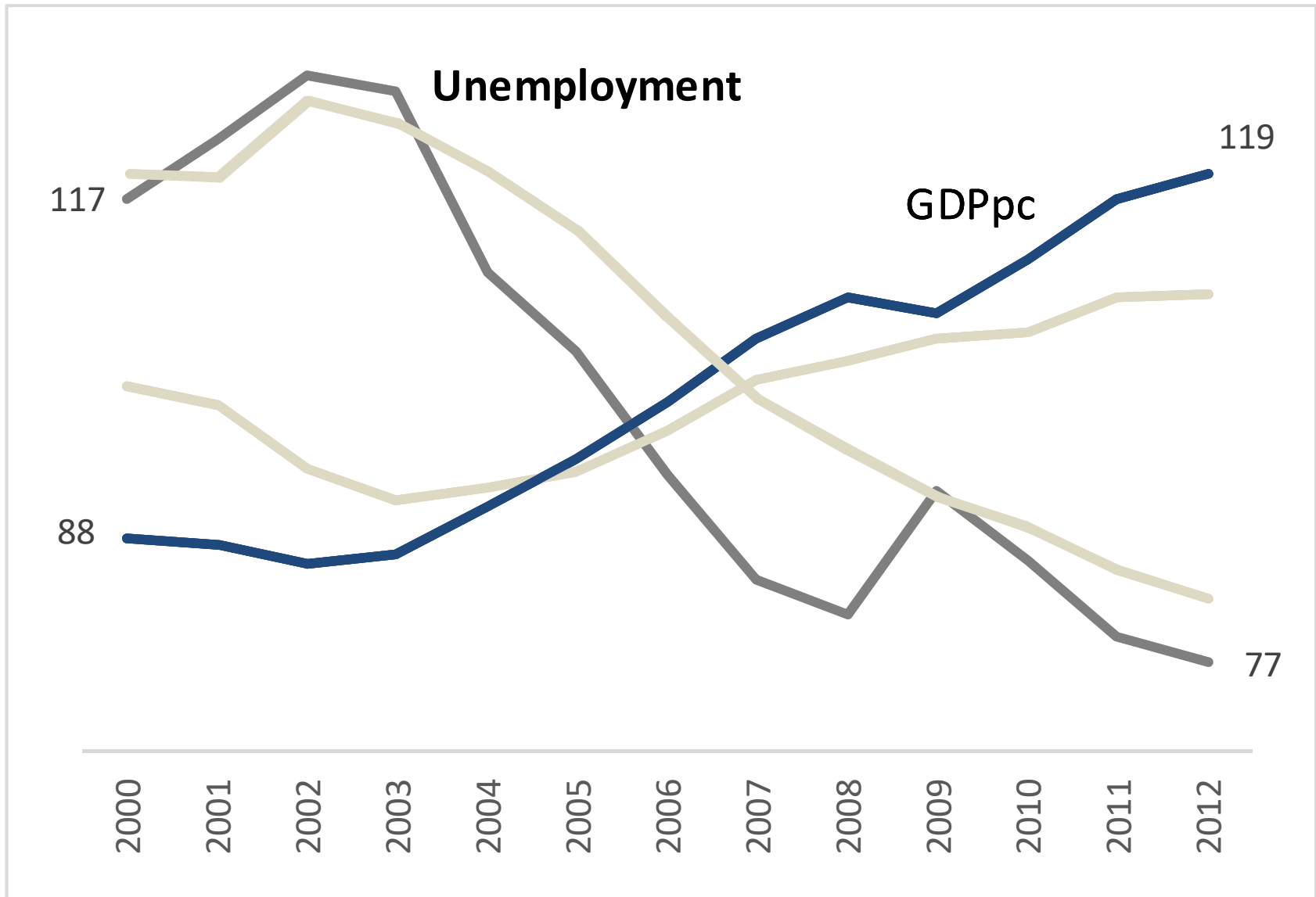
***Changing Labor Market  
Indicators and the Rate of  
Economic Growth in Latin  
America during the 2000s***

# Changing labor market indicators and economic growth

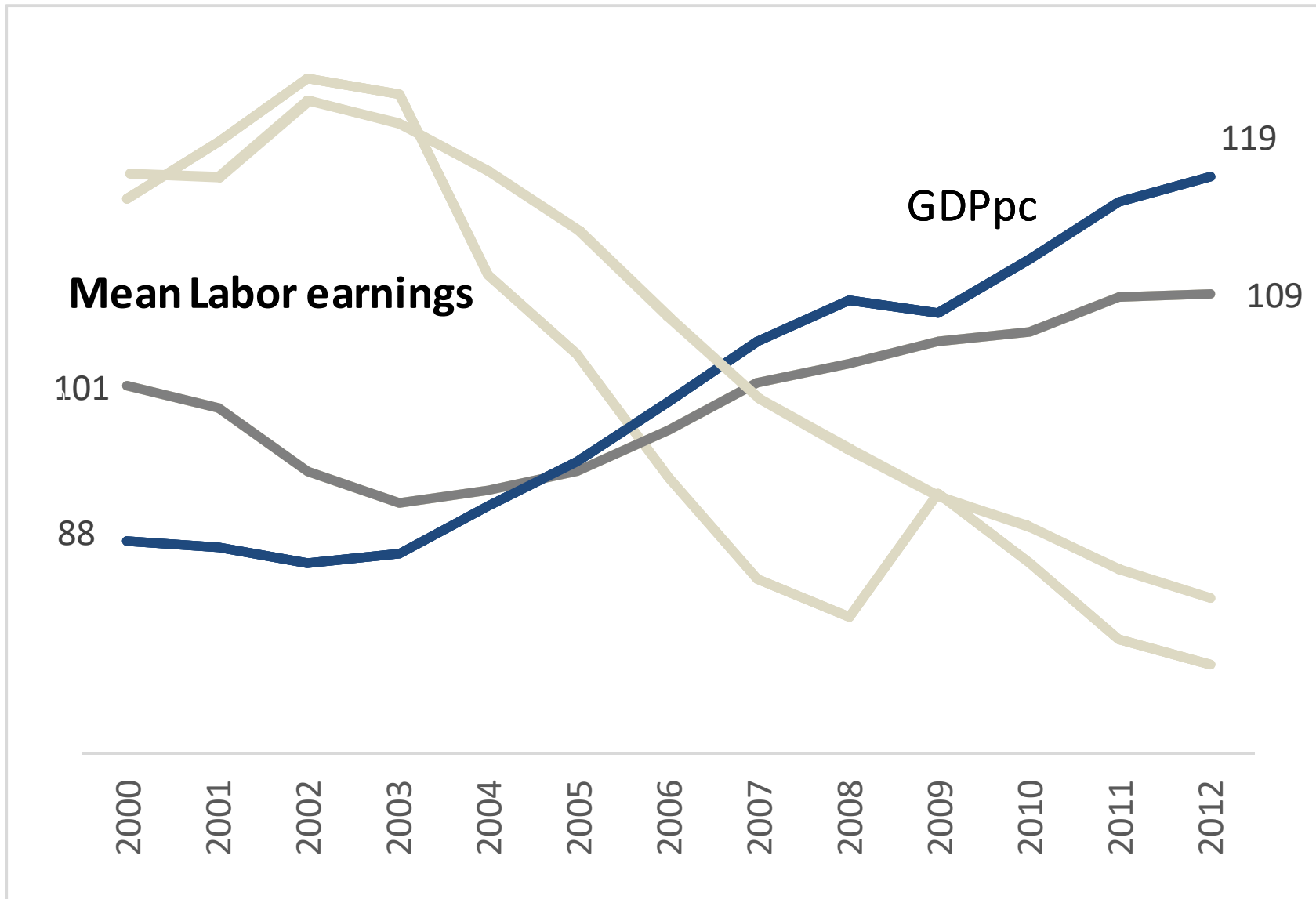
- Q: From beginning to end, how GDP per capita and LMI changed?



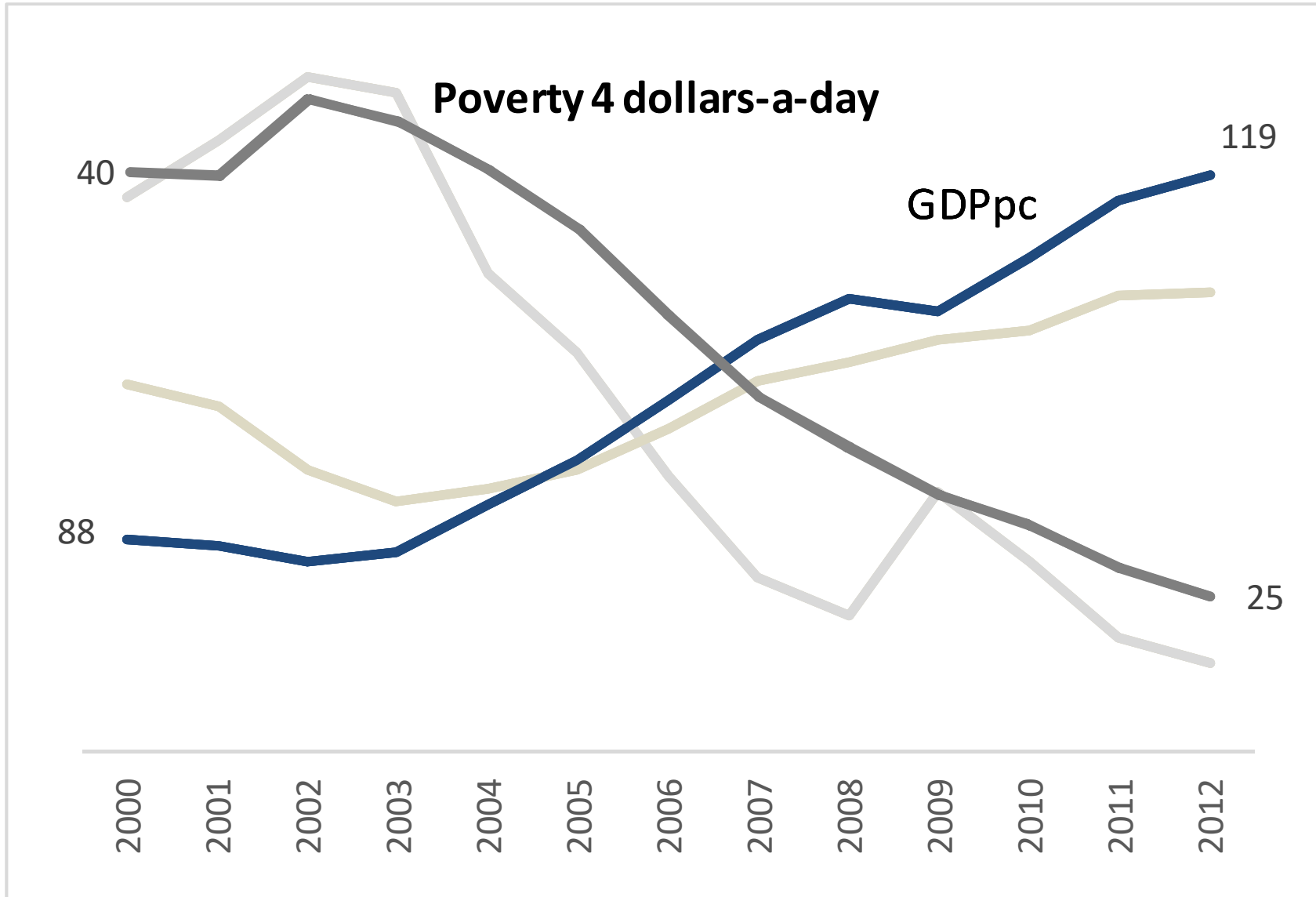
# Unemployment and GDP in Latin America during the 2000s



# Labor earning and GDP in Latin America during the 2000s

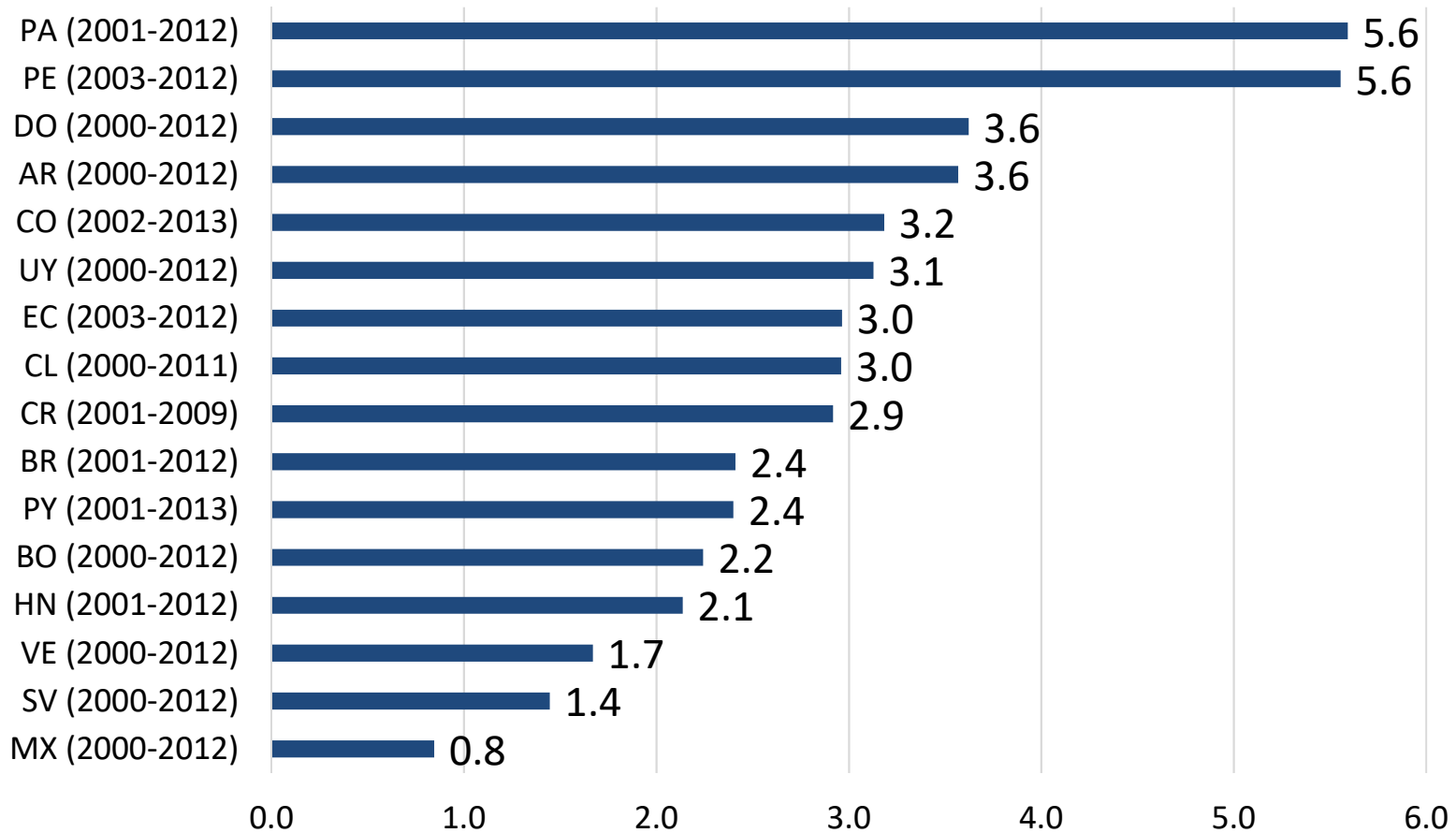


# Poverty and GDP in Latin America during the 2000s



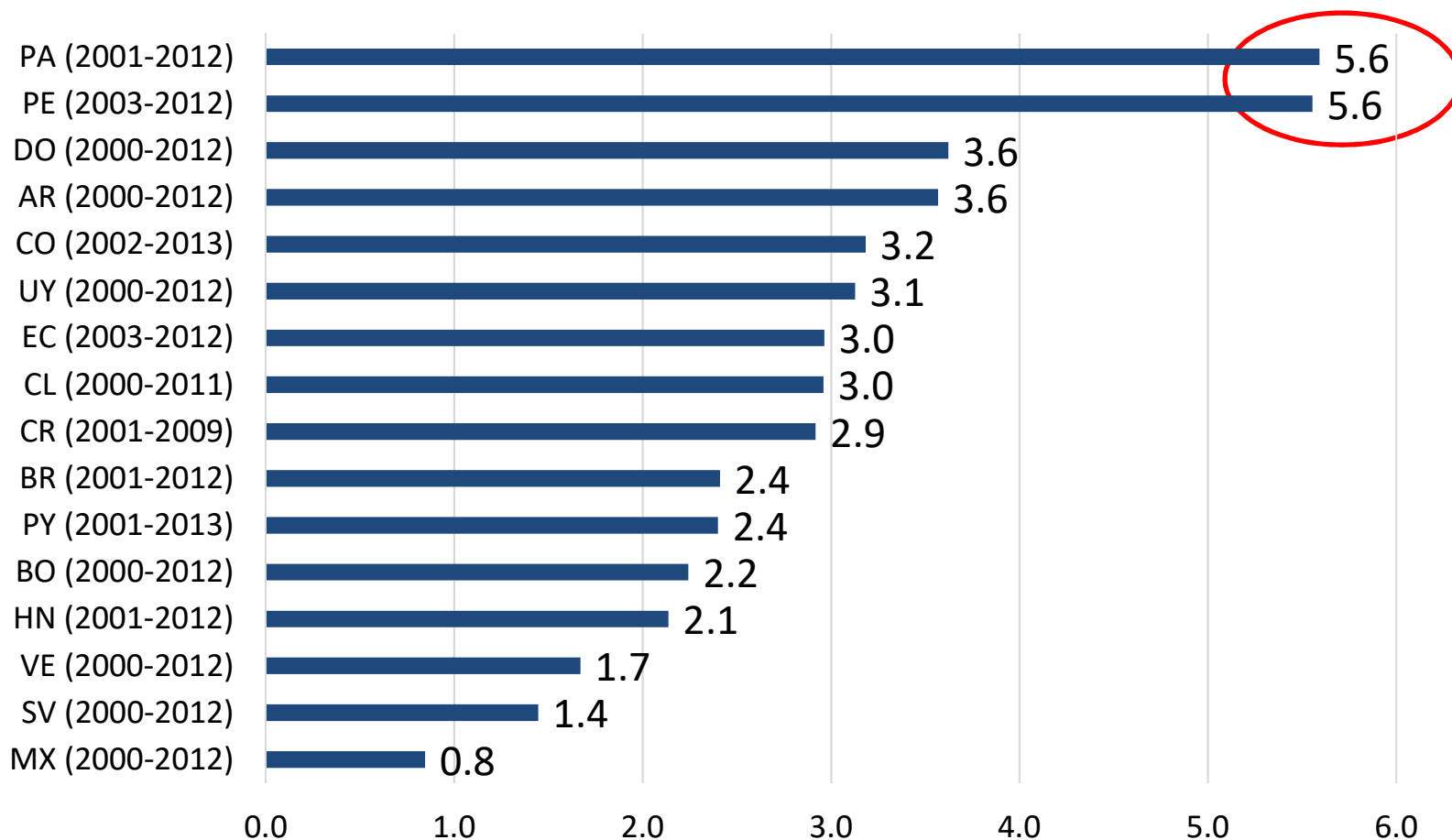
# Country-by-Country: Economic growth

## Annualized growth rate of GDP per capita (USD 05 PPP)



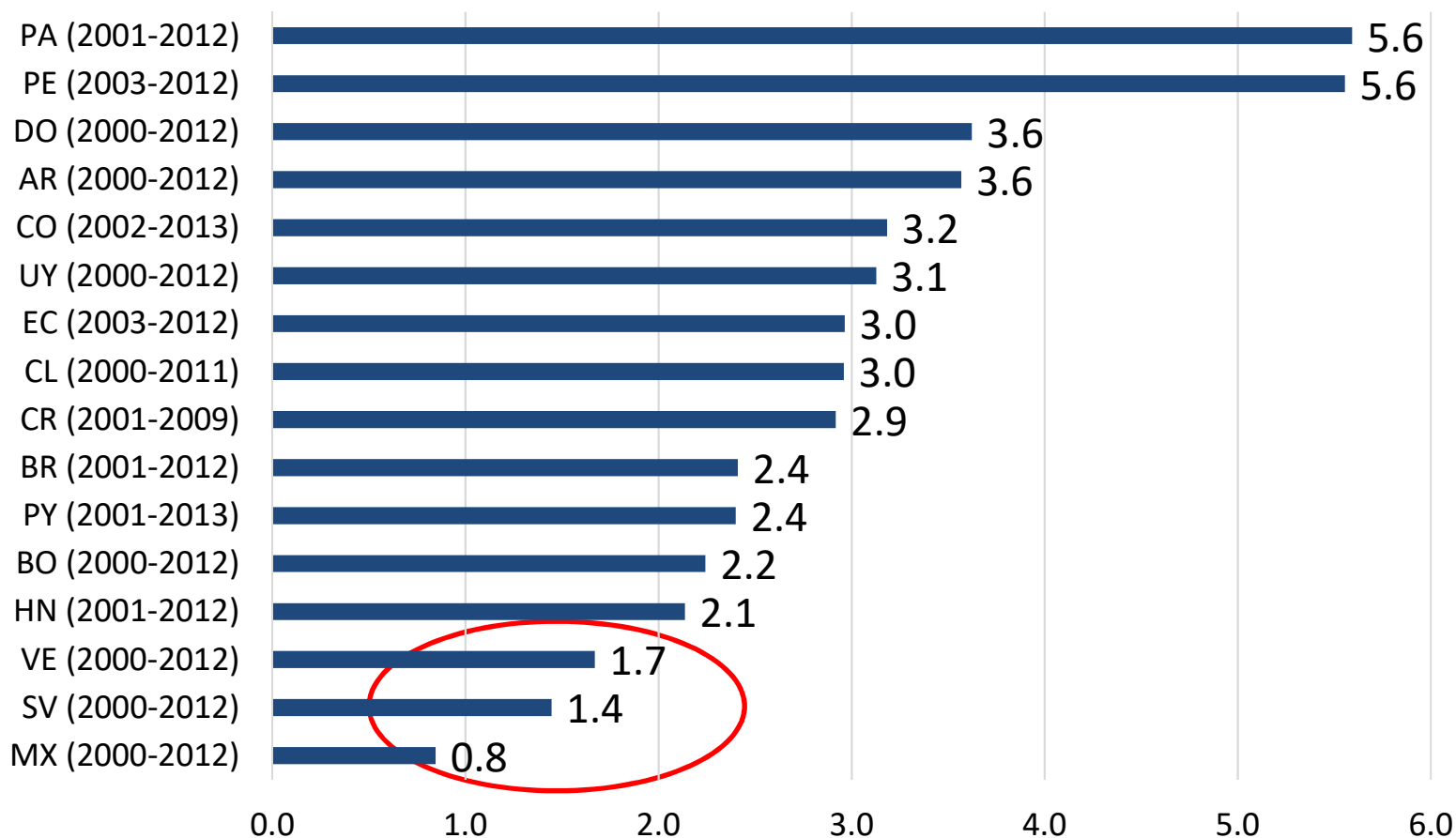
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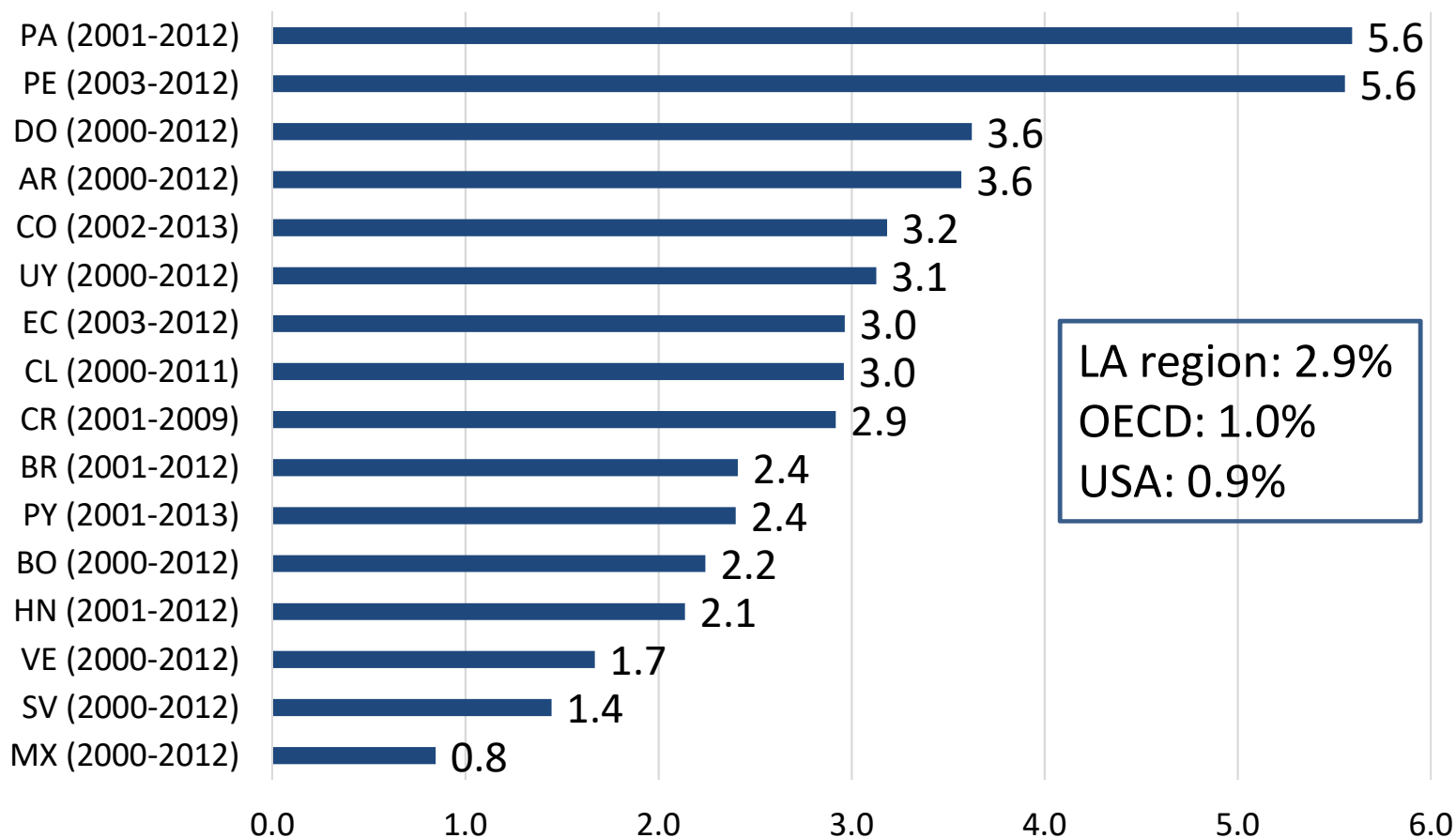
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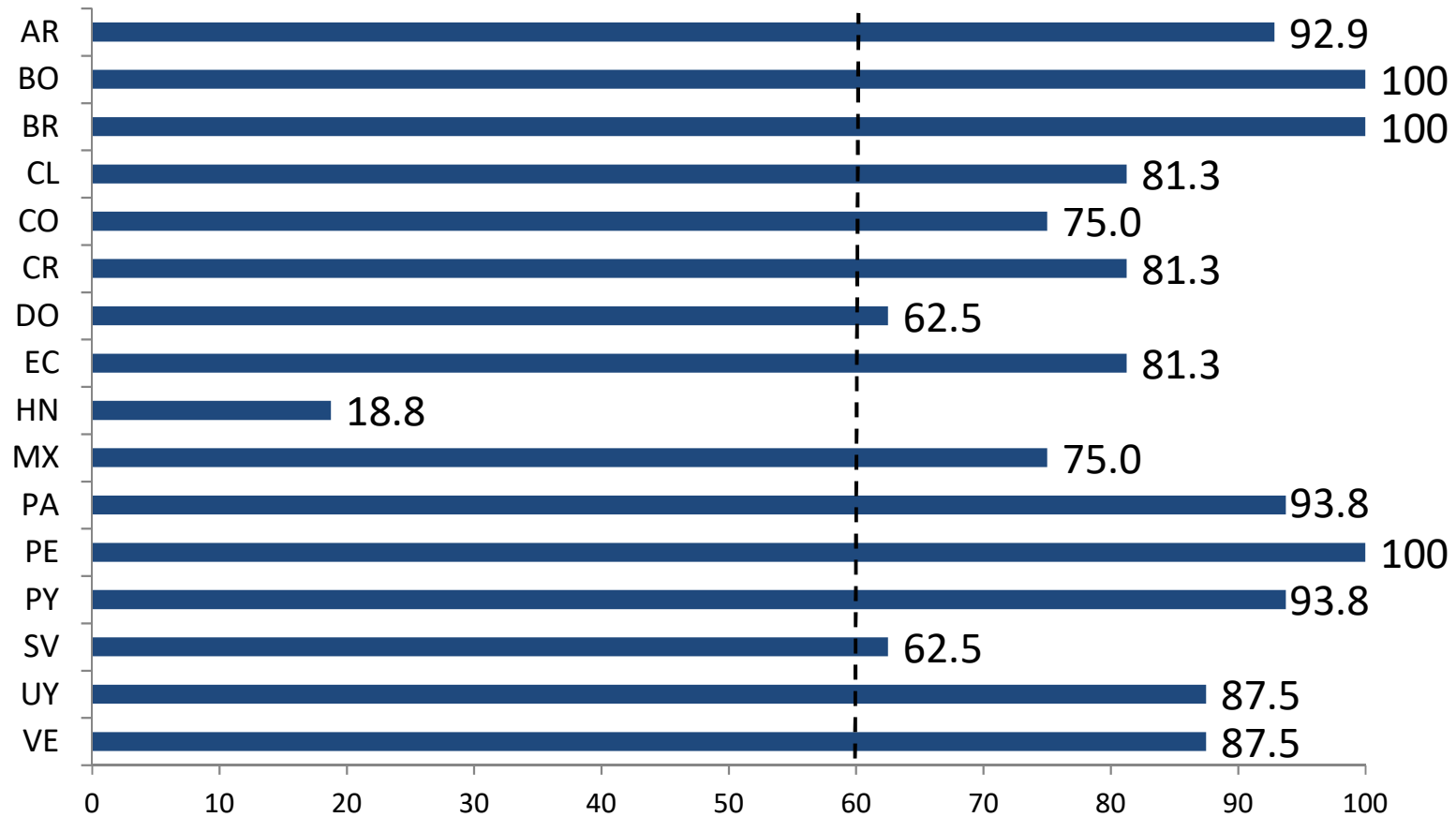
# Country-by-Country: Economic growth

Annualized growth rate of GDP per capita (USD 05 PPP)



# Country-by-Country: Changes in LMI

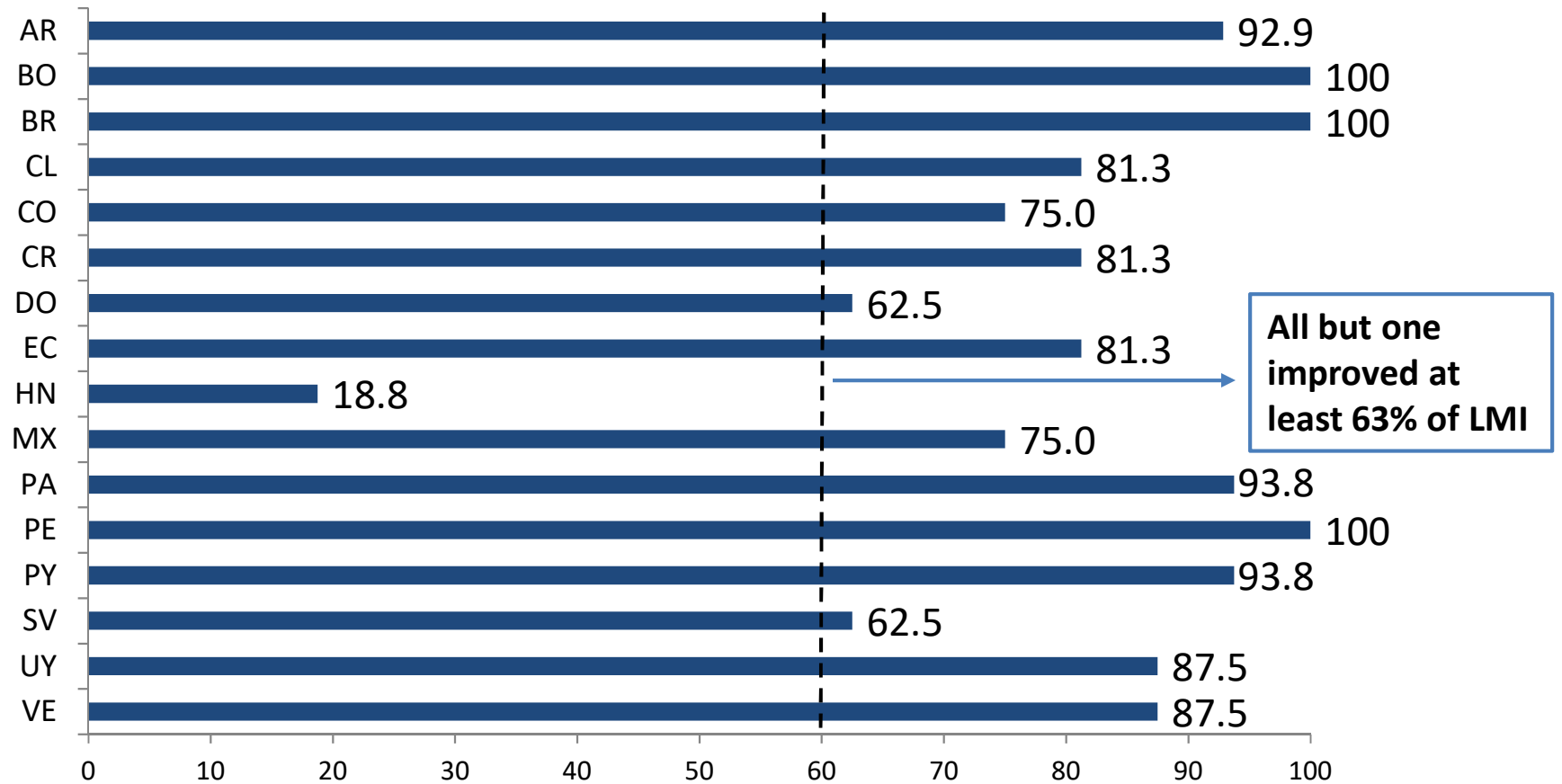
## Percentage of improving indicators ( $Z_i$ )





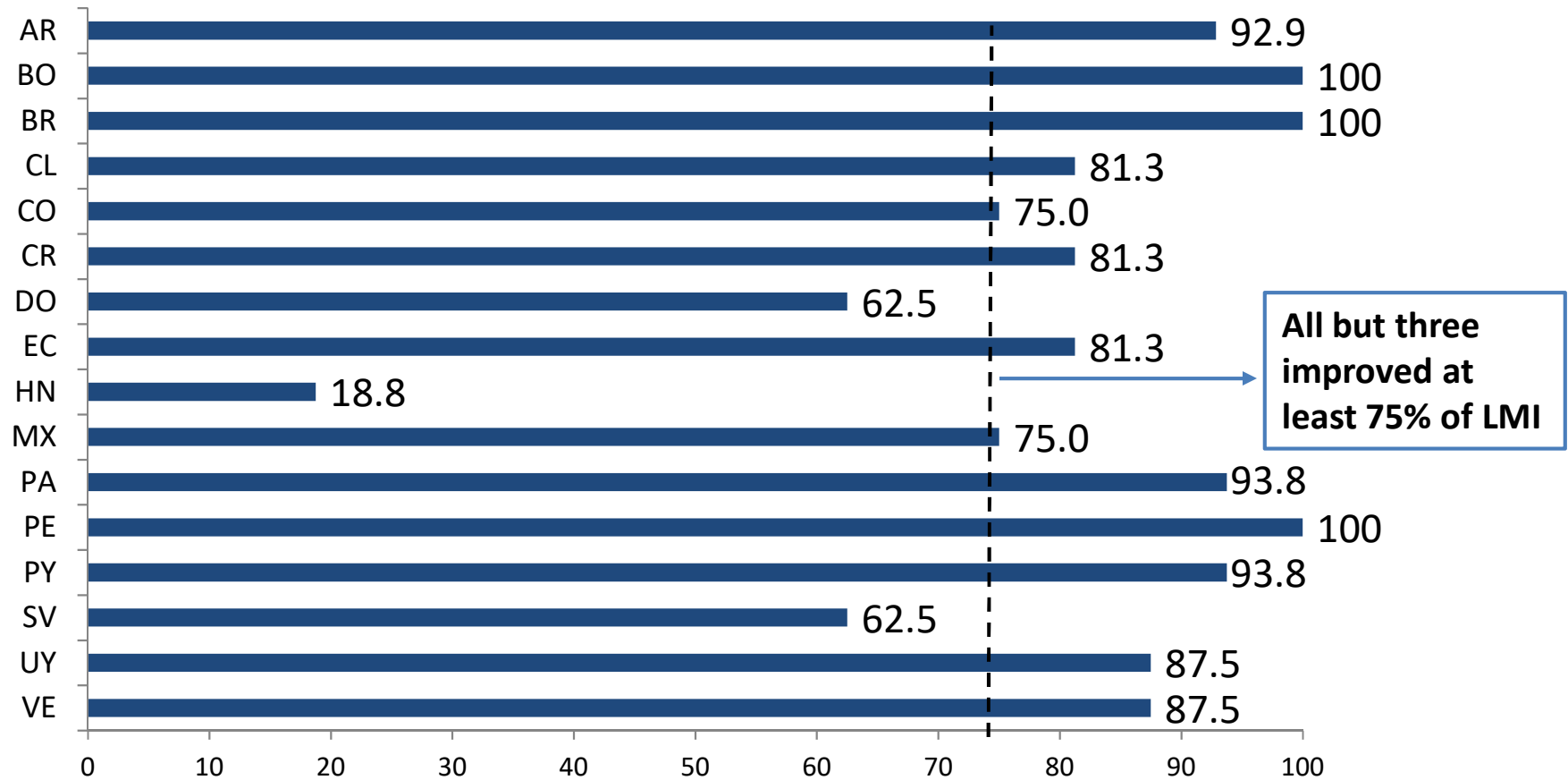
# Country-by-Country: Changes in LMI

## Percentage of improving indicators ( $Z_i$ )



# Country-by-Country: Changes in LMI

## Percentage of improving indicators ( $Z_i$ )



# Summary of findings

- Real GDP per capita grew for the average of the region, all employment and earnings indicators improved, and poverty and inequality fell.
- Real GDP per capita grew in all LA countries, most employment and earnings indicators improved in all countries but one, poverty rates fell in all countries but one.

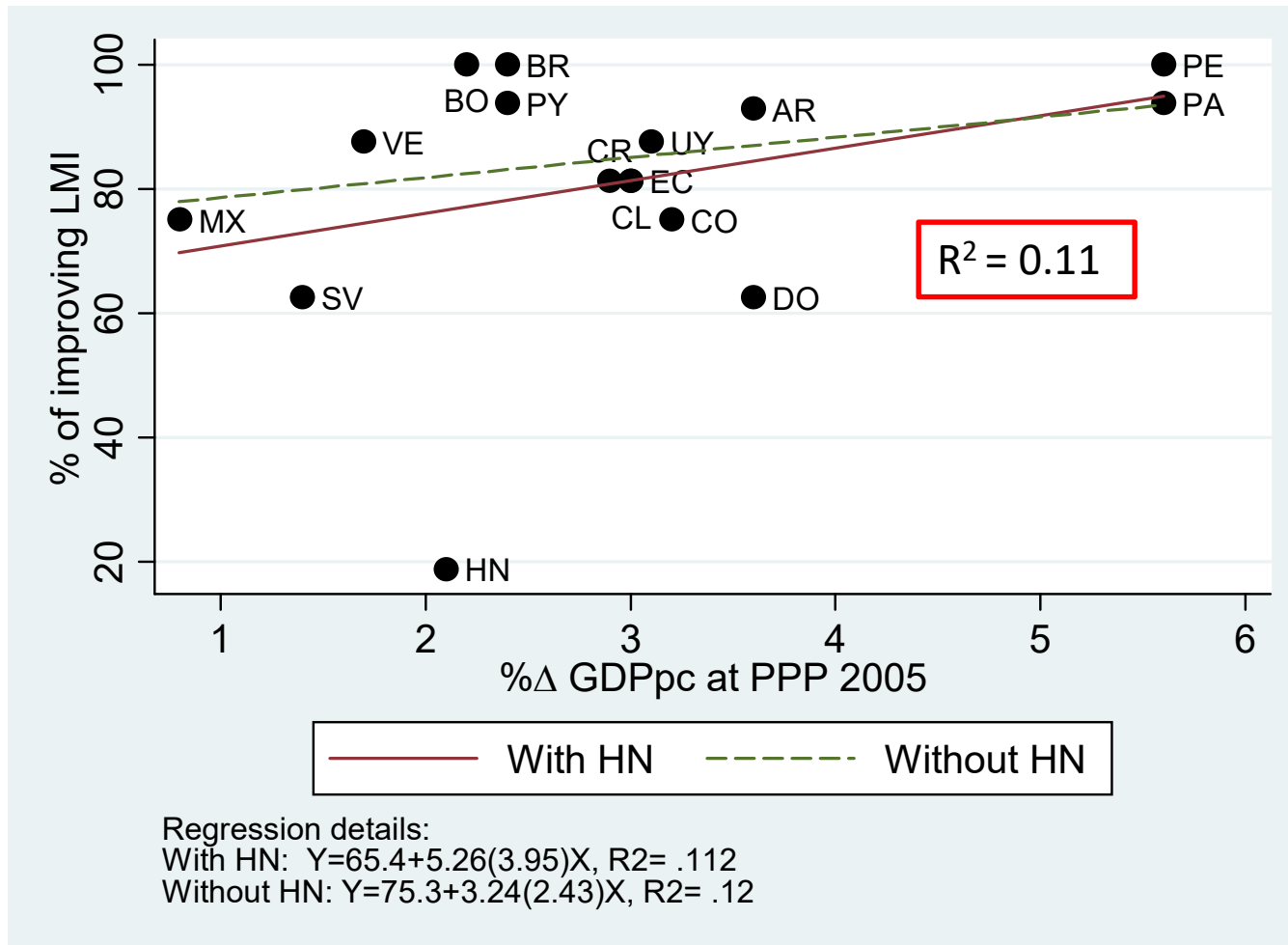
***Cross-country analysis of  
the growth-employment-  
poverty nexus***

# Growth-employment nexus

- Q: Did countries with a higher rate of economic growth experience larger improvements in LMI?

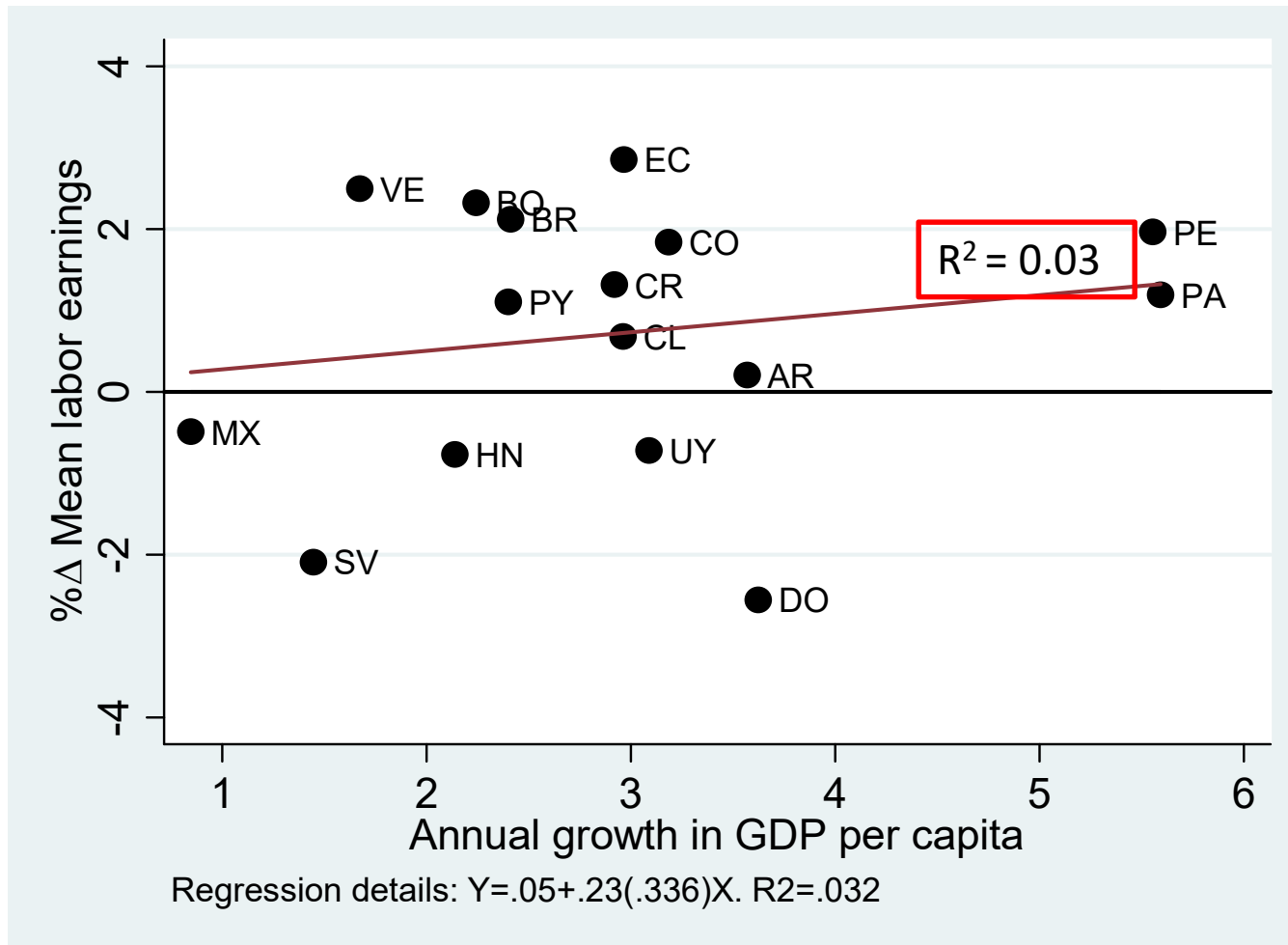
# Growth-employment nexus

Percentage of *improving LMI* and annualized *growth rate of GDP per capita*



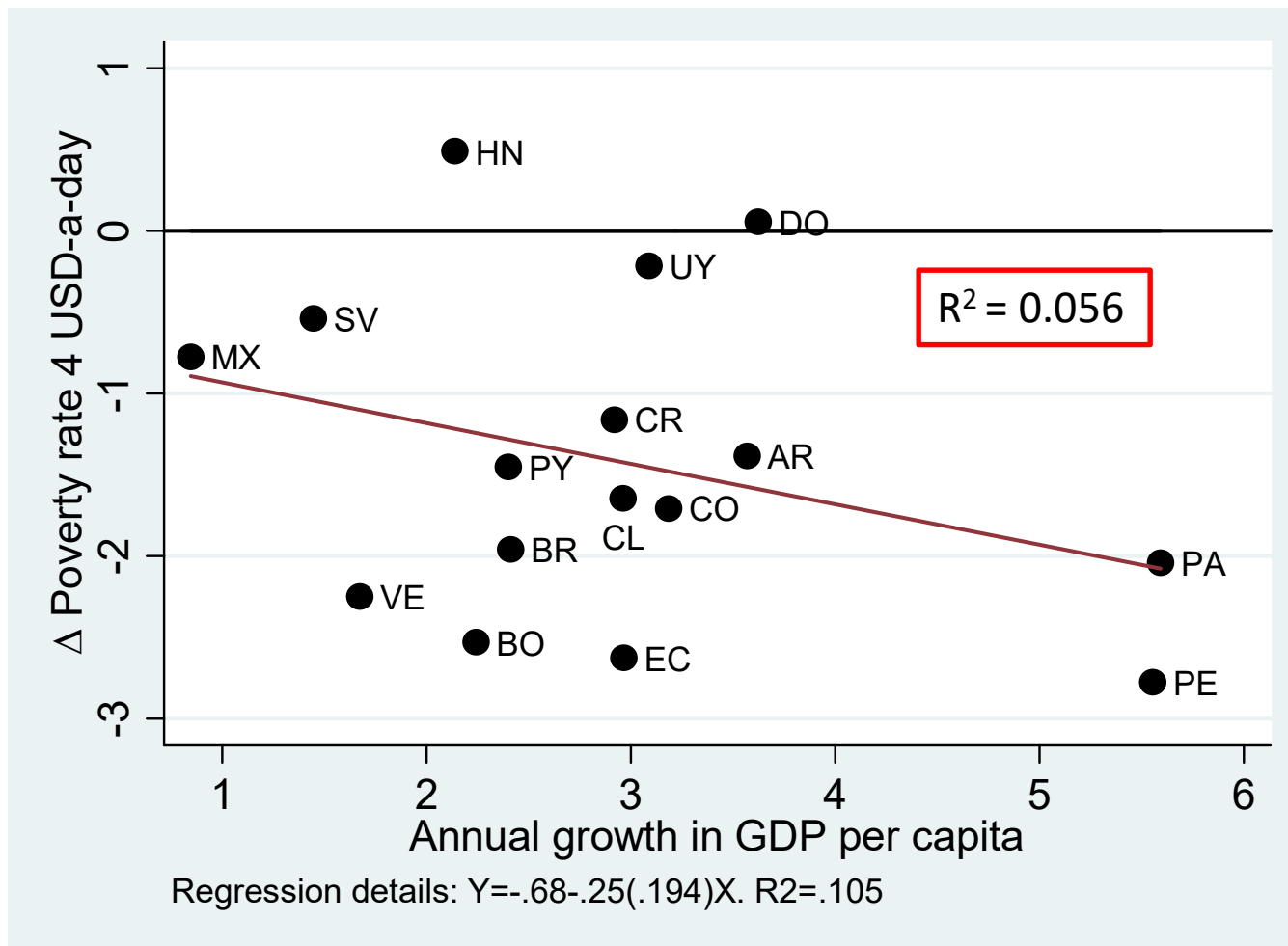
# Growth-labor earnings

Annualized changes in *mean labor earnings* and annualized *growth rate of GDP per capita*.



# Growth-poverty nexus

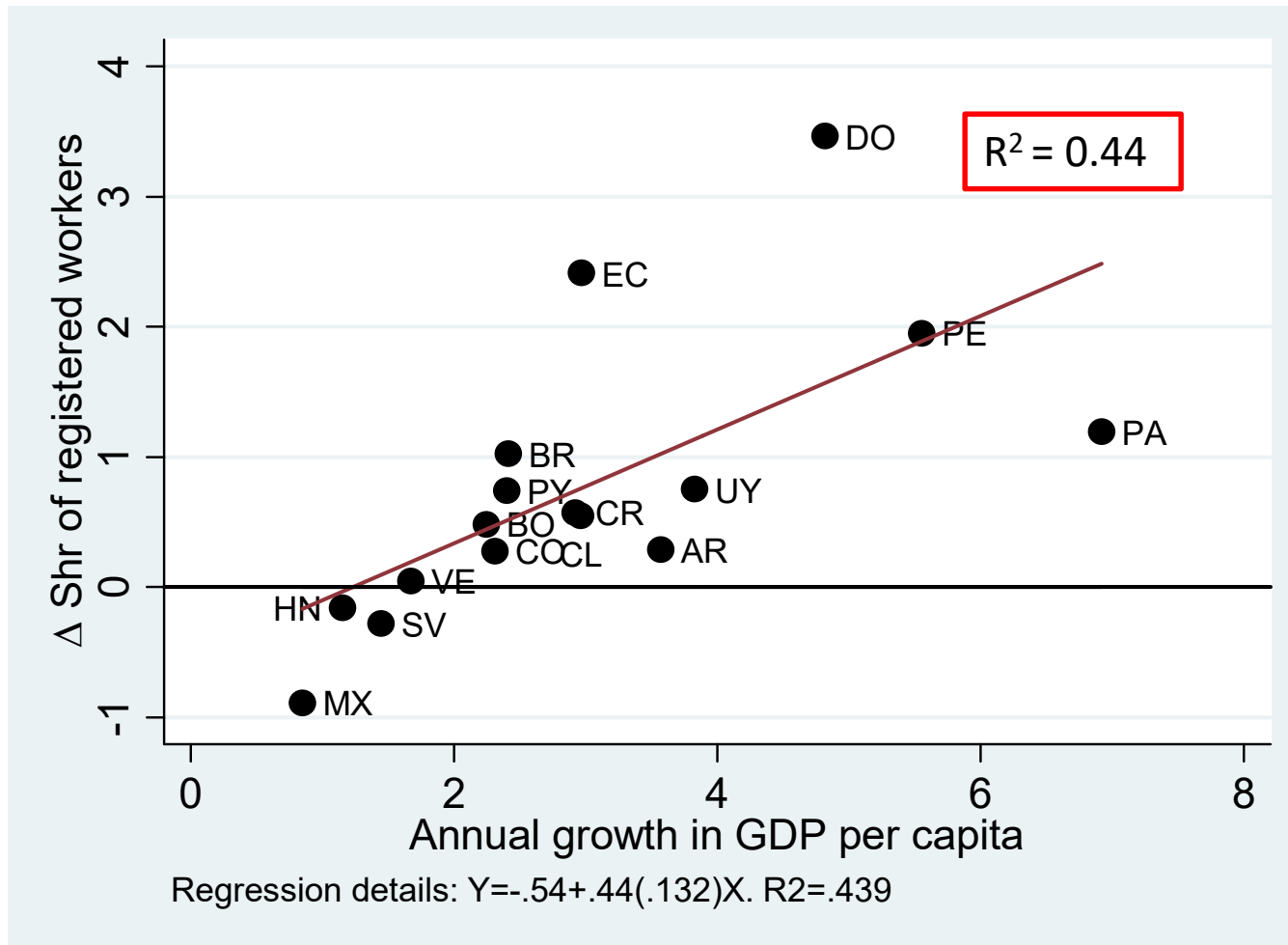
Annual change in the *Poverty 4-USD-a-day* and annualized *growth rate of GDP per capita*





# Growth-job mix

Annual change in the *share of registered workers* and annualized *growth rate of GDP per capita*



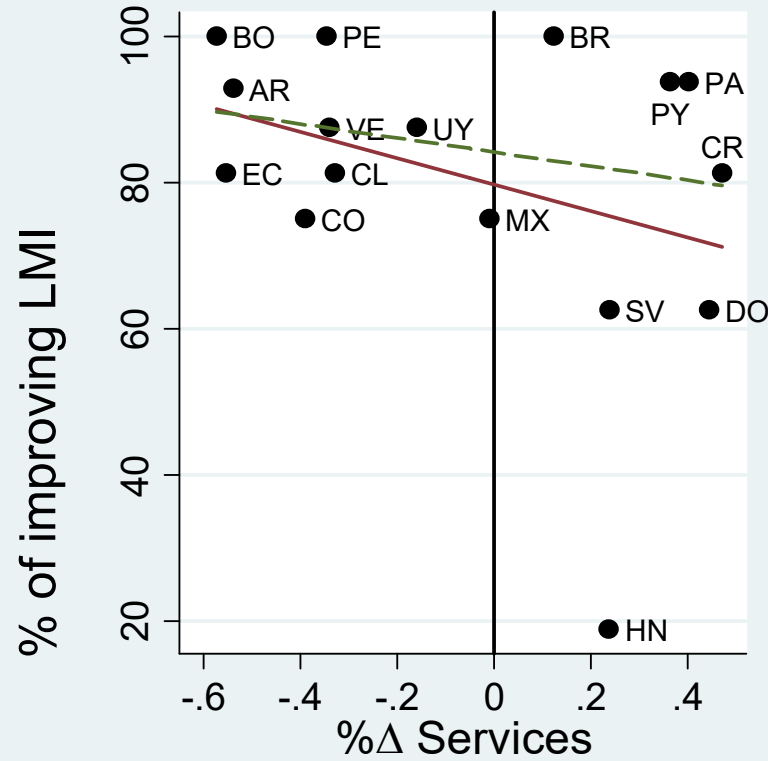
# Summary of findings: Growth-employment and growth-poverty nexus

- Across countries:
  - Faster growth is associated with larger improvements in LMI.
  - In general, the relationships are not tight (low  $R^2$ ).
  - The weak relationship seems to be driven by the experiences of the countries which grew at moderate rates by Latin American standards.

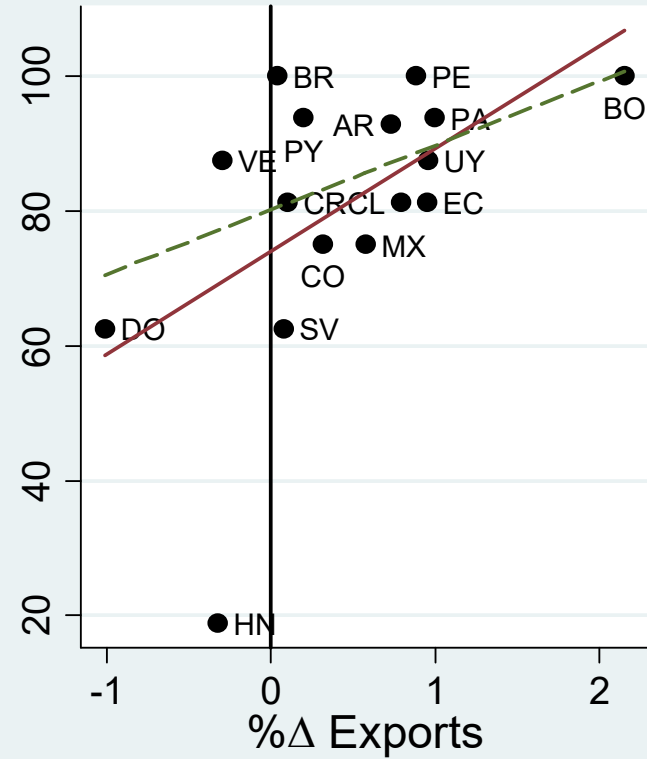
# Beyond Economic Growth

- Q: Were improvements in LMI related to other factors beyond economic growth?
- Across countries, relationship between improvements in LMI and:
  - Initial GDP
  - Initial level of LMI
  - Annualized change in macroeconomic variables other than GDP
- We concluded:
  - Initial GDP was unrelated to changes in LMI.
  - Convergence pattern in 5 /16 LMI: unemployment, share of unpaid family workers, both poverty measures, inequality of HIPC.
  - Increases in some macroeconomic variables are associated with changes in labor market conditions during the 2000s.
  - No unique configuration of macroeconomic variables that was associated with the several successful experiences among our sample of 16 countries.

Cross-Country relationship between the percentage of *improving LMI* and the annualized changes in *services* and *exports*



Regression details:  
 With HN:  $Y=79.7-18.0(13.2)X$ ,  $R^2= .116$   
 Without HN:  $Y=84.1-9.64(8.38)X$ ,  $R^2= .092$



Regression details:  
 With HN:  $Y=74.0+15.2(6.32)X$ ,  $R^2= .293$   
 Without HN:  $Y=80.2+9.54(3.97)X$ ,  $R^2= .307$

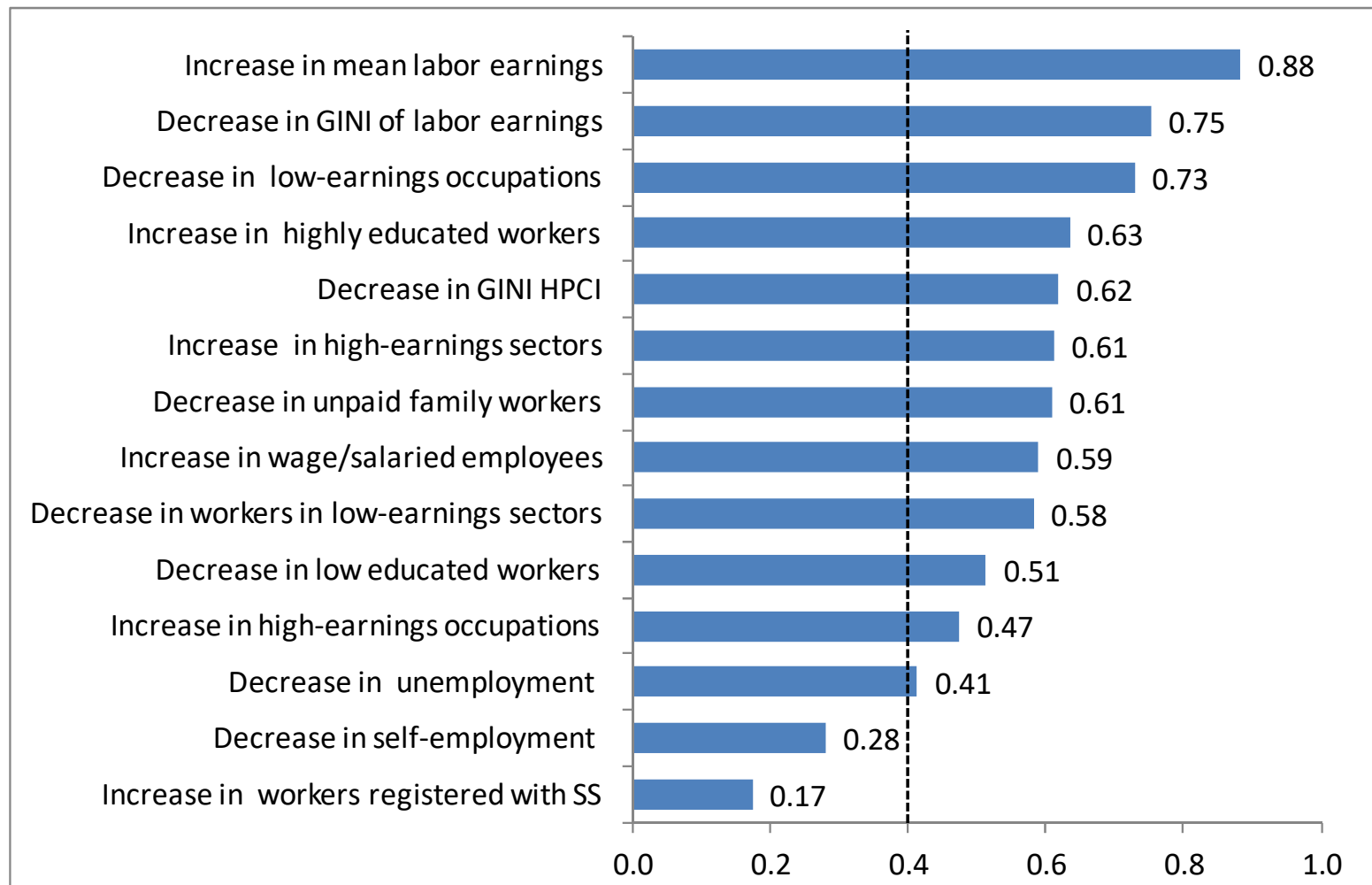


# **Cross-country employment-poverty nexus**

- Q: Are larger improvements in employment and earnings indicators associated with larger reductions in poverty?

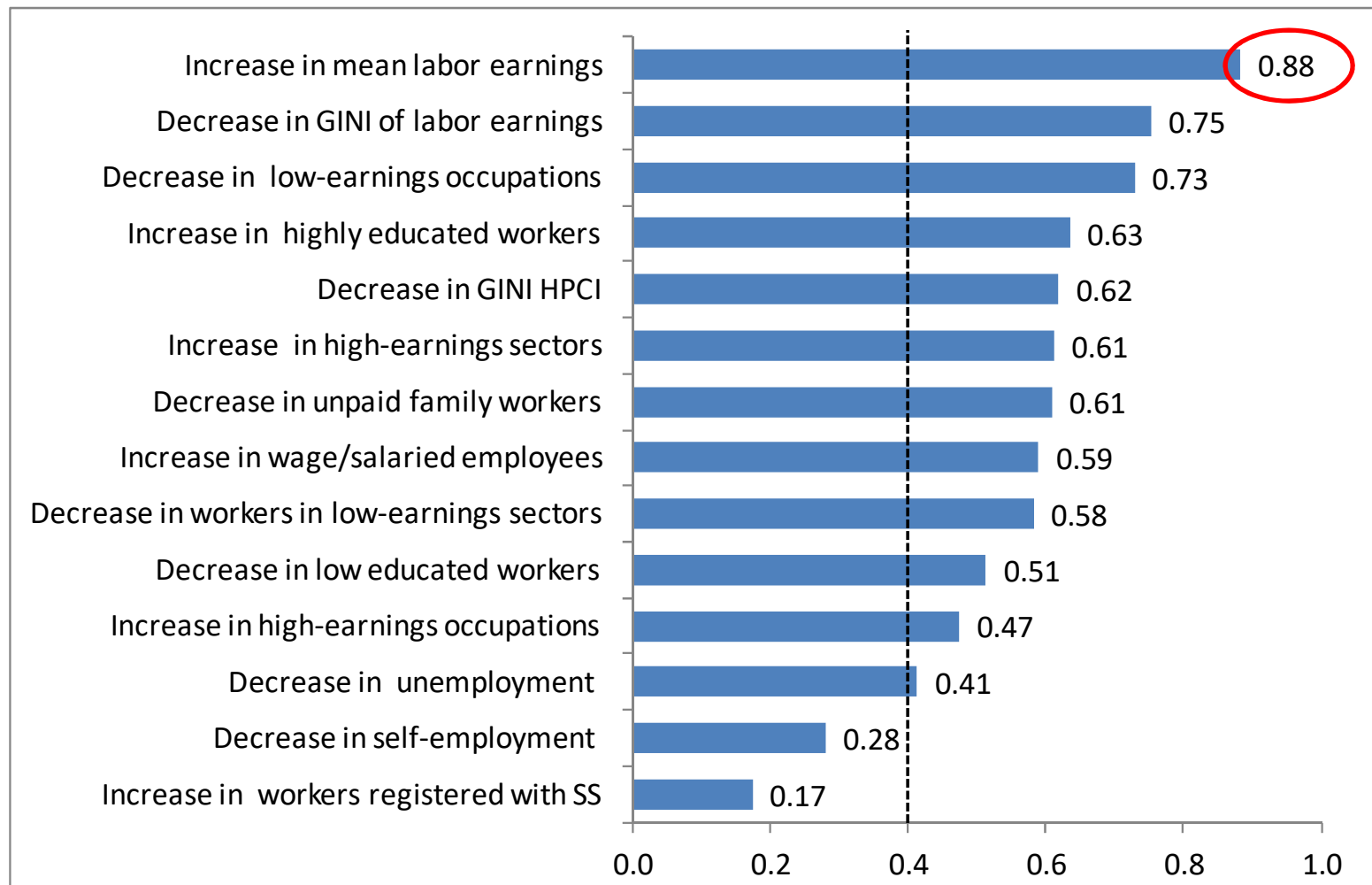
# Correlations of $\Delta$ poverty 4 USD-a-day and $\Delta$ LMI

Cross-country correlations between the annualized reductions in the poverty rate 4 USD-a-day and LMI during the 2000s



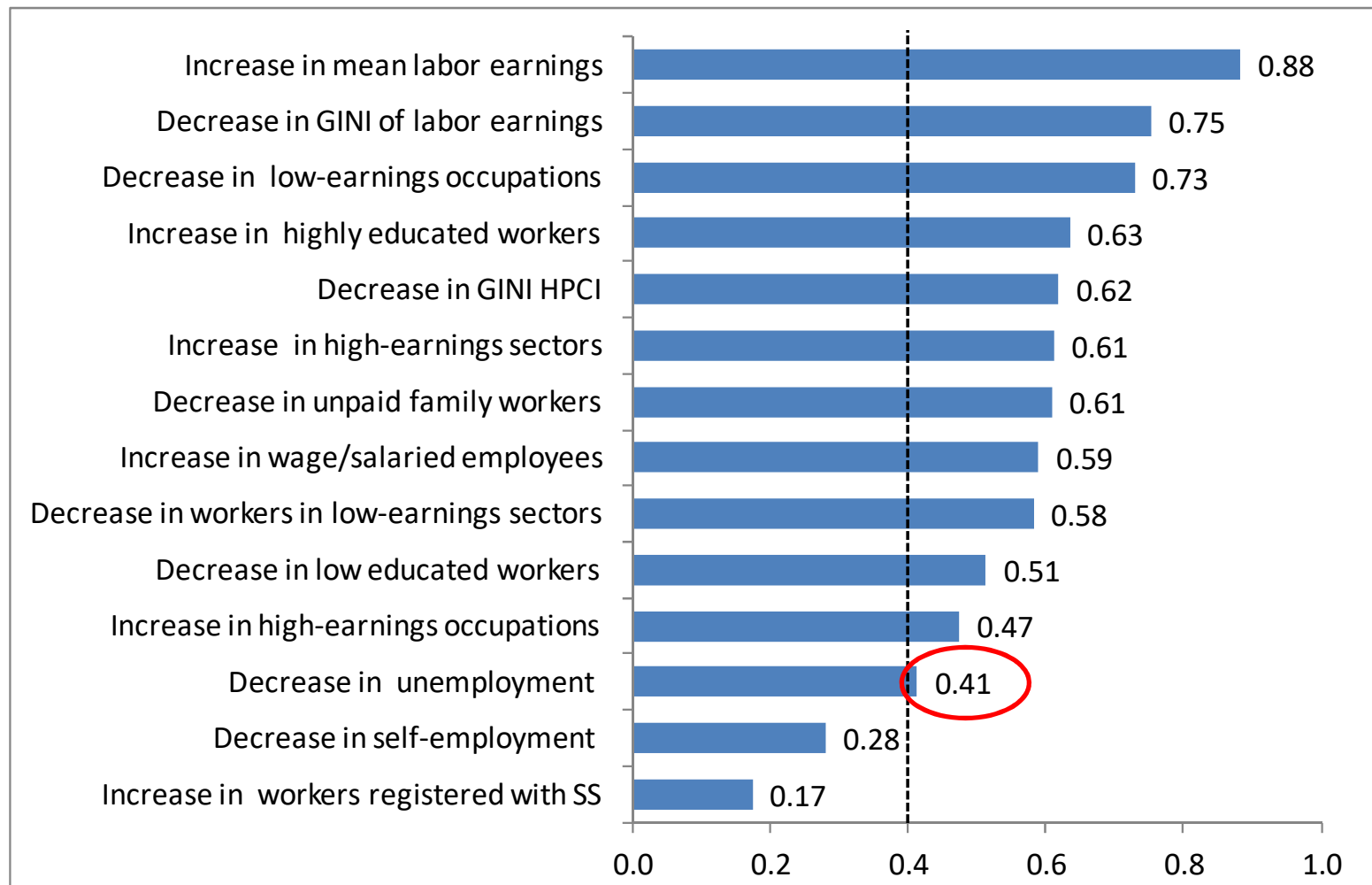
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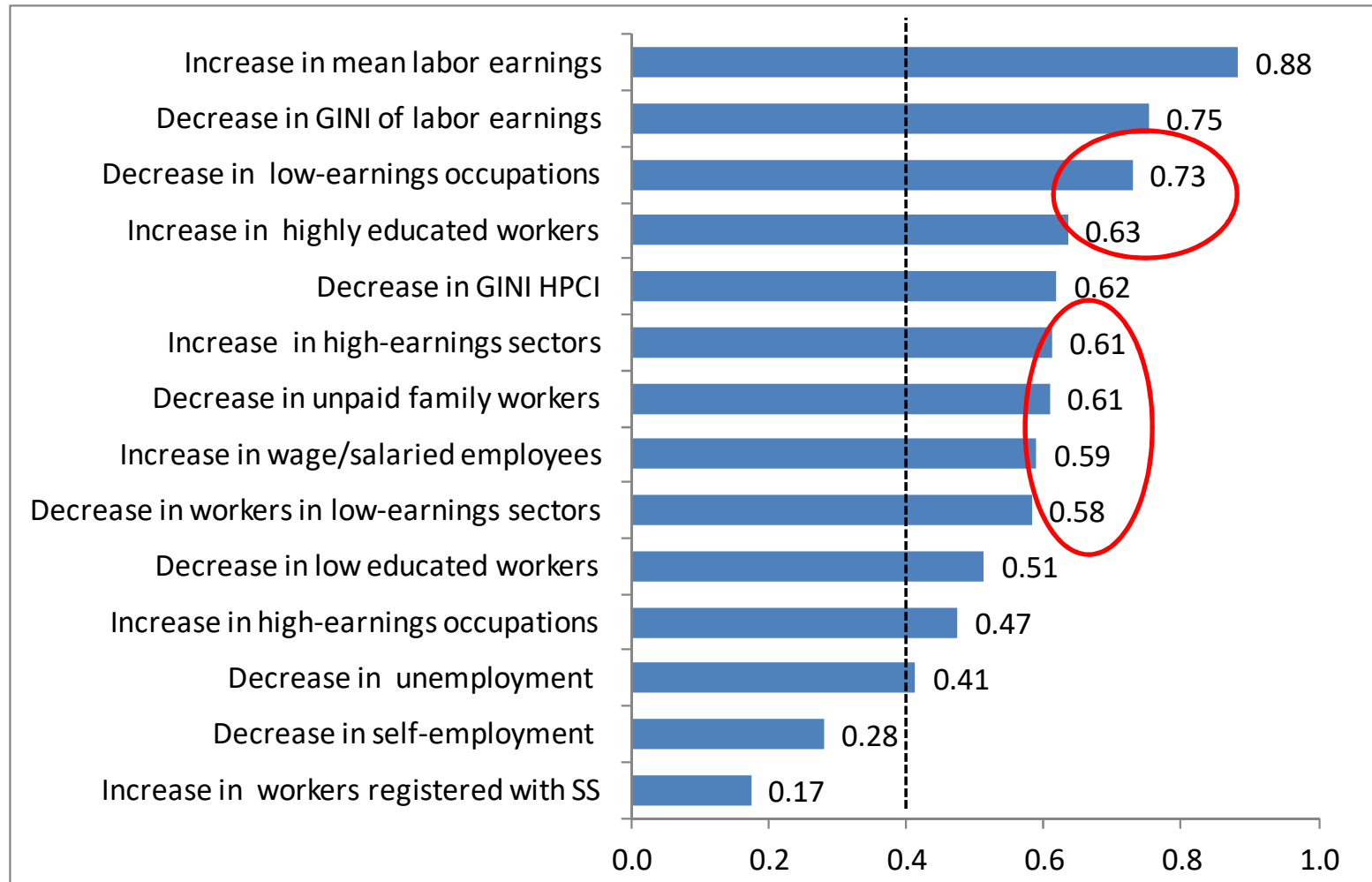
Cross-country correlations between the annualized changes in the poverty rate 4 USD-a-day and LMI during the 2000s





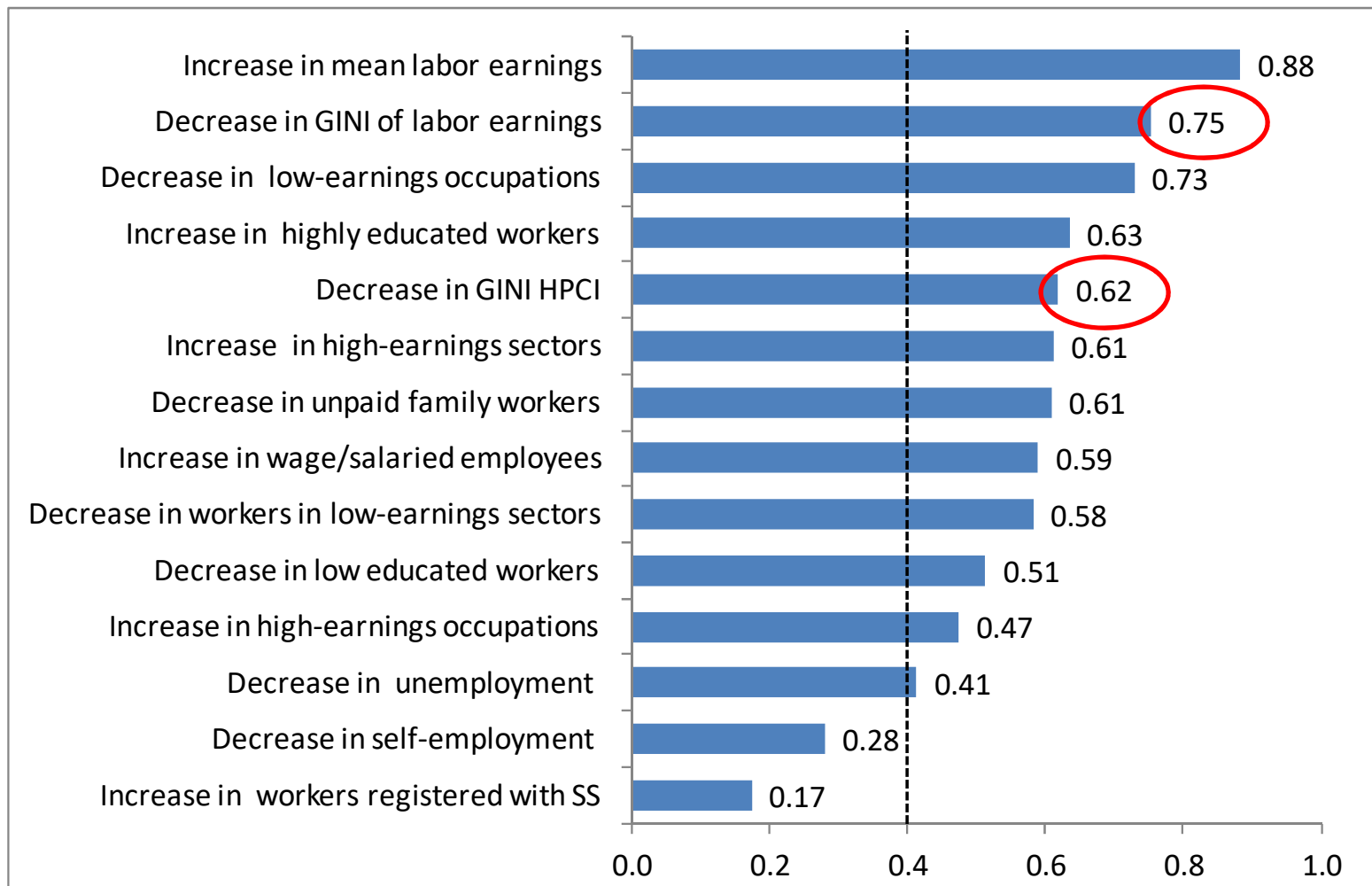
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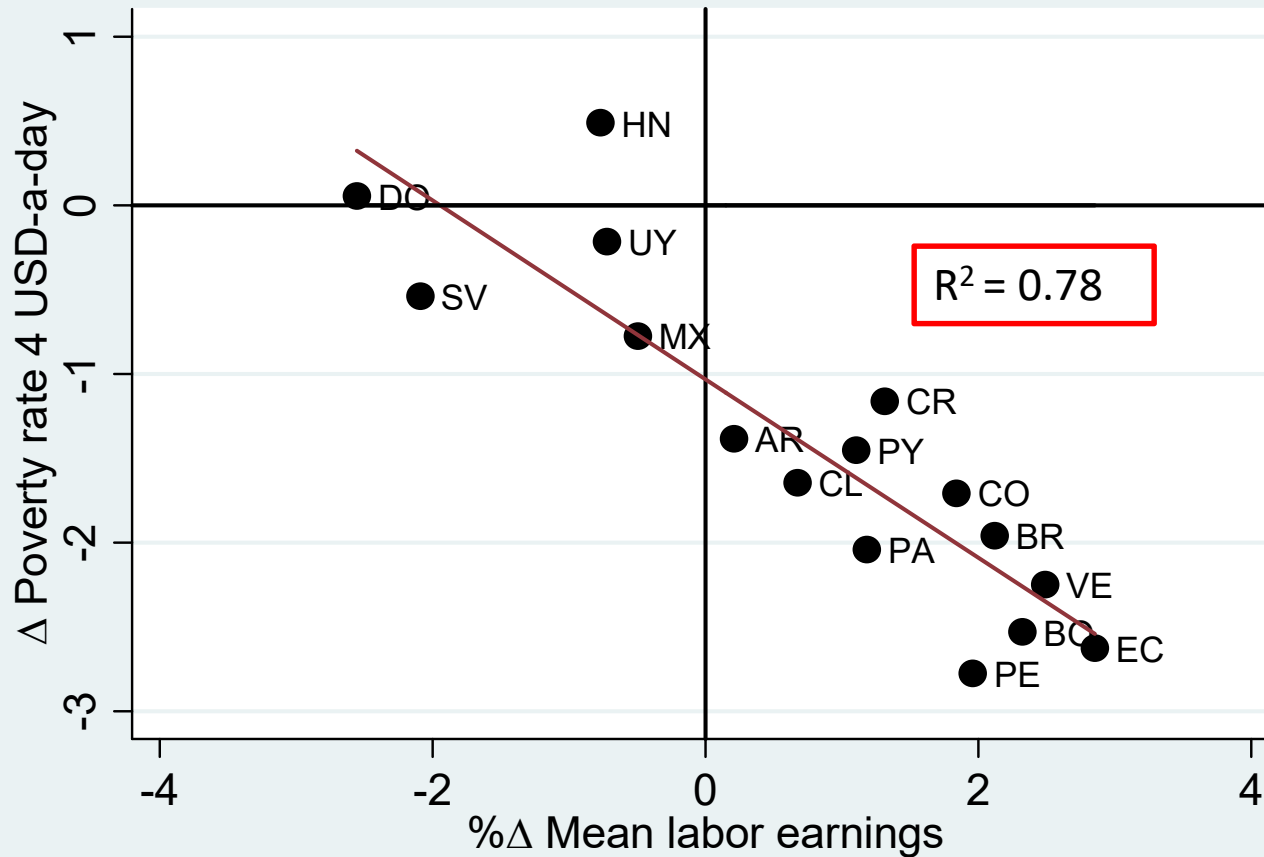
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# Labor earnings and poverty

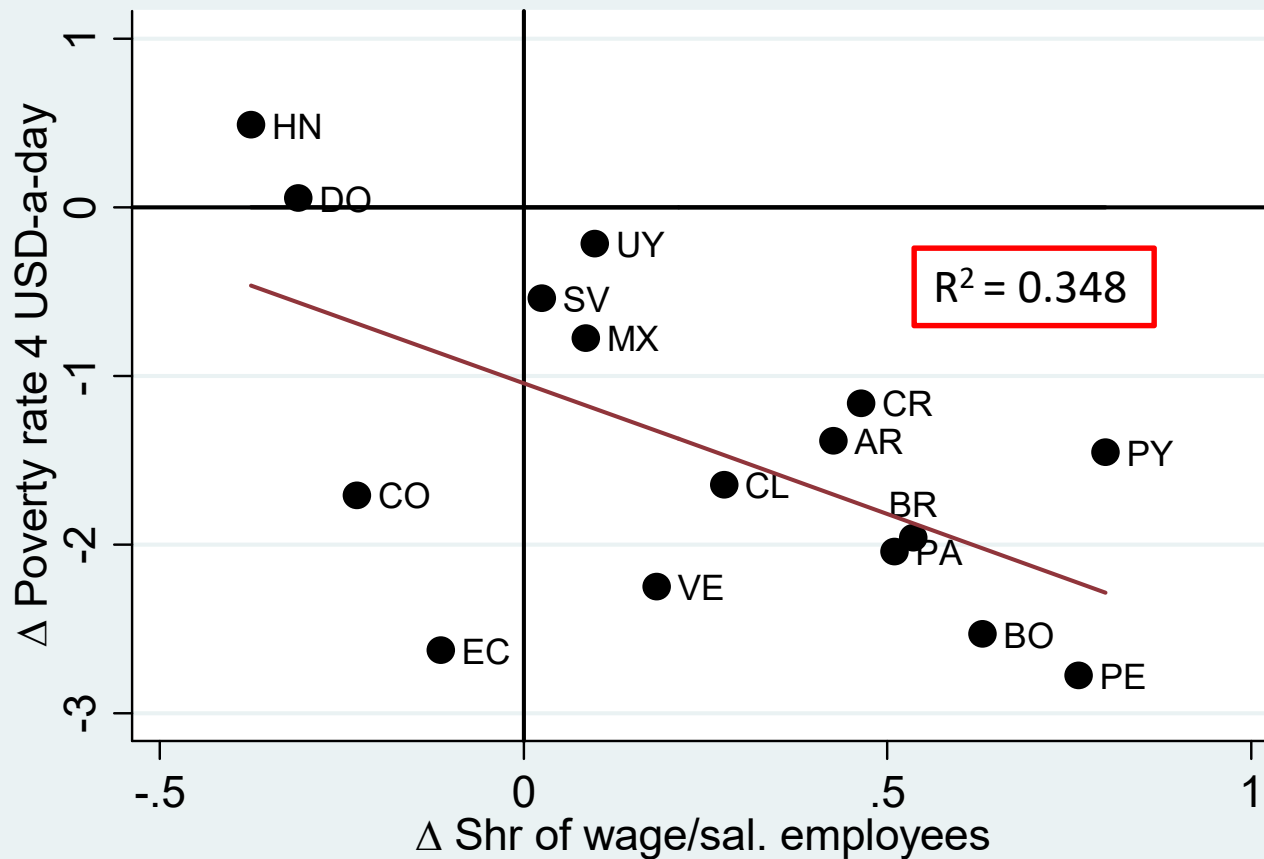
Annualized changes in *mean labor earnings* and annualized changes in the *poverty rate 4 USD-a-day*.



Regression details:  $Y = -1.0 - .53(.075)X$ .  $R^2 = .779$

# Wage/salaried employment and poverty

Annualized changes in *share of wage/salaried employee* and annualized changes in the *poverty rate 4 USD-a-day*.



Regression details:  $Y = -1.0 - 1.55(.568)X$ .  $R^2 = .348$

# Summary of employment-poverty findings

- Across-countries:
  - Large association between improvements in earnings and employment indicators and reductions in poverty.

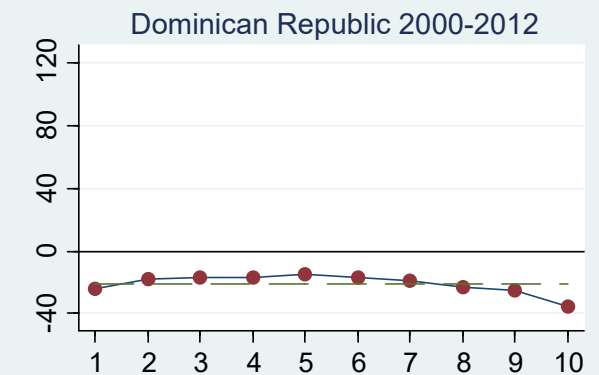
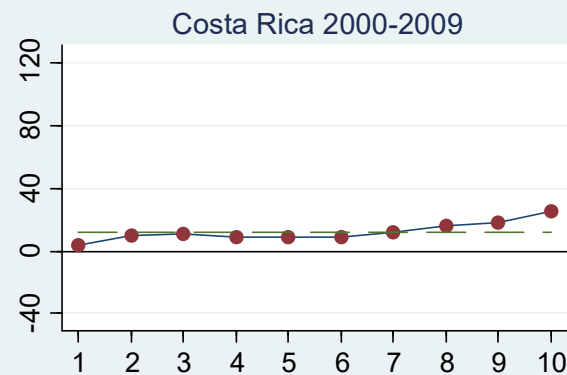
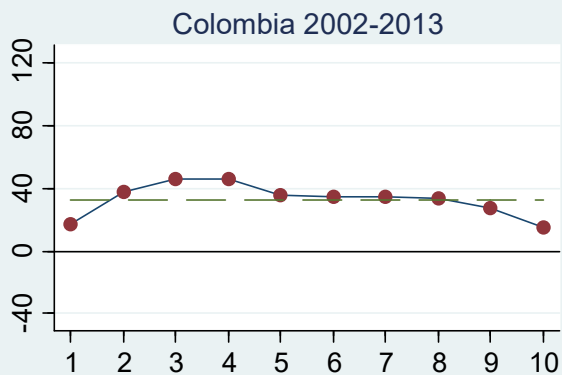
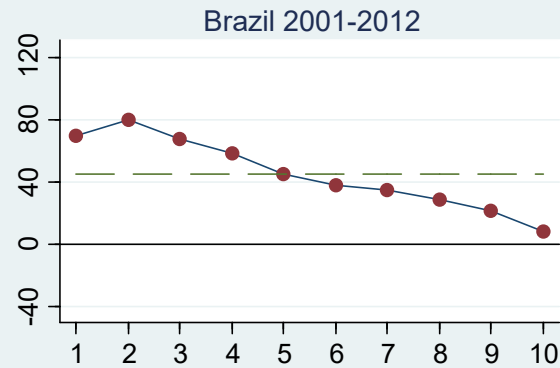
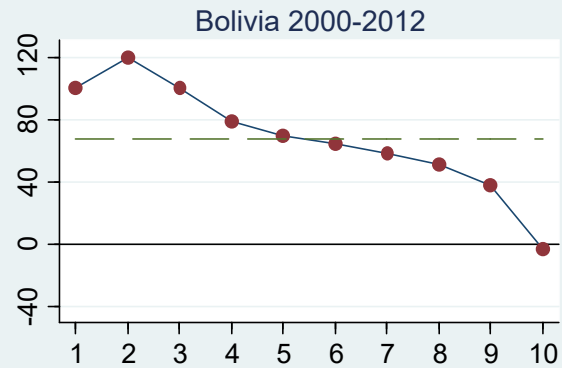
***Changes of Labor Earnings  
across the Earnings  
Distribution within Country:  
Growth Incidence Curves***

# Growth incidence curves for labor earnings

- Earnings: main source of income for LA households. Increase at the bottom of the distribution and reductions in inequality.
- Mean labor earnings increased in 11 countries, decreased in 5.
- For 9 countries, positive changes along all the distribution (and 2 more: all but top decile).
  - 70% of deciles experienced increases in labor earnings.
  - 30% of deciles with no growth (5 countries where mean earnings fell)

# Progressive changes, but high heterogeneity

*Selected relative growth incidence curves*



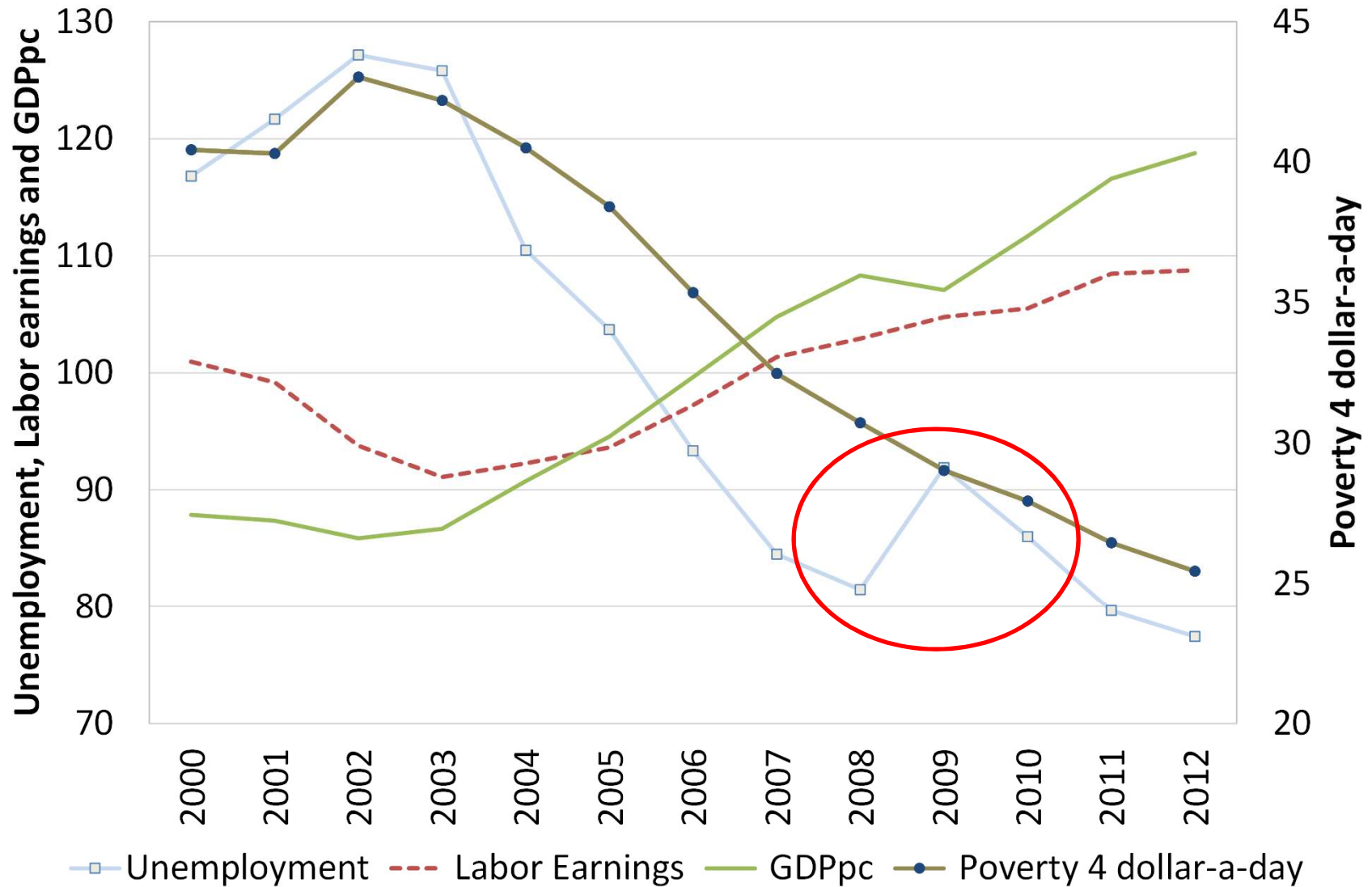


***The 2008 Economic Crisis  
and Changes in Labor  
Market Indicators***

# The Great Recession, labor market indicators, poverty and growth

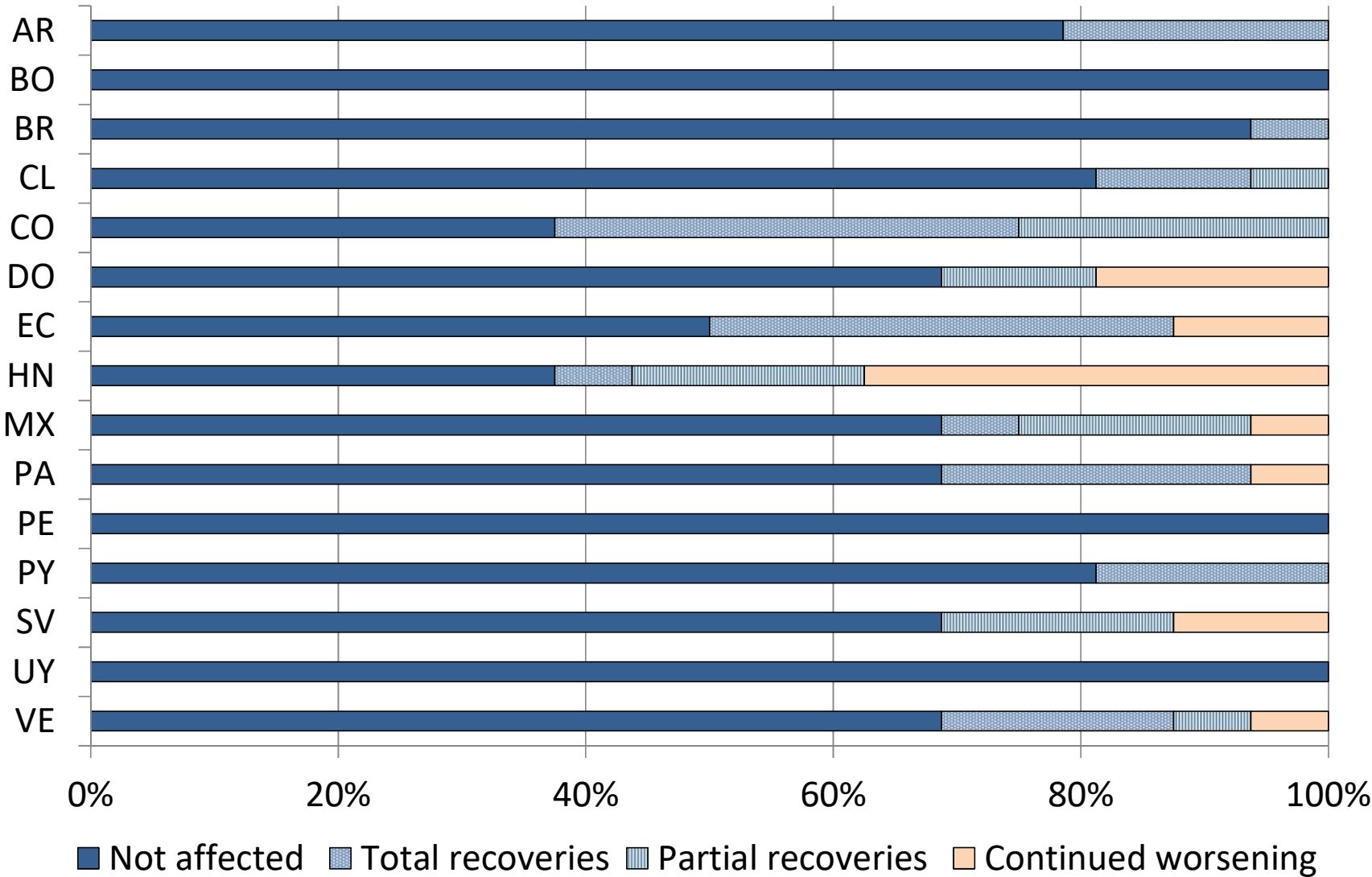
- Average GDPpc was stagnant in 2000-2003 but then increased every year after that, except for 2008.
- Crisis milder in LA than in OECD (-1.5% vs -4%).
- Unemployment increased in 2000-2002, then fell every year except for 2008.
- Poverty increased in only 5 and fell in 8 out of the 16 countries during the crisis. Extreme pov. in only 1.
- Average poverty rate did not increase during the crisis.  
**Countercyclical policies, social protection programs.**
- Quicker recovery too: growth again in all LA countries.
- Initial worsening, but relatively quick recovery of LMI. Some surpassed pre-crisis level at the end of the period.

# The Great Recession and Latin America. Newfound resilience?

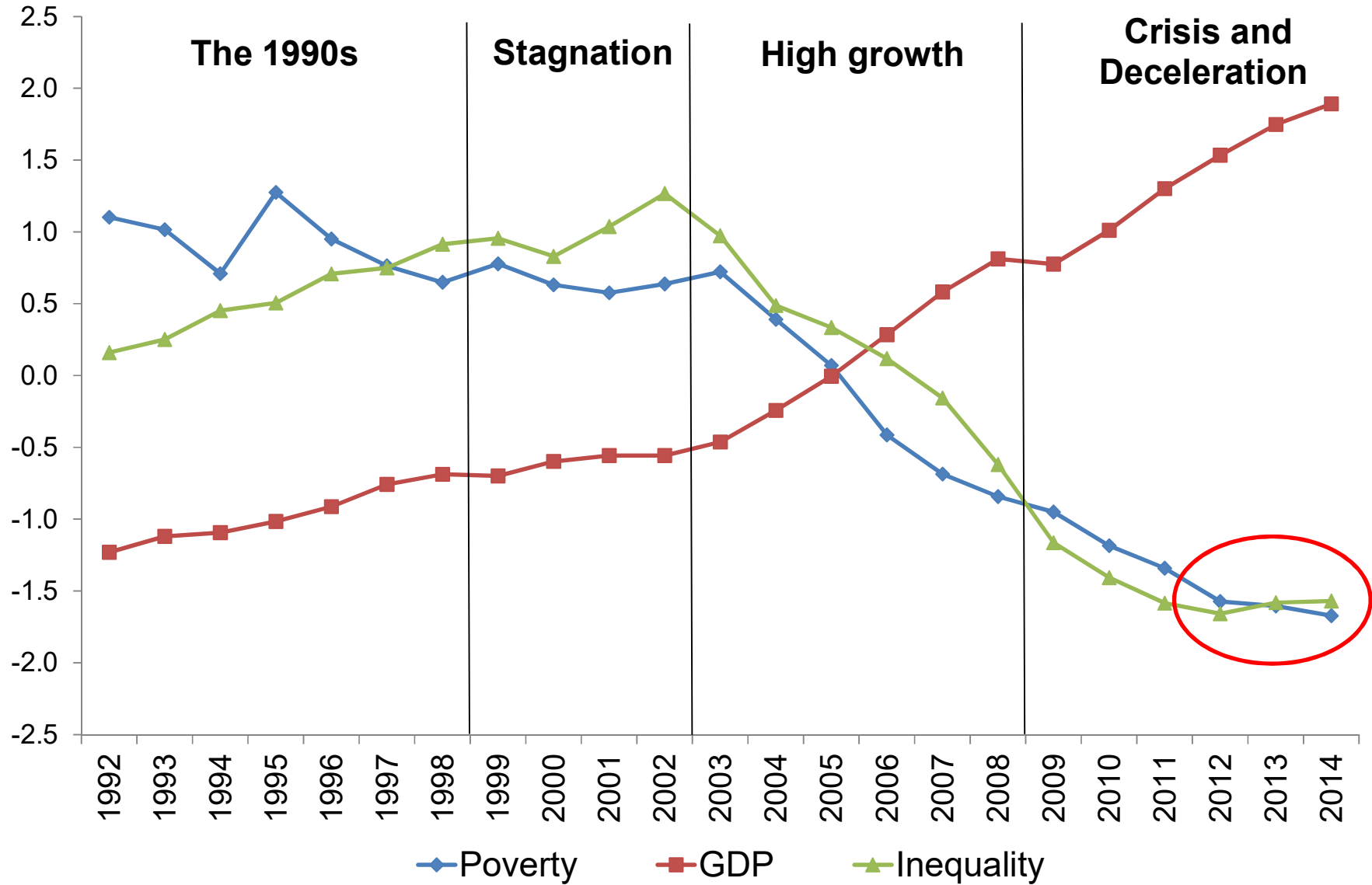


# The Great Recession and Latin America.

*% of LMI not affected/recovered*



# What happened next?



Source: Gasparini, Galiani, Cruces and Acosta 2015, based on SEDLAC (CEDLAS and World Bank) and WDI

# ***Final Remarks***

# Summary of findings

- Original questions:
  - Has economic growth resulted in economic development via improved labor market conditions in LA in the 2000s?
  - Have these improvements halted or been reversed since the Great Recession of 2008?
  - Relationship growth/LMI/poverty/inequality?
- For the region as a whole: real GDP pc grew during the 2000s, *all* employment and earnings indicators improved, and poverty and inequality fell.
- By-country: real GDP pc grew during the 2000s in *all* LA countries, most LMI improved in all countries *but one*, poverty rates fell in all countries *but one*.

# Summary of findings

- Across countries:
  - Faster growth weakly associated with larger LMI improvements
  - Some macro factors associated with changes in LMI.
  - **Larger improvements in employment and earnings were associated with larger reductions in poverty.**
- Within countries:
  - Faster growth related to more rapid LMI improvements and subsequently faster poverty reduction.
  - Heterogeneity in magnitudes and patterns.
  - Strongly progressive patterns of changes in labor market earnings.



# Augmenting Bourguignon's Triangle

- Bourguignon 2003 (on Poverty-Growth-Inequality) :
  - *Do these results imply that growth has no significant impact on distribution? Certainly not. They simply mean that there is too much country specificity in the way growth may affect distribution for any generalization to be possible.*
  - *Indeed, case studies... show that distributional changes in a given country have much to do with the pace and structural features of economic growth in the period under analysis....*
- ...Mediated through labor markets.

# Additional Material

- A video of a more extensive version of this presentation at the UNU-WIDER 30th anniversary conference : <https://www.wider.unu.edu/video/latin-america-employment-and-poverty>
- The series of 17 papers : <https://www.wider.unu.edu/project/growth-employment-poverty-nexus-latin-america-2000s?pages=2>
- The book (open access): <https://www.wider.unu.edu/publication/growth-employment-and-poverty-latin-america>