# Declining Inequality in Latin America

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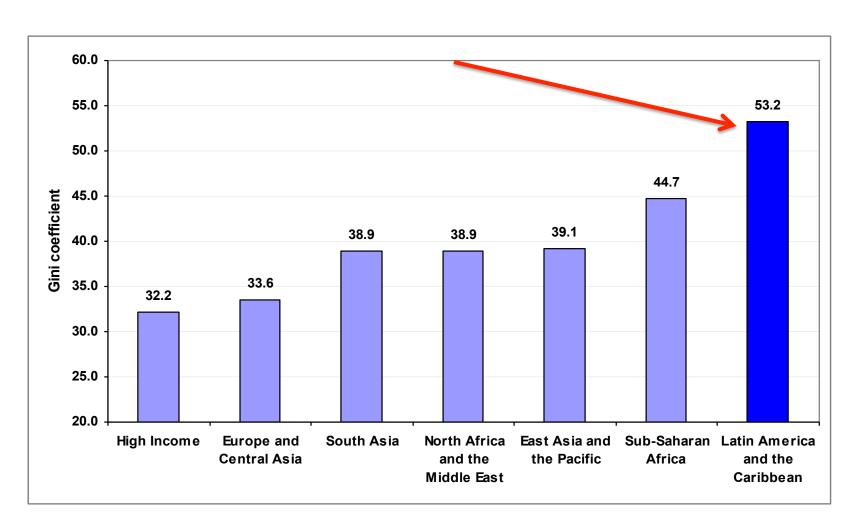
Paris – May 21, 2014

# Inequality in Latin America is high... ...but has been declining since around 2000

- Decline is pervasive and significant
- Larger than the rise in inequality in 1990s
- Important contribution to the decline in poverty
- Contributed to the rise of the middle-class
- In countries with high growth & low growth
- In countries with left and nonleft governments
- In commodity exporters and commodity importers

## LATAM IS THE MOST UNEQUAL REGION IN THE WORLD

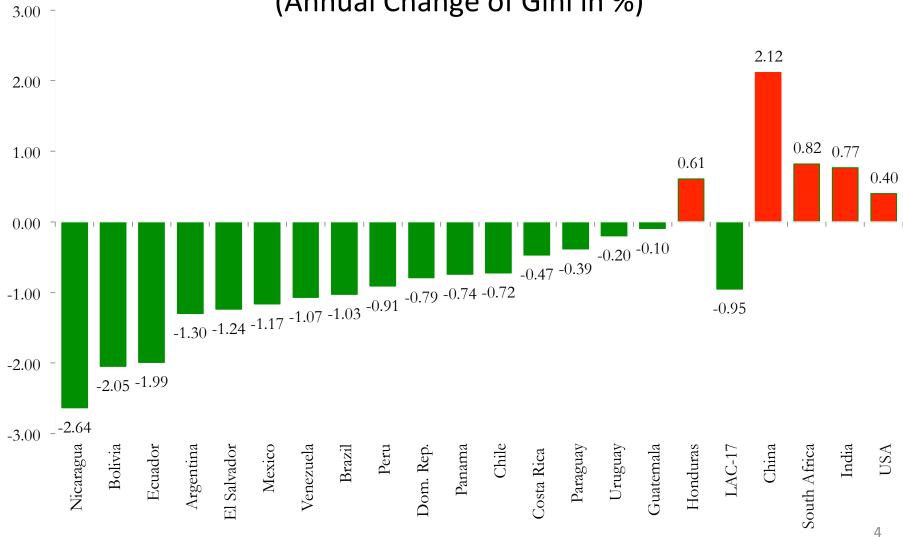
Gini Coefficient by Region (in %), 2004



### Inequality declined during the 2000's

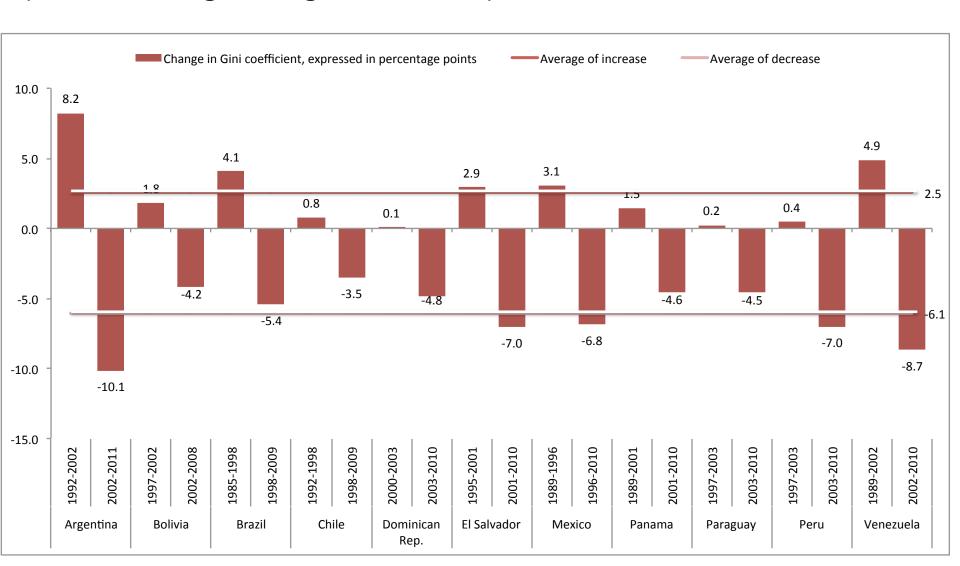
Latin America: Declining income inequality by country: 2000-2011

(Annual Change of Gini in %)

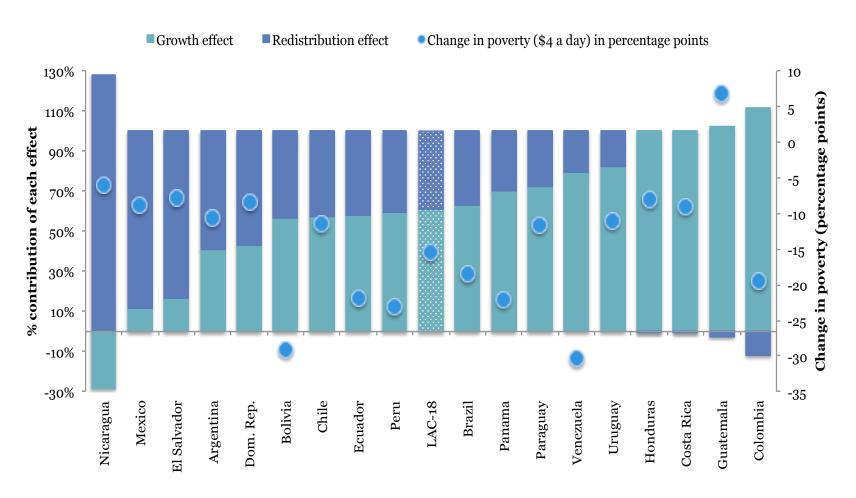


## The decline of income inequality in the 2000s has been higher that the rise in the 1990s

(Annual average change in Gini in %)

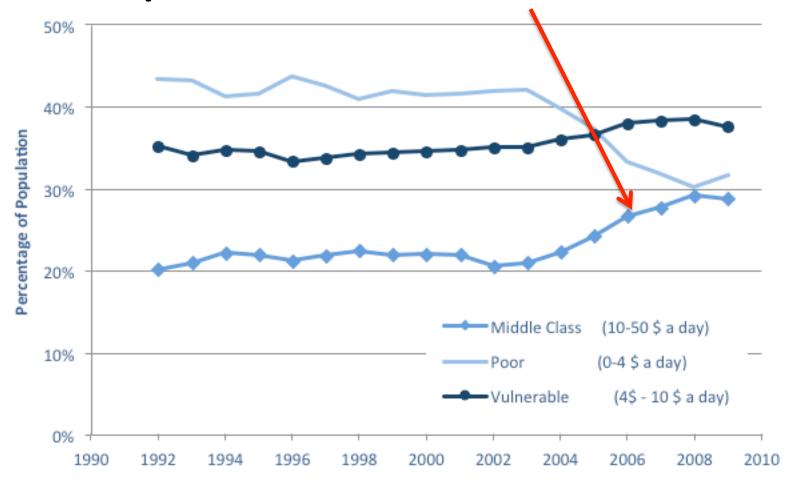


## On average, 40 percent of the reduction in poverty was due to the decline in inequality c. 2001-2010

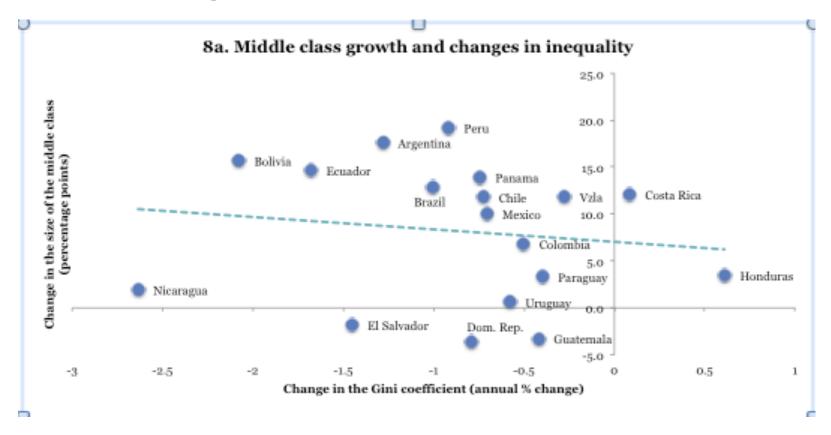


Lopez-Calva, L.F., N. Lustig, E. Ortiz-Juarez. 2014. "Inequality, Mobility and Middle Classes in Latin America." Mimeo May.

## Declining inequality has contributed to the expansion of the "middle-class"



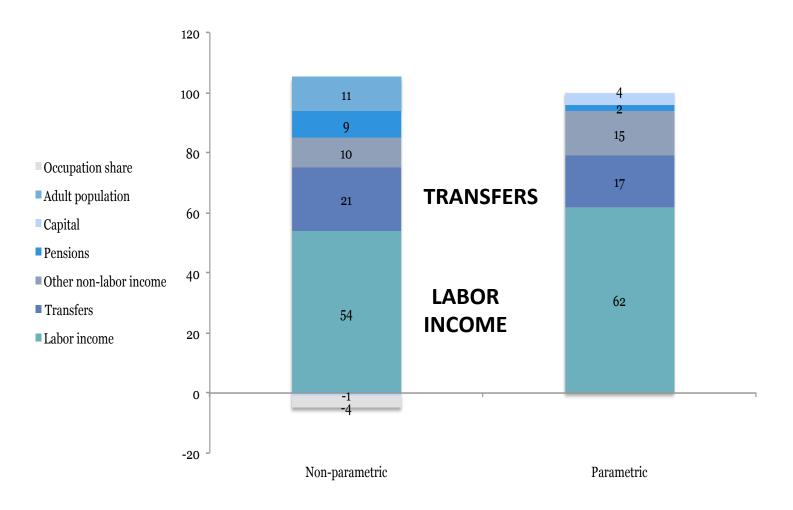
# The faster the decline in inequality, the faster the growth of the middle-class



# Determinants of the decline in inequality

- Declining inequality of hourly labor income
- Larger and more progressive transfers
- Lower dependency ratios & higher participation rates of adults

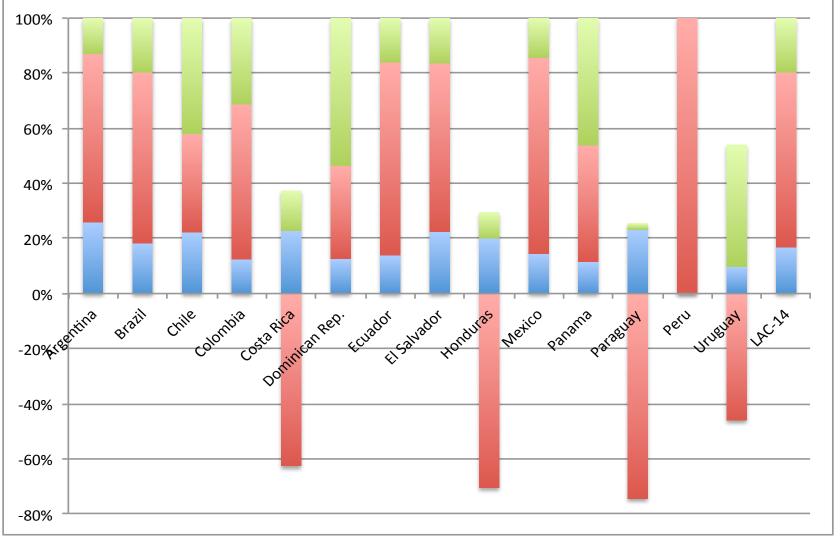
# Contribution of proximate determinants to the decline in inequality (%) Latin America, c. 2000-2010



*Source*: Non-parametric decomposition results from Azevedo et al. (2013a); and parametric results provided by CEDLAS, based on data from SEDLAC (CEDLAS and The World Bank).

# Decomposing Decline in Inequality Labor (red); Transfers (Green); Demog

(Blue) (Azevedo et al. 2012)



# Determinants of declining inequality in hourly labor earnings:

Decline in returns to post-secondary education (aka. skill premium)

- Supply
- Demand
- Labor Market Institutions
- Declining "quality" in workers with tertiary degree

### **Zooming in: Brazil**

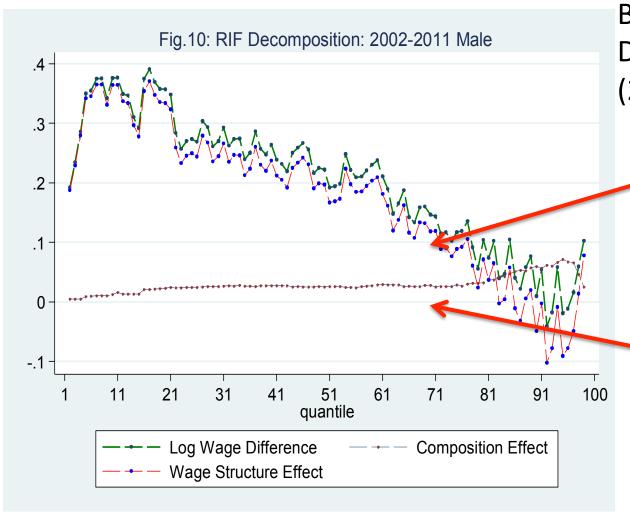
- Low growth during most of the period
- Decomposition:
  - Wage Structure Effect Equalizing
  - Workers' Characteristics Effect Slightly Unequalizing (Bourguignon et al., 2005) "paradox of progress)
- Wage structure effect:
  - Increase in relative supply of skilled workers
  - Increase in relative demand of low-skilled workers
  - Rising minimum wages
  - Declining <u>Absolute</u> real wages for workers with tertiary => degraded tertiary?

### **Brazil: Decline in Wage Inequality**

Table 1: Dispersion of Real Wages: 2002-2011, Male aged 16-65

200	2003	3 2004	2005	2006	2007	2008	2009	2011

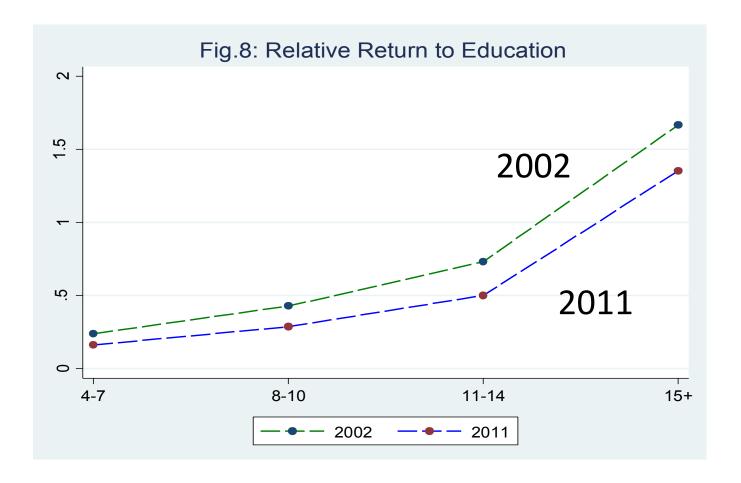
		Hourly Wage								
Mo	ale Sample									
	Mean	4.63	4.38	4.25	4.35	4.57	4.65	4.80	4.98	5.15
	Median	2.50	2.41	2.42	2.39	2.55	2.66	2.79	2.91	3.11
	Gini	0.52	0.51	0.50	0.50	0.50	0.49	0.48	0.48	0.47
	Theil	0.57	0.54	0.52	0.53	0.54	0.52	0.51	0.53	0.48
	90-10	7.79	7.27	7.05	6.60	6.75	6.12	6.11	6.00	5.60
	50-10	2.08	2.01	2.00	1.83	1.87	1.84	1.85	1.82	1.79
	90-50	3.75	3.62	3.53	3.60	3.60	3.33	3.30	3.30	3.13
	Obs	44097	43480	47187	49734	51479	51519	53825	55138	49419

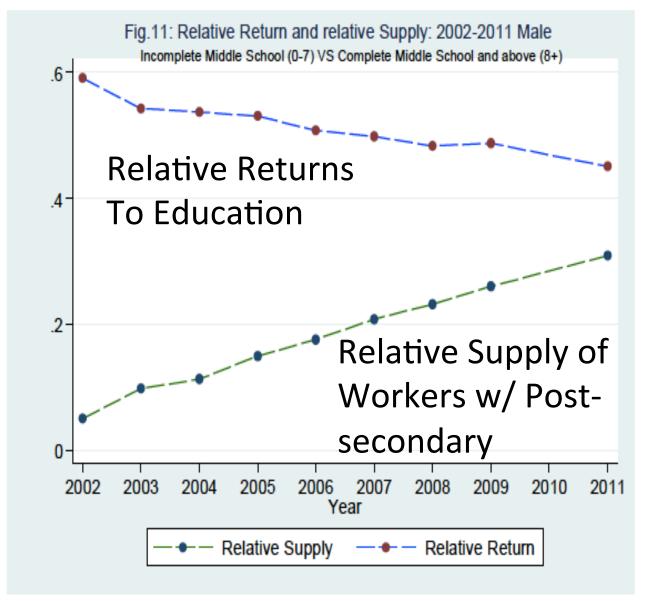


Brazil (RIF)
Decomposition
(2002-2011):

- Changes in WageStructureEqualizing
- Changes in Workers'CharacteristicsSlightlyUnequalizing

# Brazil: Decline in relative returns to education or "skill premium"

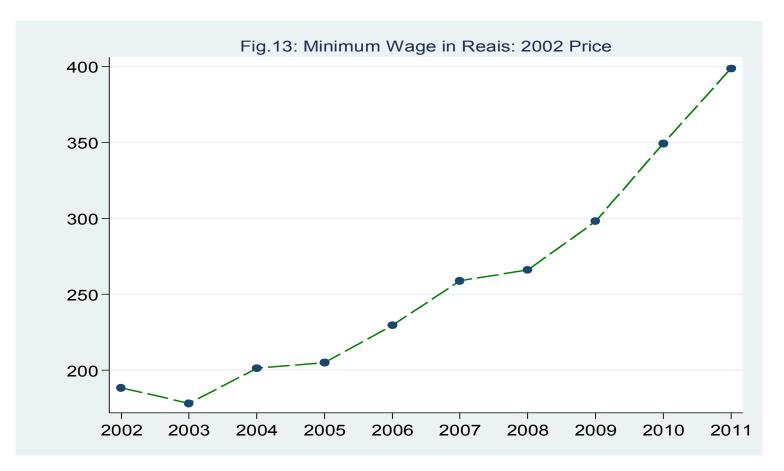




Brazil: Decline in skill premium coincides with the expansion of the relative supply of workers with post secondary education

Wang, Yang. 2013. "Decomposing the Changes in Male Wage Distribution in Brazil." Tulane University, Ph.D. field paper

### **Brazil: Rising minimum wage**

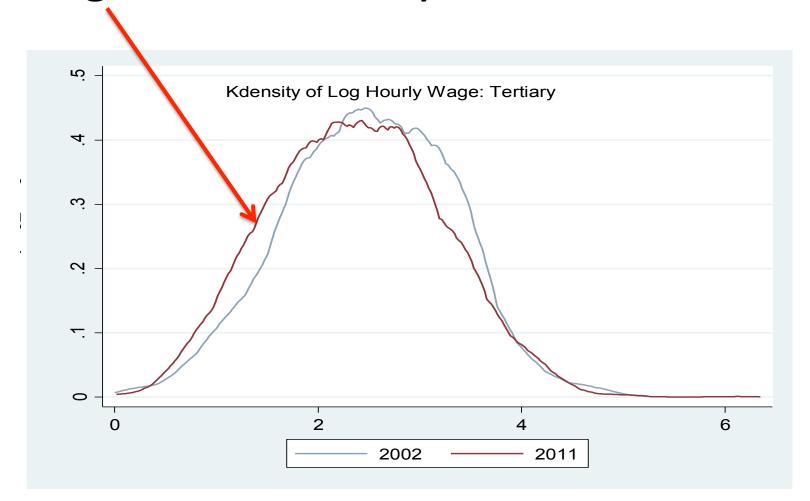


Wang, Yang. 2013. "Decomposing the Changes in Male Wage Distribution in Brazil." Tulane University, Ph.D. field paper

# Brazil: Decline in absolute wages for workers with tertiary



### "Degraded" Tertiary? Brazil 2002-2011



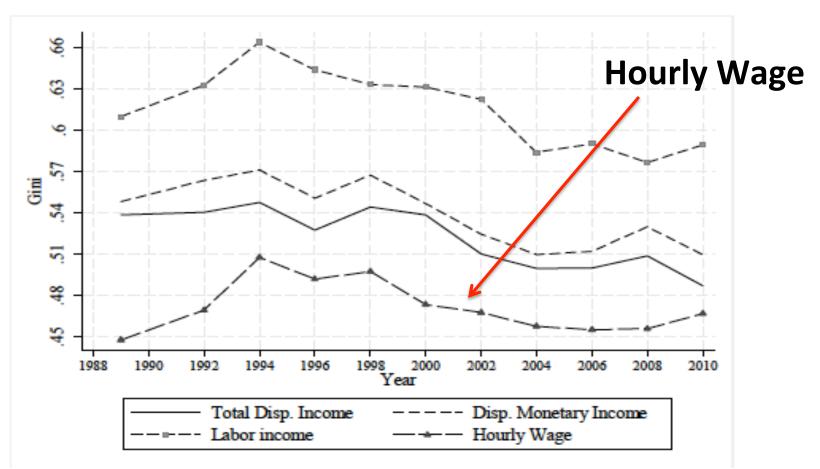
Wang, Yang. 2013. "Decomposing the Changes in Male Wage Distribution in Brazil." Tulane University, Ph.D. field paper

### Zooming in: Mexico

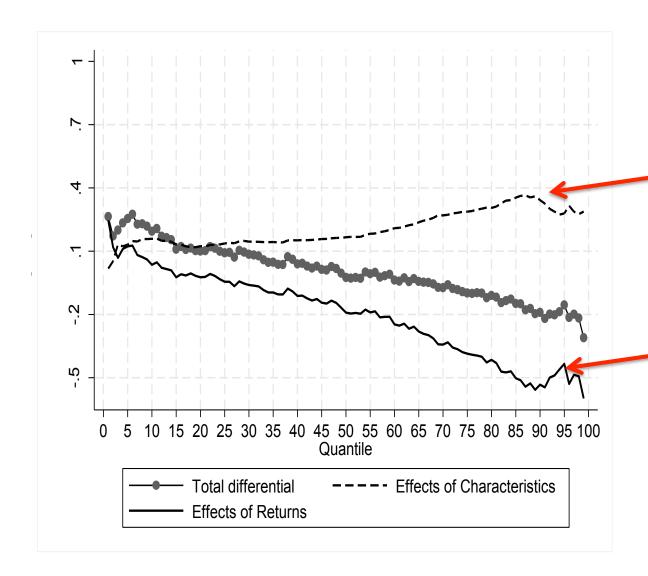
- Low growth
- Decomposition:
  - Wage Structure Effect Equalizing
  - Composition Effect Slightly Unequalizing (Bourguignon et al., 2005) "paradox of progress)
- Wage structure effect:
  - Increase in relative supply of skilled workers
  - Minimum wages and unionization no effect
  - Degraded tertiary?

### Mexico: Decline in Inequality (Gini)





Campos, R., G. Esquivel and N. Lustig. 2014. "The Rise and Fall of Income Inequality in Mexico, 1989–2010," Chapter 7 in Giovanni Andrea Cornia, ed., *Falling Inequality in Latin America: Policy Changes and Lesssons*, WIDER Studies in Development Economics, Oxford University Press,



Mexico (RIF)
Decomposition
(1996-2010):

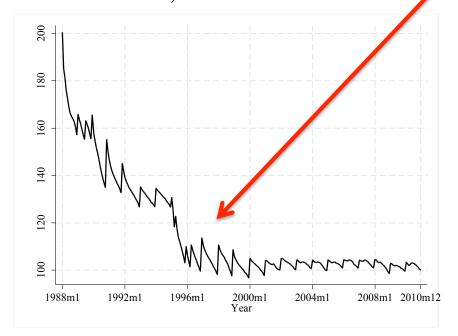
- Changes in workerscharacteristics
- •=> unequalizing
- Wage StructureEffect
- => Equalizing

Campos, R., G. Esquivel and N. Lustig. 2014. "The Rise and Fall of Income Inequality in Mexico, 1989–2010," Chapter 7 in Giovanni Andrea Cornia, ed., *Falling Inequality in Latin America: Policy Changes and Lesssons*, WIDER Studies in Development Economics, Oxford University Press,

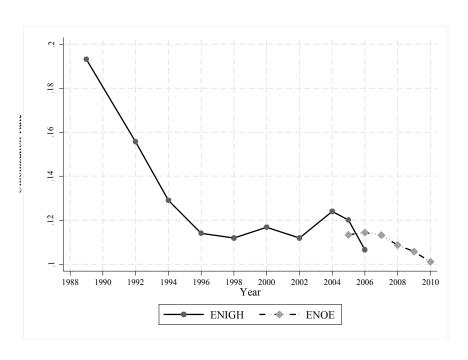
## In contrast to Brazil, in Mexico minimum wages did not increase at all...

#### Real Minimum Wage and Unionization: 1988-2010

A. Real Minimum Wage Index (December 2010=100)

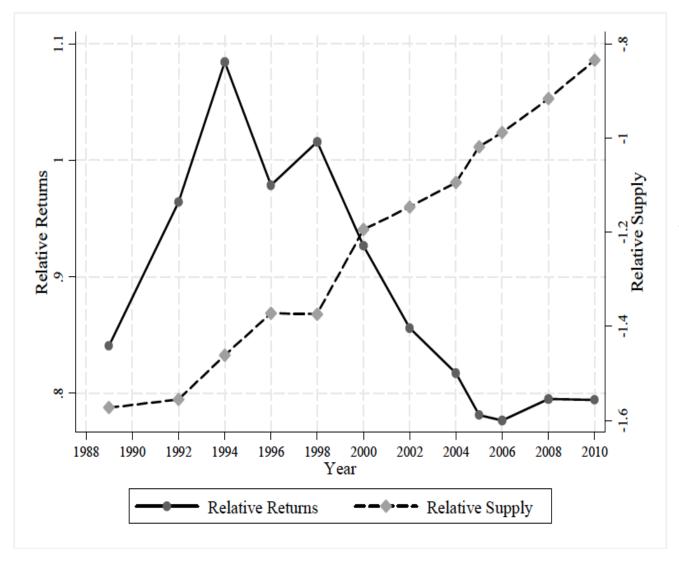


#### B. Unionization Rate



Campos, R., G. Esquivel and N. Lustig. 2014. "The Rise and Fall of Income Inequality in Mexico, 1989–2010," Chapter 7 in Giovanni Andrea Cornia, ed., *Falling Inequality in Latin America: Policy Changes and Lesssons*, WIDER Studies in Development Economics, Oxford University Press,

Mexico: Relative returns and relative supply, 1989-2010 (High school and more vs. secondary or less)



Mexico:
Decline in
skill premium
coincides with the
expansion of the
relative supply of
workers with post
secondary
education

Campos, R., G. Esquivel and N. Lustig. 2014. "The Rise and Fall of Income Inequality in Mexico, 1989–2010," Chapter 7 in Giovanni Andrea Cornia, ed., *Falling Inequality in Latin America: Policy Changes and Lesssons*, WIDER Studies in Development Economics, Oxford University Press,

# How redistributive are Latin American governments?

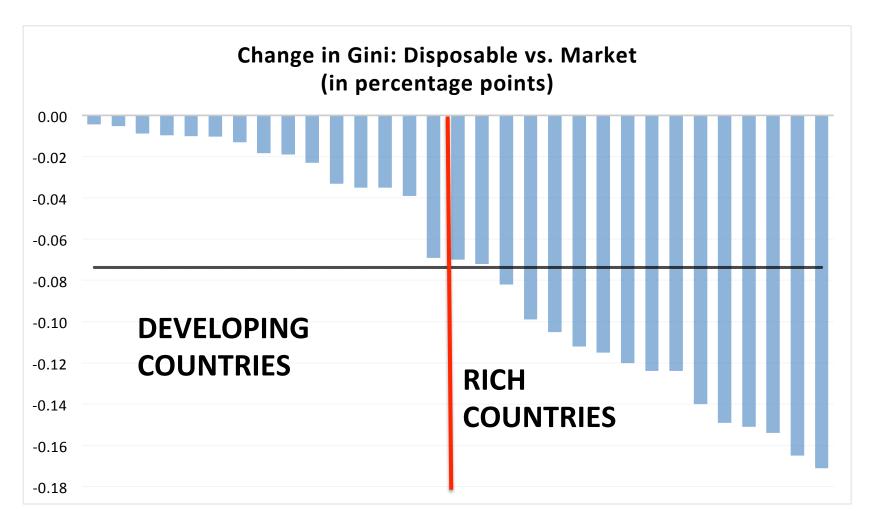
 Decomposition of changes in inequality by income source show that transfers is, on average, the second most important proximate determinant of decline in overall inequality

- Social spending and tax incidence analysis for 14 countries (8 from Latin America)
- www.commitmentoequity.org



## Redistribution in the rich and developing countries





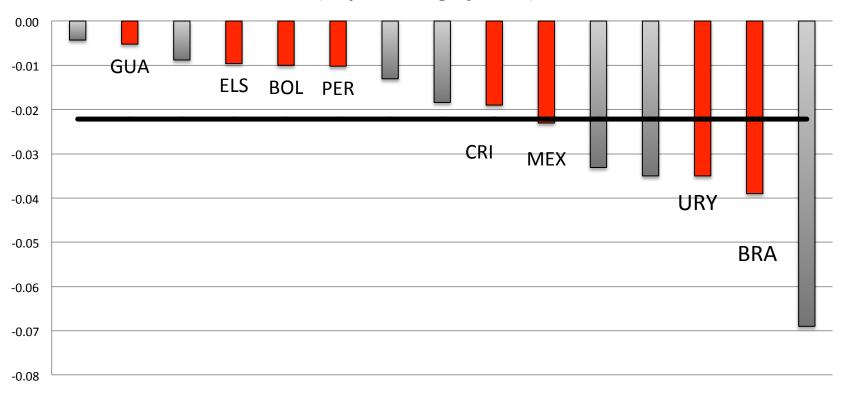
Sources: Immervoll et al. (2009) for EU and for CEQ countries see Lustig (2014) and slides at the end.

Note: in these calculations contributory pensions are part of market income and NOT treated as a government transfer.

#### **Zooming in (CEQ 14 countries; LA 8 in red)**



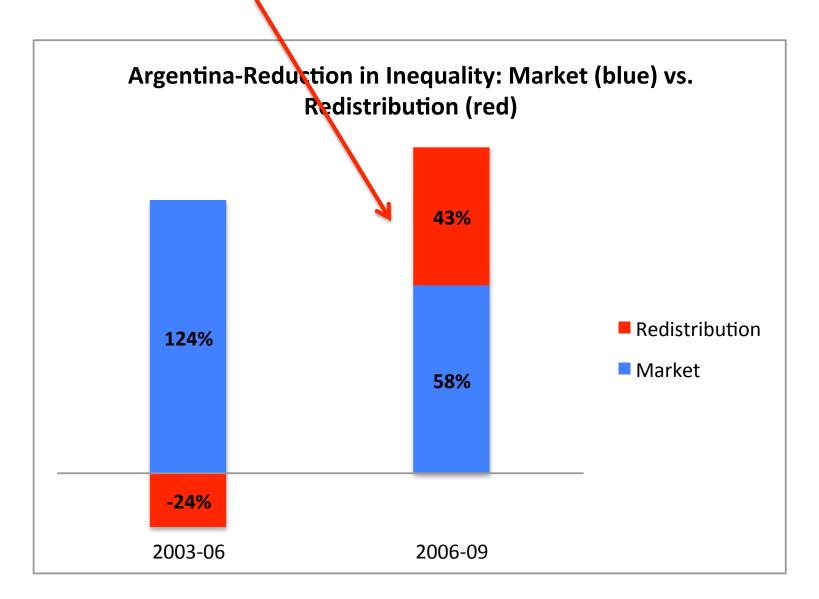
### Change in Gini: Disposable vs. Market (in percentage points)

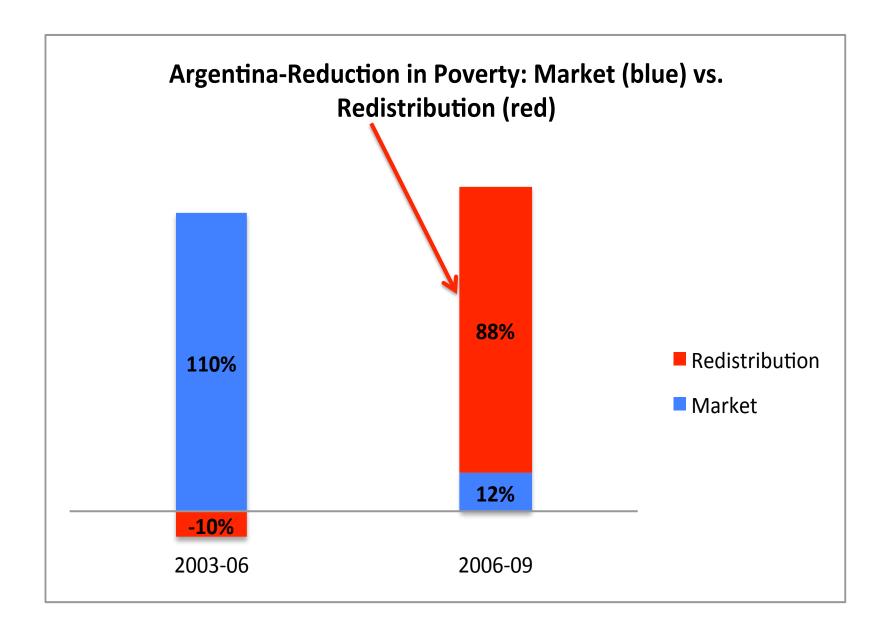


Sources: Lustig (2014) and slides at the end.

Note: in these calculations contributory pensions are part of market income and NOT treated as a government transfer.

#### **Argentina: Rising role of transfers**





#### **Mexico:** Rising role of transfers

Mexico: The impact of cash transfers on inequality and poverty, 1996, 2000 and 2010

		Net market income	Disposable income
1996	Gini	0.522	0.520
	% change with respect to net market income	/ + /	-0.4%
	Headcount index (\$2.5 PPP)	30.2%	29.9%
	% change wrt net market income	-/-	1.0%
2000	Gini	0.544	0.539
	% change wrt net market income	- \	-0.9%
	Headcount index (\$2.5 PPP)	22.1%	21.6%
	% change with respect to net market income	_	-2.3%
2010	Gini	0.503	0.495
	% change wrt net market income		-1.7%
	Headcount index (\$2.5 PPP)	13.8%	11%
	% change with respect to net market income	<u> </u>	-20.1%

Campos, R., G. Esquivel and N. Lustig. 2014. "The Rise and Fall of Income Inequality in Mexico, 1989–2010," Chapter 7 in Giovanni Andrea Cornia, ed., *Falling Inequality in Latin America: Policy Changes and Lesssons*, WIDER Studies in Development Economics, Oxford University Press,

### Thank you!

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- Wang, Yang. 2013. "Decomposing the Changes in Male Wage Distribution in Brazil." Tulane University, Ph.D. field paper.

#### **CEQ Teams**



#### (Year of Survey; C=consumption & I=income)(MWB Version)

- 1. Argentina (2009, I): Nora Lustig and Carola Pessino (CEQ Web Dec 2013) *Public Finance Review*, May 2014, Volume 42, Issue 3
- 2. Bolivia (2009; I): Veronica Paz Arauco, George Gray-Molina, Wilson Jimenez and Ernesto Yañez (CEQ Web Dec 2013) *Public Finance Review*, May 2014, Volume 42, Issue 3
- **3. Brazil (2009; I)**: Sean Higgins and Claudiney Pereira (CEQ Web Dec 2013) *Public Finance Review,* May 2014, Volume 42, Issue 3
- **4. Costa Rica (2010; I)**: Pablo Sauma and Juan Diego Trejos (February 2014; paper)
- **5. El Salvador (2011; I)**: Margarita Beneke, Nora Lustig and Jose Andres Oliva (March 11, 2014)
- **6. Guatemala (2011; I)**: Maynor Cabrera, Nora Lustig and Hilcias E. Moran (April 13, 2014)

#### **CEQ Teams**



#### (Year of Survey; C=consumption & I=income)(MWB Version)

- **10 Mexico (2010; I):** John Scott (CEQ Web Dec 2013) *Public Finance Review,* May 2014, Volume 42, Issue 3
- **11 Peru (2009; I):** Miguel Jaramillo (CEQ Web Dec 2013) *Public Finance Review,* May 2014, Volume 42, Issue 3
- 12 United States (2011; I): Sean Higgins, Nora Lustig, Whitney Ruble and Timothy Smeeding
- **13 Uruguay (2009; I):** Marisa Bucheli, Nora Lustig, Maximo Rossi and Florencia Amabile (CEQ Web Dec 2013) *Public Finance Review,* May 2014, Volume 42, Issue 3
- Research Assistant: Yang Wang, Tulane University