

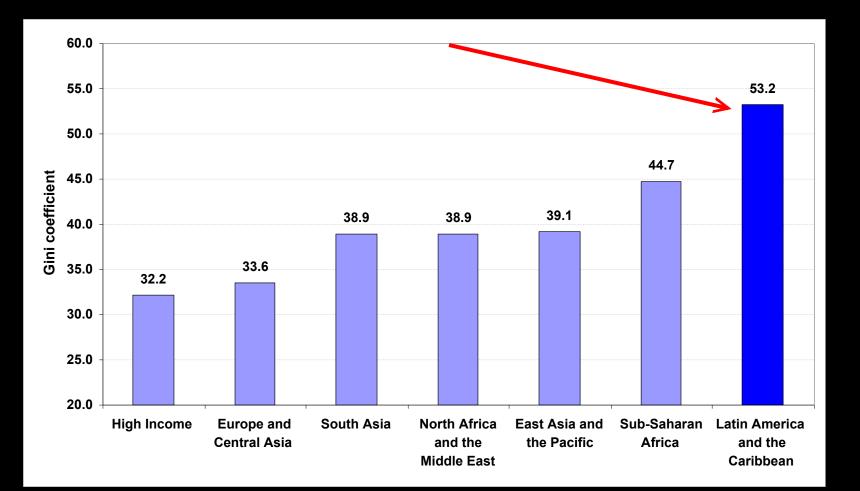
## **Declining Inequality in Latin** America Nora Lustig **Tulane University** and Nonresident Fellow CGD and IAD SAIS Washington, DC, September 17, 2014

### 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

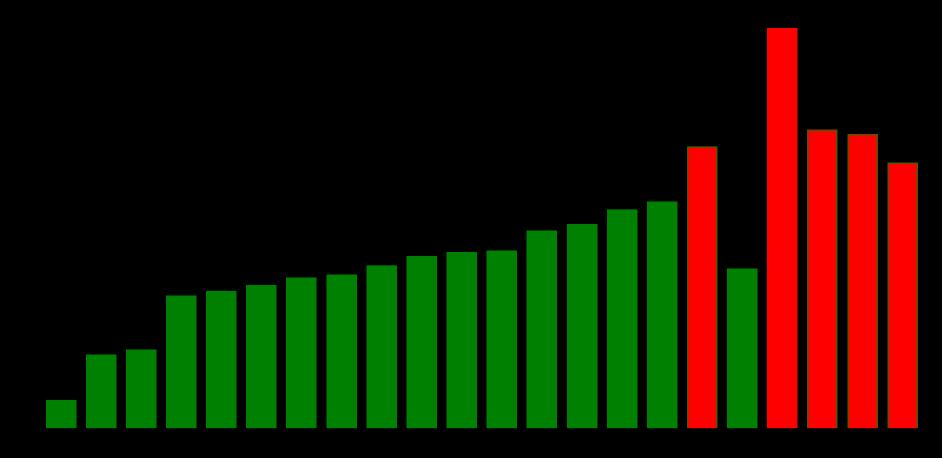
Gini Coefficient by Region (in %), 2004



Ferreira and Ravallion, 2008.

### Inequality declined during the 2000's

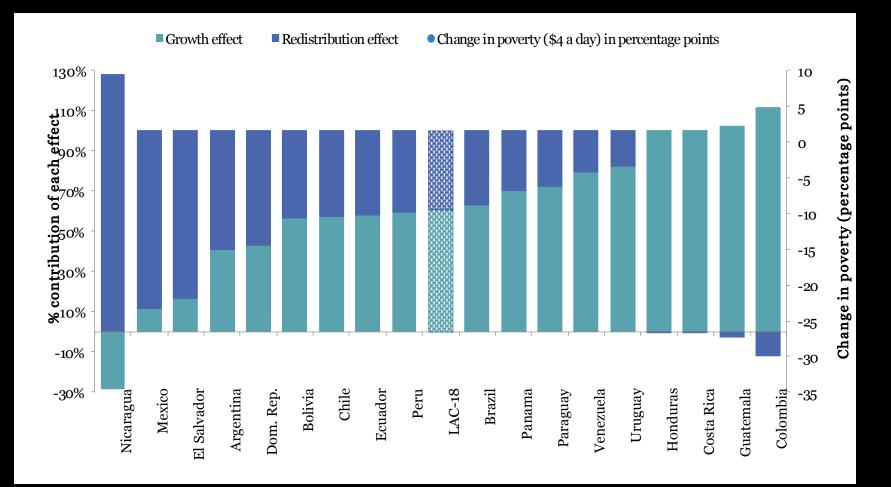
Latin America: Declining income inequality by country: 2000-2011 (Annual Change of Gini in %)



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

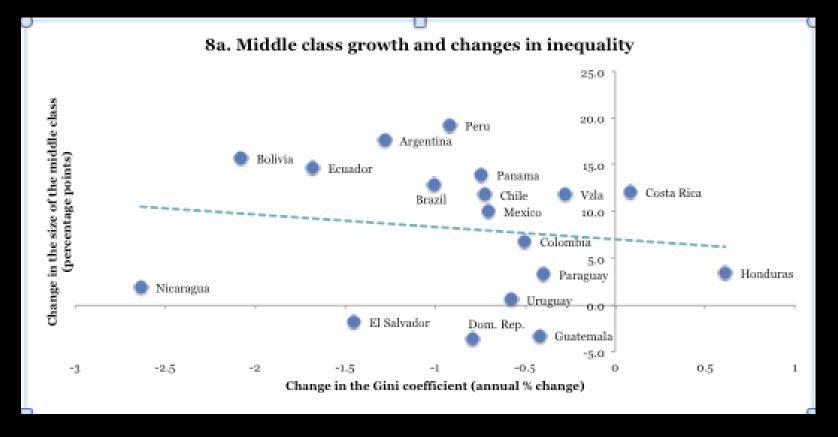


Lopez-Calva, L.F., N. Lustig, E. Ortiz-Juarez. 2014. "Inequality, Mobility and Middle Classes in Latin America." Mimeo May.

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

Ferreira et al., 2012.

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

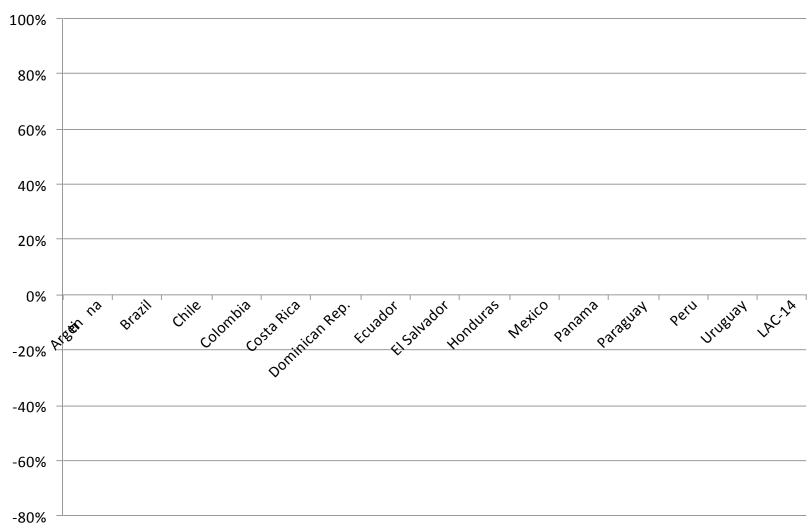


Lopez-Calva, L.F., N. Lustig, E. Ortiz-Juarez. 2014. "Inequality, Mobility and Middle Classes in Latin America." Mimeo May.

# 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

### Decomposing Decline in Inequality Labor (red); Transfers (Green); Demog (Blue) (Azevedo et al. 2012)



Determinants of declining inequality in hourly labor earnings:

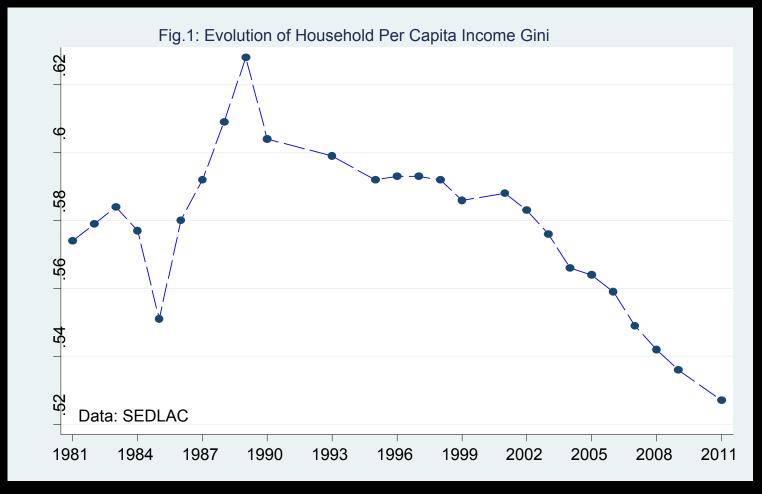
Decline in returns to post-secondary education (aka. skill premium)

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

### Zooming in

Brazil

## Zooming in Brazil: Decline in Inequality (Gini)



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

## Zooming in: Brazil

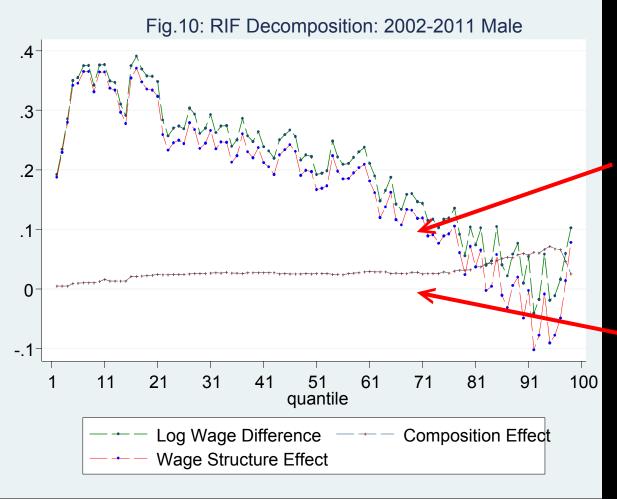
- Low growth during most of the period
- Decomposition of change in wage inequality:
  - Change in Relative Wages => Effect Equalizing
  - Change in Composition for Education and Experience =>Slightly Unequalizing (Bourguignon et al., 2005) "paradox of progress)

## Zooming in: Brazil

- Relative Wages 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**

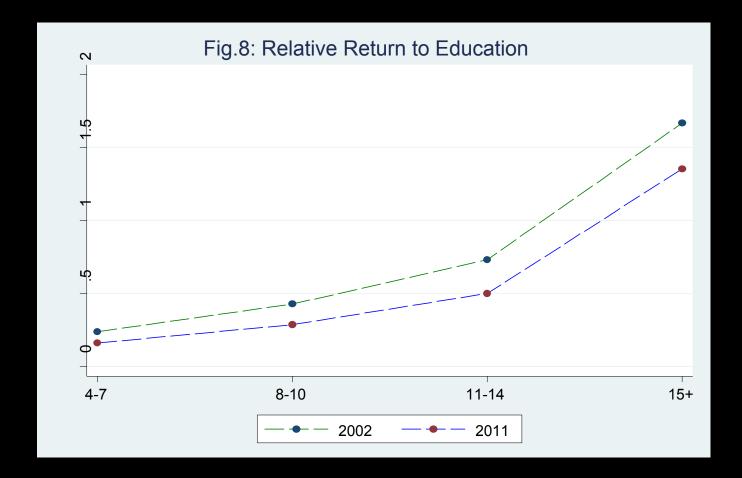
	2002	2003	2004	2005	2006	2007	2008	2009	2011
	Hourly Wage								
Male Sample									
Mean	4.63	4.38	4.25	4.35	4.57	4.65	4.80	4.98	5.15
Median	2.50	2.41	2.42	2.39	2.55	2.66	2.79	2.91	3.11
Gini	0.52	0.51	0.50	0.50	0.50	0.49	0.48	0.48	0.47
Theil	0.57	0.54	0.52	0.53	0.54	0.52	0.51	0.53	0.48
90-10	7.79	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

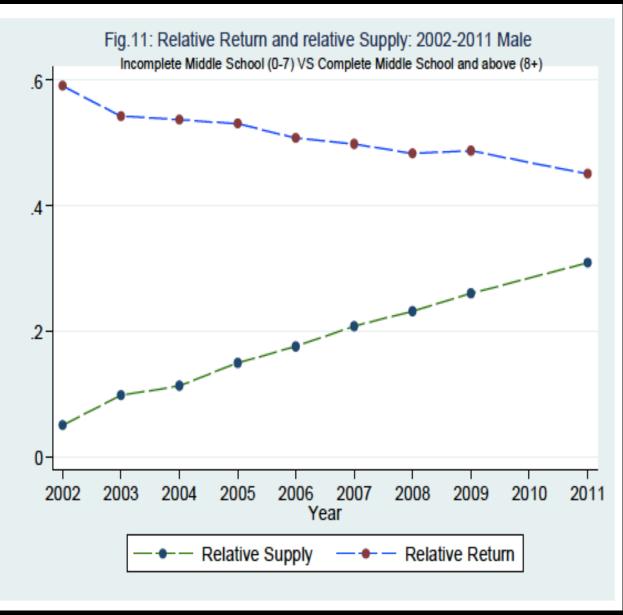


Brazil (2002-2011):

Relative
Wages
=> Equalizing
Composition
Education &
Experience
=>Slightly
Unequalizing

# Brazil: Decline in relative returns to education





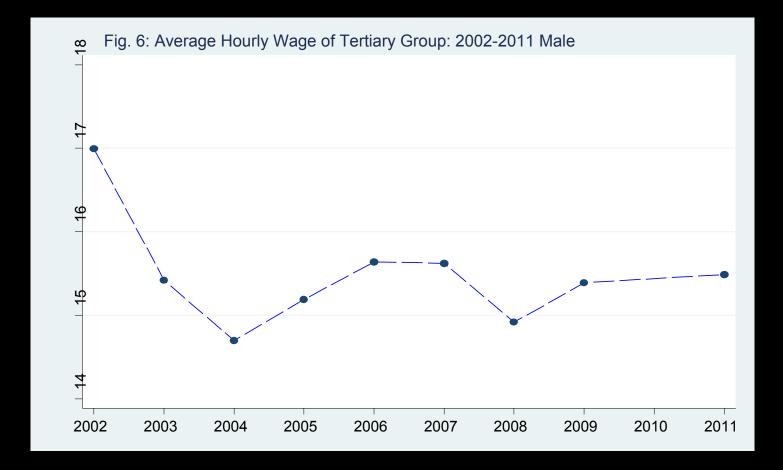
Brazil: Decline in skill premium coincides with the expansion of the relative supply of workers with post secondary education

### 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 real wages for workers with tertiary

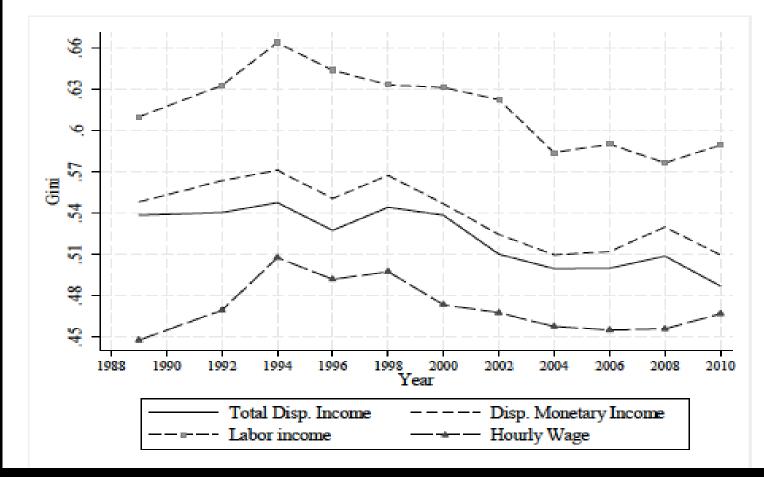


### Zooming in

Mexico

### Zooming in Mexico Decline in Inequality (Gini)

Mexico: Evolution of the Gini Coefficient, 1989-2010



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,

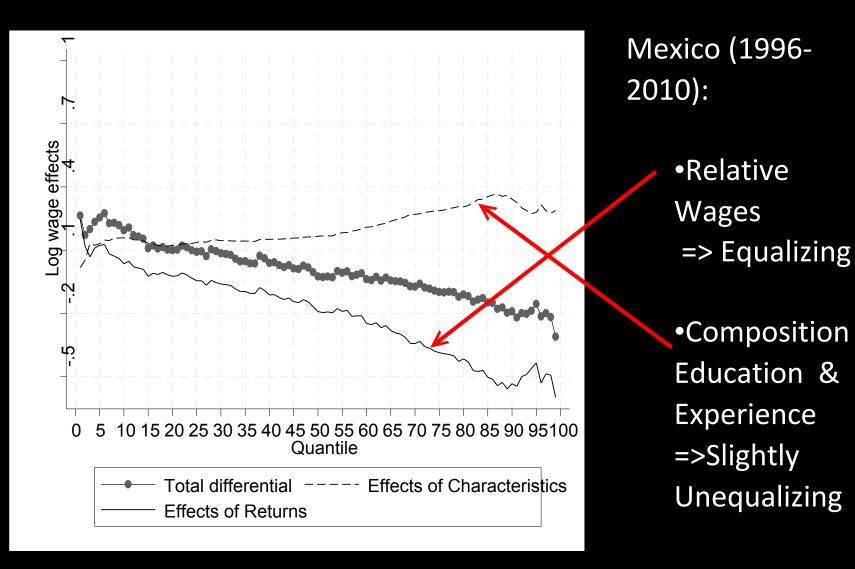
## Zooming in: Mexico

- Low growth
- Decomposition of change in wage inequality:
  - Change in Relative Wages => Effect
     Equalizing
  - Change in Composition for Education and Experience =>Slightly Unequalizing

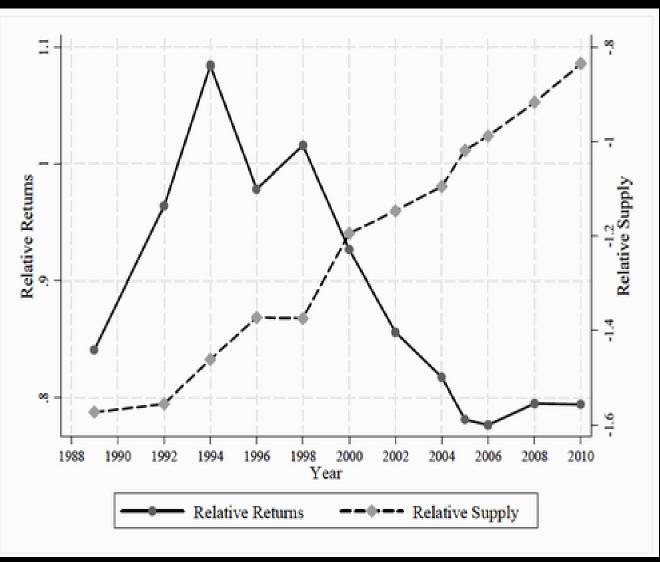
## Zooming in: Mexico

• Change in Relative Wages

- Increase in relative supply of skilled workers
- Minimum wages and unionization no effect
- Degraded tertiary?



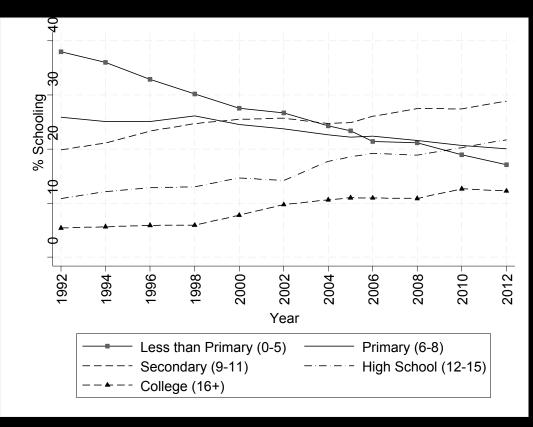
Campos, R., G. Esquivel and N. Lustig. 2014. "The Rise and Fall of Income Inequality in Mexico, 1989–2010," Chapter 7 in Giovanni Andrea Cornia, ed., *Falling Inequality in Latin America: Policy Changes and Lesssons*, 26 WIDER Studies in Development Economics, Oxford University Press,



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

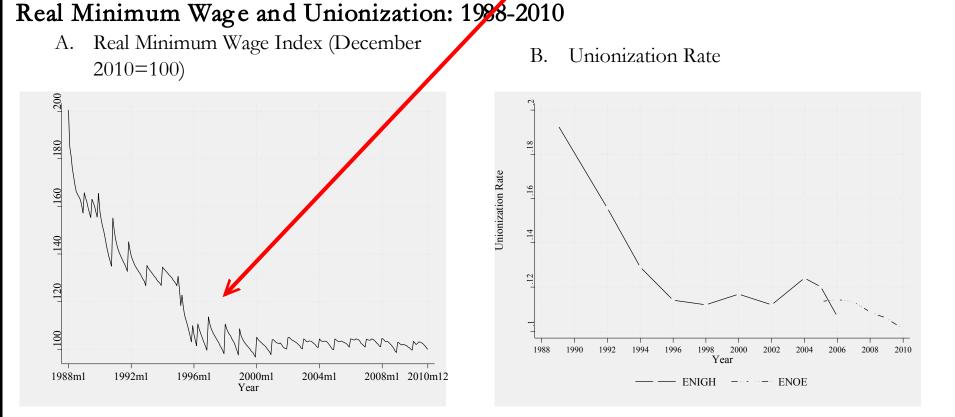
Campos, R., G. Esquivel and N. Lustig. 2014. "The Rise and Fall of Income Inequality in Mexico, 1989–2010," Chapter 7 in Giovanni Andrea Cornia, ed., *Falling Inequality in Latin America: Policy Changes and Lesssons*, WIDER Studies in Development Economics, Oxford University Press,

#### Mexico:Changes in Schooling



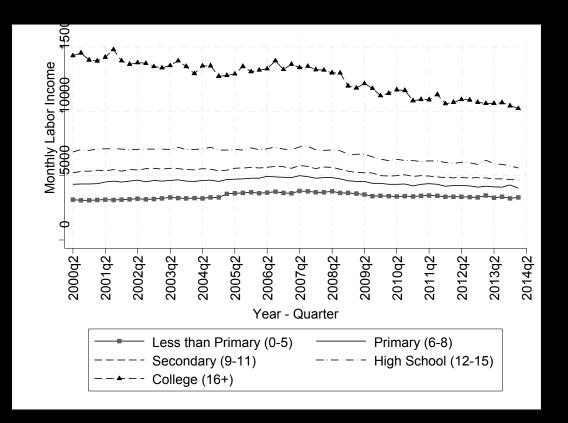
Note: Population age 20-65, ENE from 2000-2004 and ENOE 2005-2014. Representative at the national level. Full sample.

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



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,

#### **Income: education**



Campos, Lopez-Calva and Lustig (2014) Note: Population age 20-65, ENE from 2000-2004 and ENOE 2005-2014. Representative at the national level. Sample restricted to those with valid labor income. All employment: salaried, self-employment and employers. Constant Mexican Pesos 2014:1.

## **Government Transfers**

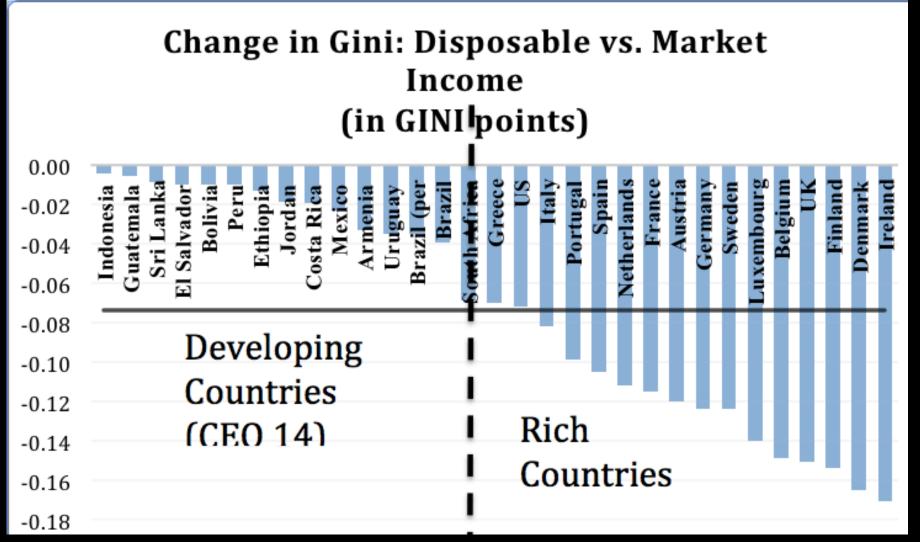
# How redistributive are Latin American governments?

- 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)
- <u>www.commitmentoequity.org</u>



Redistribution in the rich and developing countries

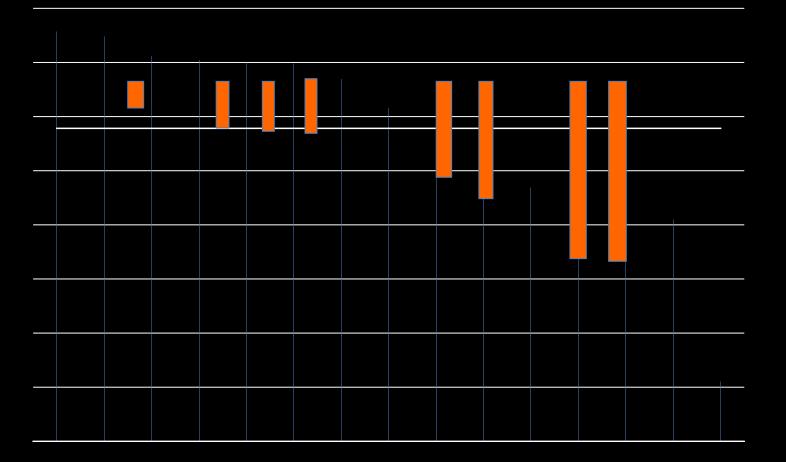




Sources: Immervoll et al. (2009) for EU and for CEQ countries see Lustig (2014) and slides at the end.

Note: in these calculations contributory pensions are part of market income and NOT treated as a government transfer. 34

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



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.

COMMITMENT TO EQUITY

#### Redistribution rises with income per capita

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.

# .... the more unequal, the more redistribution



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

Higher inequality is associated with more redistributive "effort:" spending on transfers/GDP rises with inequality



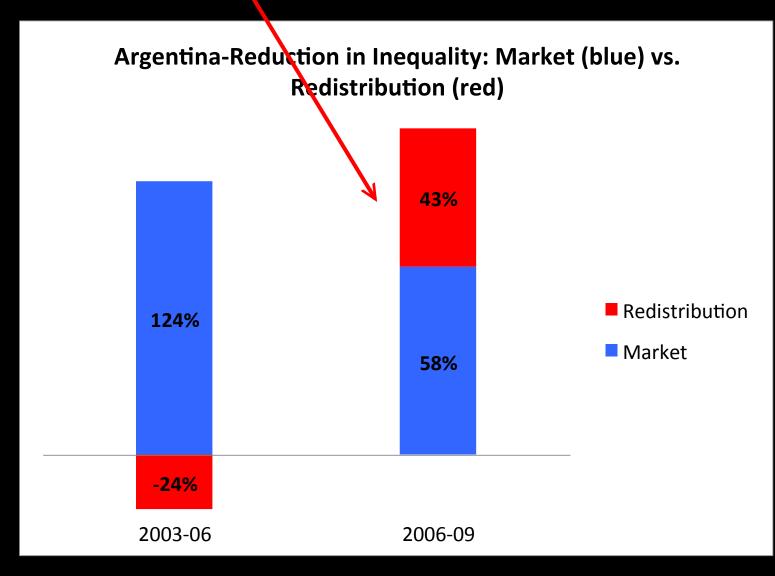
Sources: Lustig (2014) and slides at the end. Note: in these calculations contributory pensions are part of market income and NOT treated as a government transfer.



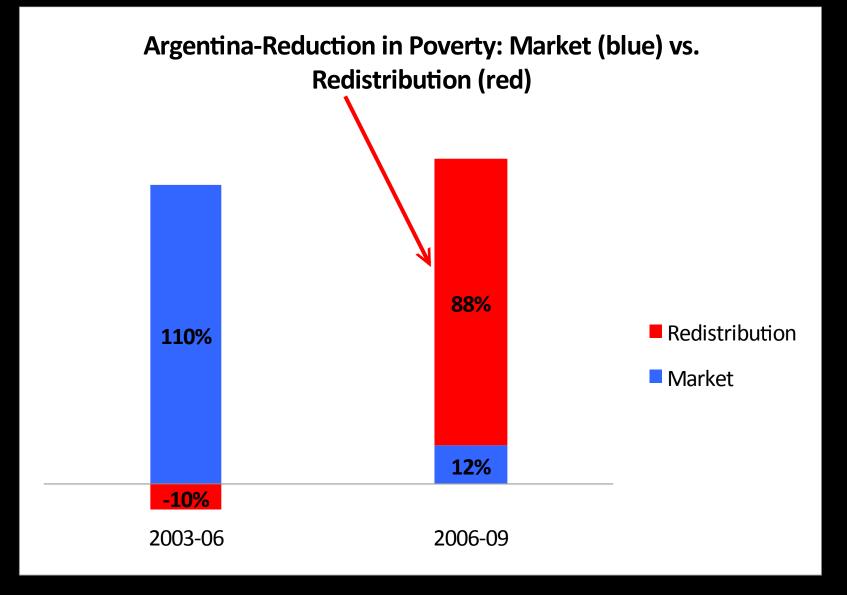
#### ...and so does social spending/GDP

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**

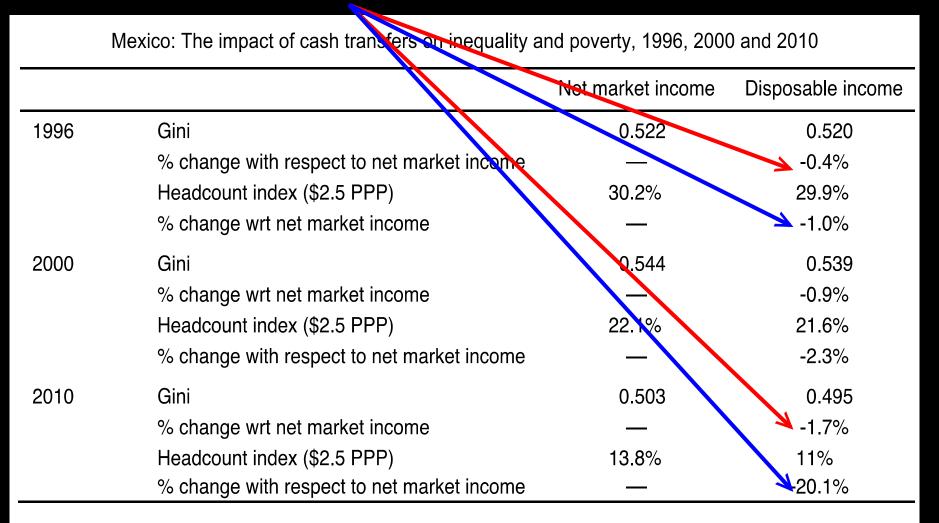


Lustig, N. and C. Pessino. 2014.



#### Lustig, N. and C. Pessino. 2014.

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



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!

#### References

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- Lustig, N., L. F. Lopez-Calva, E. Ortiz-Juarez. 2014. "Deconstructing the Decline in Inequality in Latin America," chapter in Devlin, Machinea, Chavarria (eds.), (published in Spanish)
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- Lustig, N. and C. Pessino. 2014. "Social Spending and Income Redistribution in Argentina in the 2000s: the Rising Role of Noncontributory Pensions," in *Public Finance Review*, May 2014, Volume 42, Issue 3 Lustig, N., C. Pessino and J. Scott. 2014. "The Redistributive Impact of Taxes and Social Spending in Latin America. Special Issue." *Public Finance Review*, May, Volume 42, Issue 3.
- 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. Armenia (2011; I): Stephen Younger and Artsvi Khachatryan (March 12, 2014; paper)
- 3. **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
- 4. **Brazil (2009; I)**: Sean Higgins and Claudiney Pereira (CEQ Web Dec 2013) *Public Finance Review,* May 2014, Volume 42, Issue 3
- 5. **Costa Rica (2010; I)**: Pablo Sauma and Juan Diego Trejos (February 2014; paper)
- 6. **El Salvador (2011; I)**: Margarita Beneke, Nora Lustig and Jose Andres Oliva (March 11, 2014)
- Ethiopia (2010/11; C): Ruth Hill, EyasuTsehaye, Tassew Woldehanna (April 30, 2014)
- Guatemala (2011; I): Maynor Cabrera, Nora Lustig and Hilcias E. Moran (April 13, 2014)
- 9. Indonesia (2012; C) : Jon Jellema and Matthew Wai-Poi (February 18, 2014)

#### **CEQ** Teams



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

- 10 **Jordan (2010; C) :** Morad Abdel-Halim, Shamma Adeeb Alam, Yusuf Mansur, Umar Serajuddin, Paolo Verme (April 18, 2014)
- 11 **Mexico (2010; I):** John Scott (CEQ Web Dec 2013) *Public Finance Review,* May 2014, Volume 42, Issue 3
- 12 **Peru (2009; I):** Miguel Jaramillo (CEQ Web Dec 2013) *Public Finance Review,* May 2014, Volume 42, Issue 3
- 13 **South Africa (2010; I)**: Ingrid Woolard, Precious Zikhali, Mashekwa Maboshe, Jon Jellema (May 5, 2014)
- 14 Sri Lanka (2009/10; C): Nisha Arunatilake, Gabriela Inchauste and Nora Lustig (April 8, 2014; paper)
- 15 **United States (2011; I):** Sean Higgins, Nora Lustig, Whitney Ruble and Timothy Smeeding
- 16 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