

A Vulnerability Approach to the Definition of the Middle Class

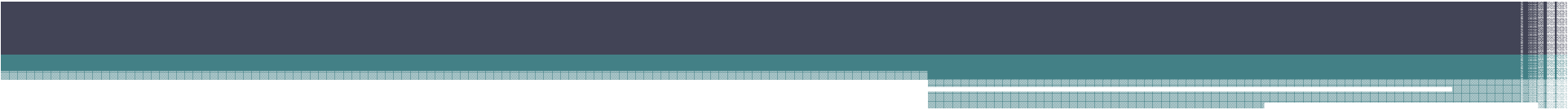
Luis F. López-Calva

The World Bank.

CAF Latin America Seminar
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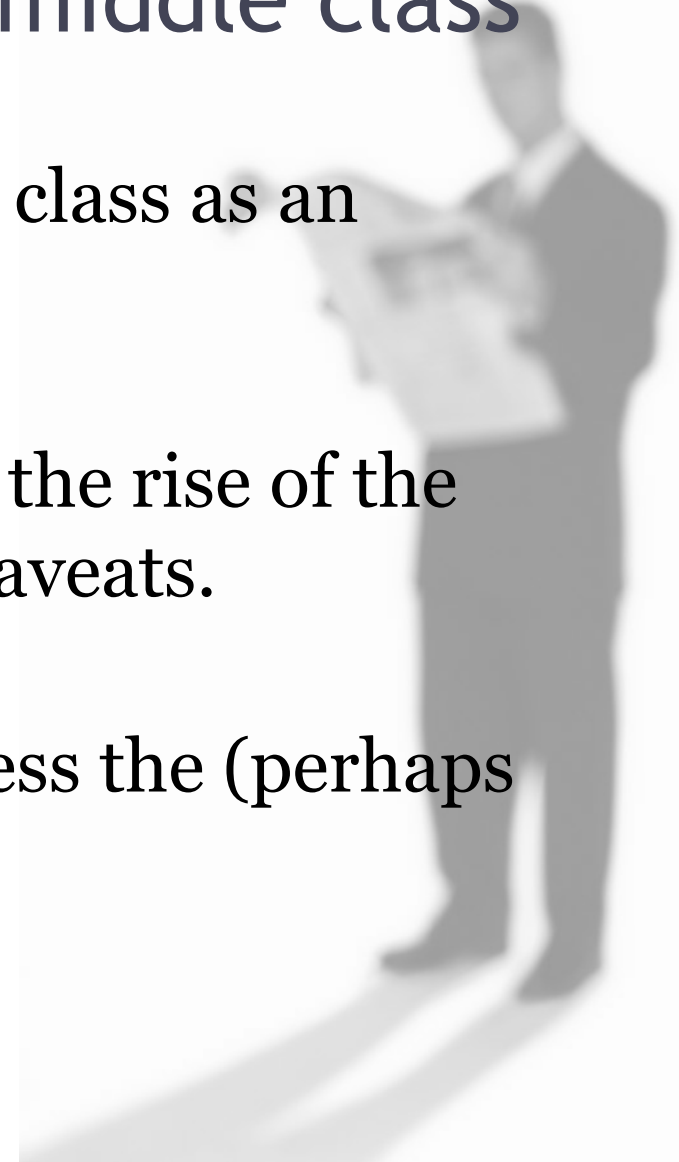
1. An objective definition of the middle class: Why is it relevant?
2. Concepts
3. Measurement
4. Trends in Latin America
 - The case of Mexico
5. Middle Class and Values



**1. An objective definition:
Why is the measurement of the
middle class relevant?**

Renewed interest in the middle class

- The rise of the global middle class as an important global trend
- Spirited debate surrounding the rise of the middle class is not without caveats.
- Economic viewpoint—to assess the (perhaps overly) optimistic trends



Africa's growing middle class

Pleased to be bourgeois

A third of Africans now live on at least \$2 per day

May 12th 2011 | from the print edition

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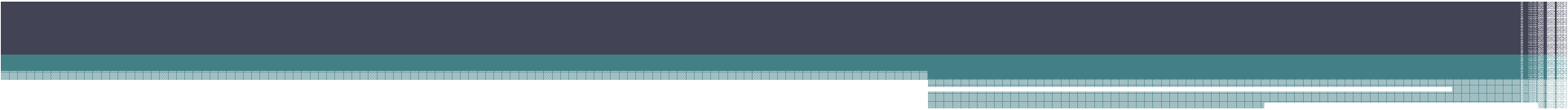


Moving upwards?

IT IS to the middle class we must look for the prosperity of Africa, to paraphrase William Thackeray. Many countries are making a mint from commodities such as oil, copper and gold thanks to sky-high prices. But that is not enough to give Africa a permanent boost. Commodity markets are notoriously fickle and revenues can quickly be squandered.

The case of Mexico as an example

- As the Mexican government discussed the new “middle class society” ...
- ...about 9 million people went back into poverty between 2006-2012
- Our definition turned out to be more accurate: *Many of those "new middle class" households were not really there yet*

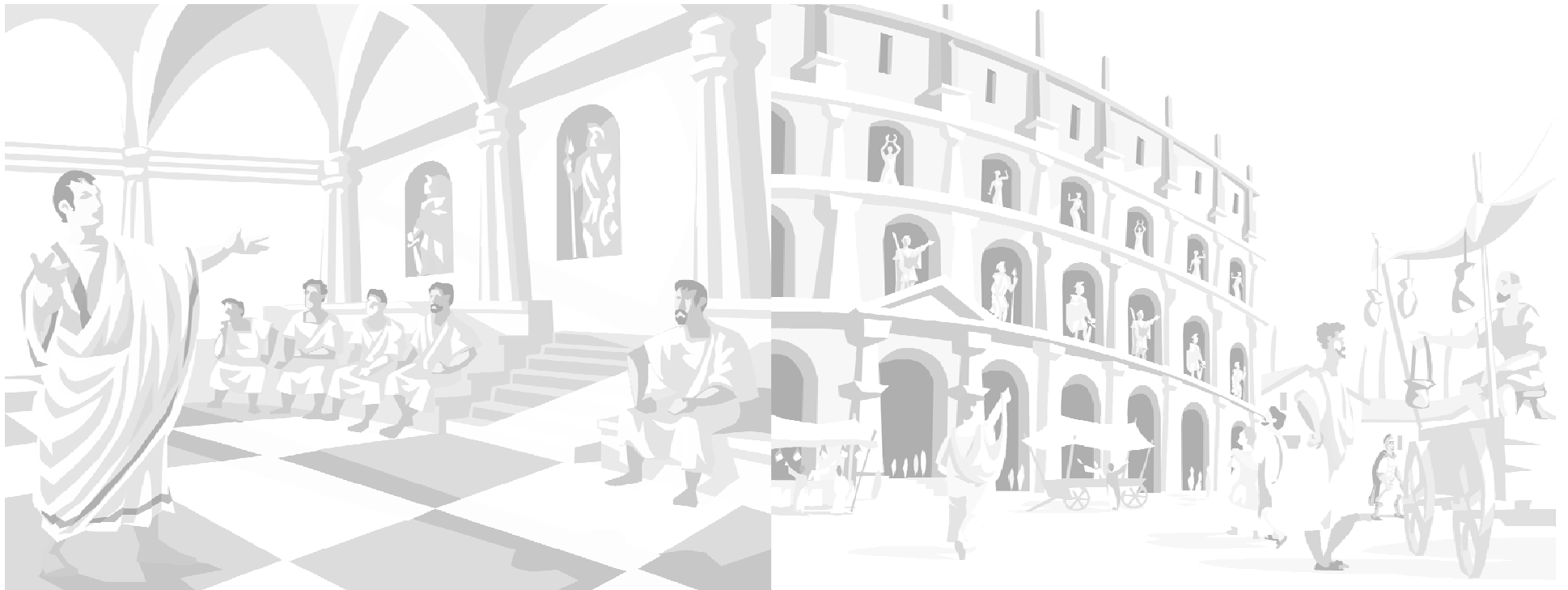


2. What does it mean to be middle class?

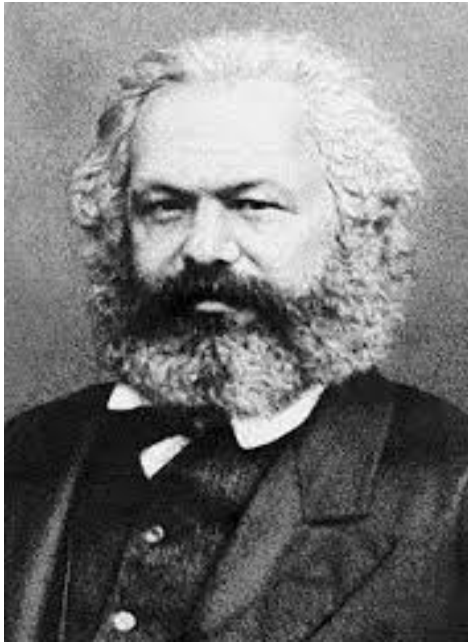
An economic point of view

Concepts

- The concept of “class” was born out of an economic necessity (effective tax collection)...



...evolving into a much more complex notion in sociology (Marx and Weber).



- The concept is broad, and likely multidimensional.
- It involves more than simply incomes.

The sociological notion

In the Weberian tradition the concept of stratification contains three intertwined notions:

- **Class:** the strictly economic aspect of stratification.
- **Status:** the identity and prestige associated with membership (cultural consumption)
- **Party (power):** related to the notion of power in social relations



The closest link to Marxian analysis: *class as exploitation and property relations*



Middle Class



Relative:
Polarization



Absolute:
Vulnerability to
poverty

¿Which thresholds?

If p_n is the n percentile and y_i the per capita income of household i :

Threshold	Authors	
Relative		
$0.75 (p_{50}) \leq y_i \leq 1.25 (p_{50})$	Birdsall et al. (2000) & Thurow (1987)	Population depends on specific distribution
$0.60 (p_{50}) \leq y_i \leq 2.25 (p_{50})$	Blackburn & Bloom (1985)	
$0.50 (p_{50}) \leq y_i \leq 1.50 (p_{50})$	Davis & Huston (1992)	
$p_{40} \leq y_i \leq p_{80}$	Alesina & Perotti (1996)	Fixed proportion of the population
$P_{20} \leq y_i \leq p_{80}$	Barro (1999) & Easterly (2001)	
$p_{40} \leq y_i \leq p_{60}$	Partridge (1997)	
$P_{20} \leq y_i \leq p_{90}$	Solimano (2008)	
Absolute (income per capita /daily expenditure)		
\$2-\$10	Banerjee & Duflo (2008)	Very low standards
\$2-\$13	Ravallion (2010)	
\$12-\$50	Milanovic & Yitzhaki (2002)	
\$10-\$100	Kharas & Gertz (2010)	
		Arbitrary

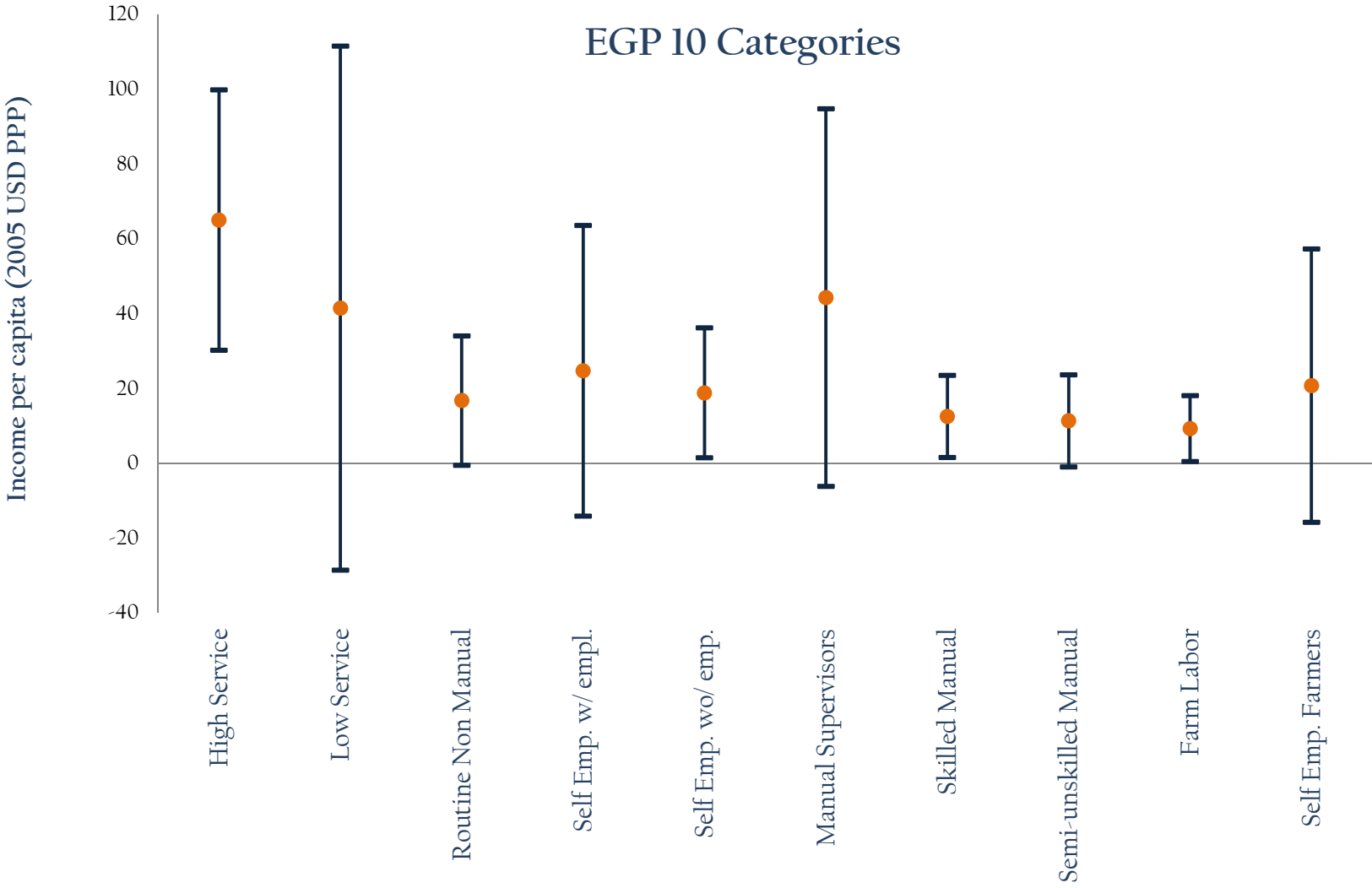
Defining the middle class:

Conceptual clarity on the definition of what it means to be “middle class”

A concept that:

- Isolates the economic dimension
- Makes sense of the ‘directional’ notion from a welfare perspective
- Introduces relevant categories from a policy perspective
- Can be applied to different contexts as a *concept*—even though the specific thresholds may vary

Goldthorpe categories: Chile



Source: Ferreira, et al. (2013)

Vulnerability to poverty and Middle Class

One looks to define the middle class in terms of absolute monetary thresholds, but which –not arbitrary— ones?

For the lower bound of the middle class, we proceed by analogy with well-established approaches to setting poverty lines:

- What incomes are associated with the “functionings” that define the class
 - Poverty: Insufficient nutrition (levels of calorie intake)
 - Middle Class: Lower vulnerability to falling back into poverty (“economic security”)

Absolute in the sense of the functioning that defines it, relative in terms of the specific context

Vulnerability to Poverty and Middle Class

- López-Calva and Ortiz-Juarez (2012) propose a new definition of the admission threshold to the ‘middle class club’:



An individual becomes a middle class member when she is no longer *vulnerable to poverty*



- The concept of middle class is then anchored to:
 - A non-arbitrary principle, based on welfare
 - *Economic security*—the element that differentiates this situation from others

Defining the middle class in terms of absolute monetary thresholds:

¿Which—non-arbitrary thresholds—to choose?

- For the **lower bound** of the middle class, we proceed analogously to the well-established approach to define poverty lines :

Income level associated with the ‘functioning’:

- **Poverty:** Insufficient nutrition (level of calorie intake)
- **Middle Class:** Lower vulnerability of falling back into poverty (economic security)
- *Absolute* in the sense of the functionings that define it
- *Relative* in terms of the specific context



3. Measurement

Vulnerability to Poverty: Method

Augmented poverty lines (Cafiero and Vakis, 2006).

Ours is constructed in three stages, using panel data:

- 1st: actual transitions, in or out of poverty (transition matrices)
- 2nd and 3rd: construct probabilities of falling into poverty and associated income level, respectively
- Methodology results in an estimate of the value of the lower income threshold, in PPP terms

Based on Luis F. Lopez-Calva and Eduardo Ortiz-Juarez, "A Vulnerability Approach to the Definition of the Middle Class," *Journal of Economic Inequality* (2014). Springer, vol. 12(1), pages 23-47, March.

First available in 2011, as a World Bank Policy Research Working Paper Series 5902.

Poverty transition matrices from panel data, using international poverty line of US\$4 for Chile, Mexico and Peru

% of households

Chile		2006		
2001		Non-poor	Poor	Total
	Non-poor	93.6	6.4	100
	Poor	65.6	34.4	100
Mexico		2005		
2002		Non-poor	Poor	Total
	No-pobre	82.2	17.8	100
	Pobre	47.4	52.6	100
Peru		2006		
2002		Non-poor	Poor	Total
	Non-poor	85.2	14.8	100
	Poor	37.8	62.2	100

“Never poor”

“Always poor”

Out of poverty”

“Entering poverty”

- Logistic model to analyze the correlates of the probability of falling into poverty over the analyzed period
- The estimated probability of being poor in the next period p_{it} for household i is given by:

$$p_{it} = E(\text{poor}_{i,t+1} \mid \mathbf{X}_{it}) = F(\mathbf{X}_{it} \cdot \boldsymbol{\beta}_{it})$$

- $\text{poor}_{i,t+1}$ is the dependent variable (1 = “always poor” or “entering poverty” ; 0 = otherwise)
- $\boldsymbol{\beta}_{it}$ is a vector of model parameters
- \mathbf{X}_{it} is a vector of demographic indicators, labor market resources, and shocks affecting the household

Finally:

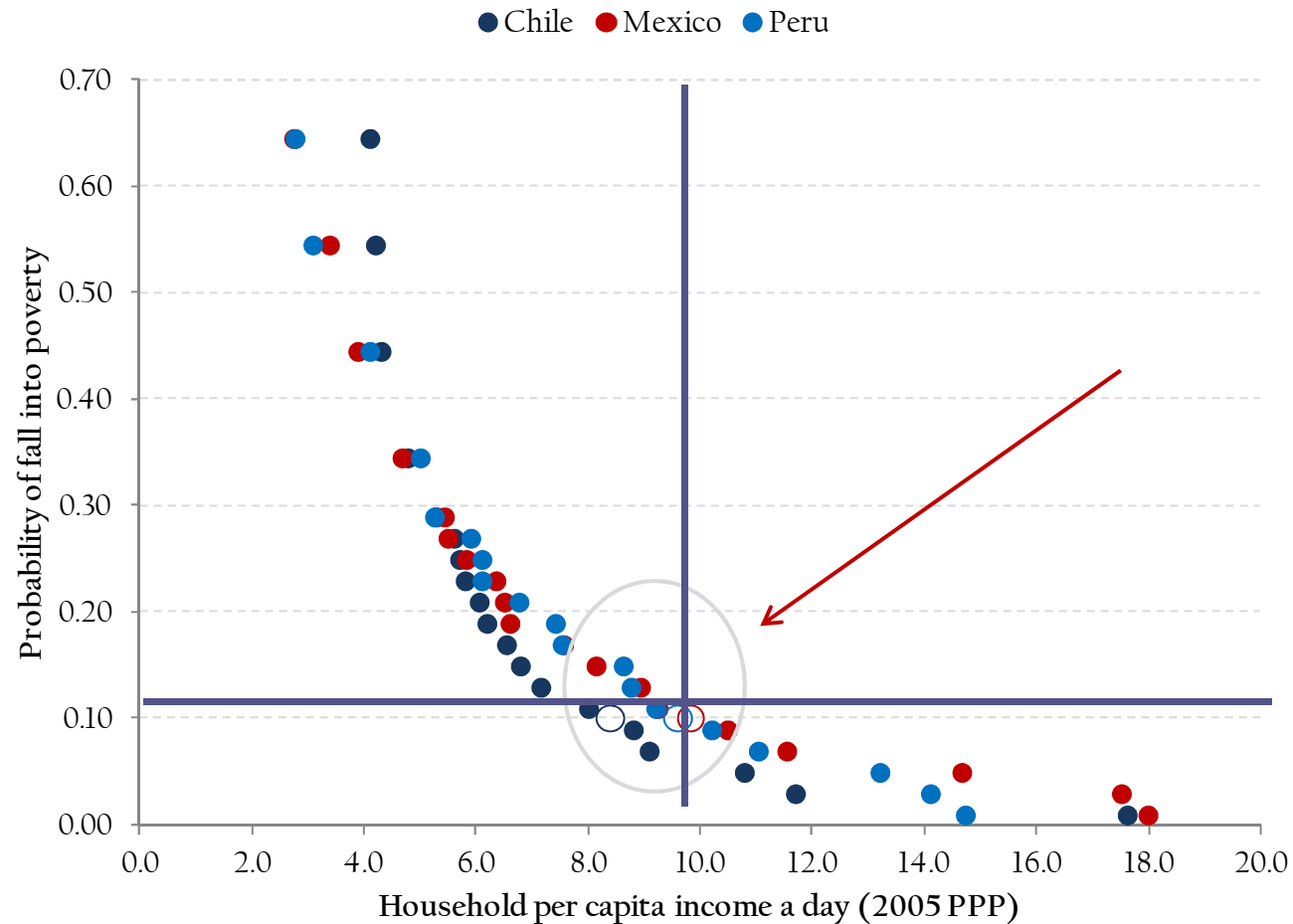
- We use the same independent variables in the logit model to estimate the following income equation

$$\ln Y_{it} = \alpha + \mathbf{X}_{it} \cdot \boldsymbol{\beta}_{it} + \varepsilon_i$$

- $\ln Y_{it}$ is the household per capita income at the initial time point.
 - The resulting coefficients and the average of the independent variables are used to obtain the **amount of income associated with each probability**

Estimated income → Lower threshold

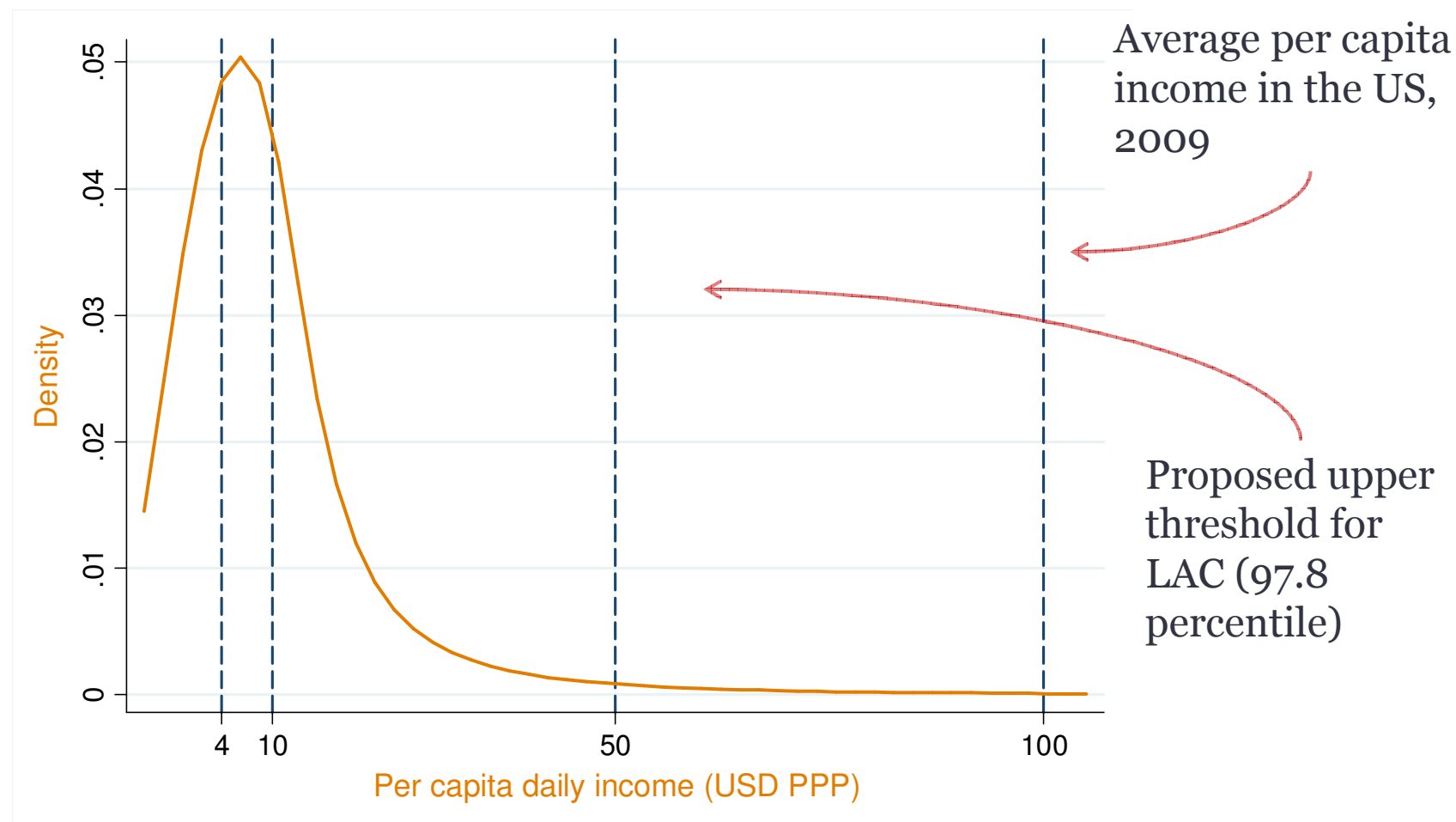
Household per capita income at 2005 PPP (a day)



Source: López-Calva & Ortiz-Juarez (2012) based on data from CASEN, MxFLS and ENAHO panel databases

¿ What about the upper threshold?

LAC-wide income distribution



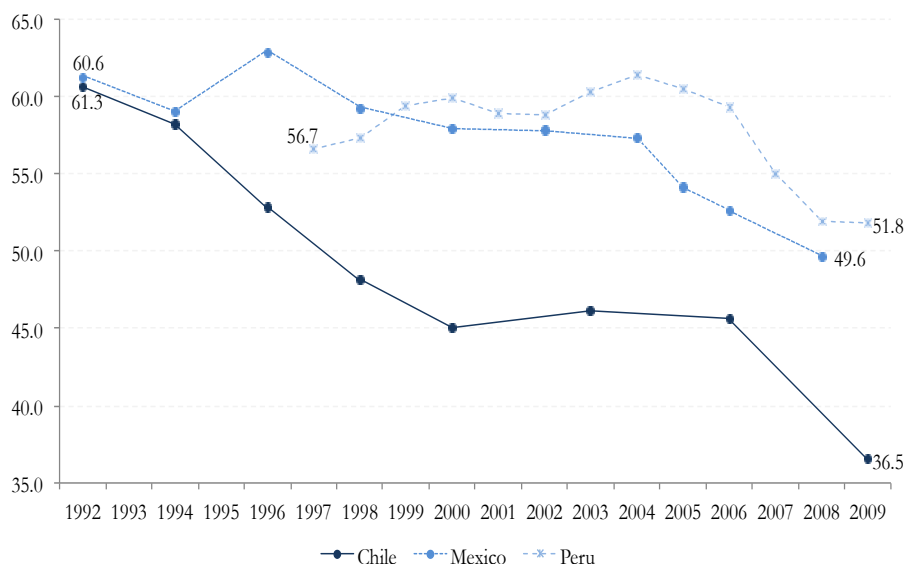


4. Evolution of the middle class in Latin America

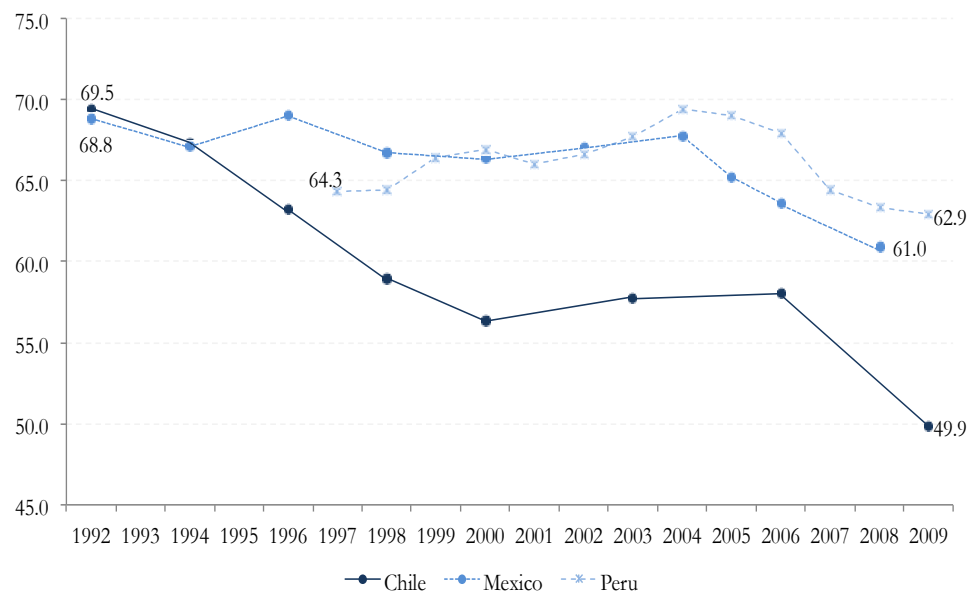
Existent absolute measures—appear to be too focused on low-income countries

- Diverging patterns under an absolute standard. *The middle class would have decreased in Chile, Mexico and Peru.*

Banerjee & Duflo (2008): \$2-10

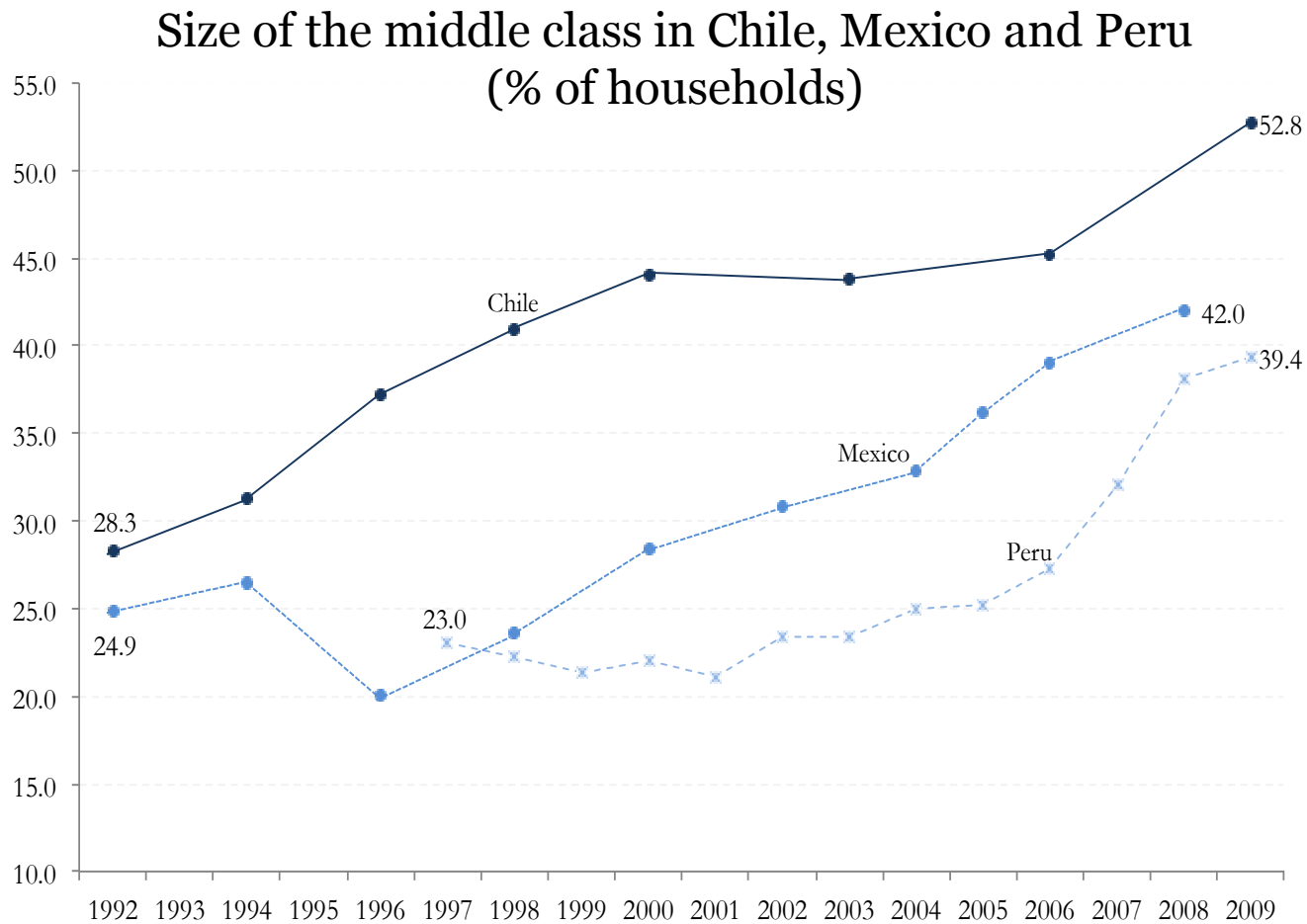


Ravallion (2010): \$2-13



Source: Lopez-Calva & Ortiz-Juarez (2011) based on data from CASEN, ENIGH and ENAHO cross-sectional databases.

For middle-income countries, US\$10-50 a day seems to be more appropriate:



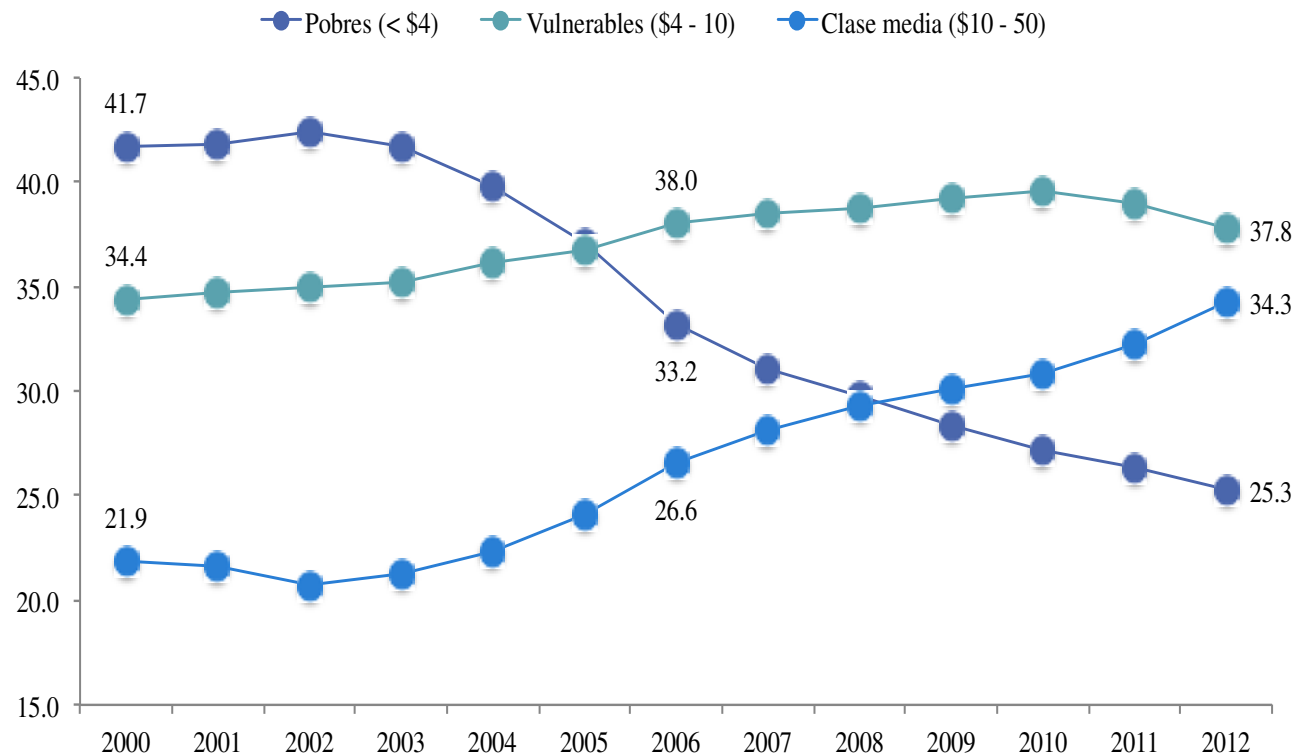
Source: Lopez-Calva & Ortiz-Juarez (2011) based on data from CASEN, ENIGH and ENAHO cross-sectional databases.

TRENDS

Not everyone who exited poverty entered the middle class, they are still vulnerable:

The vulnerable population increased from 34.4 to 37.8% (2000-11)

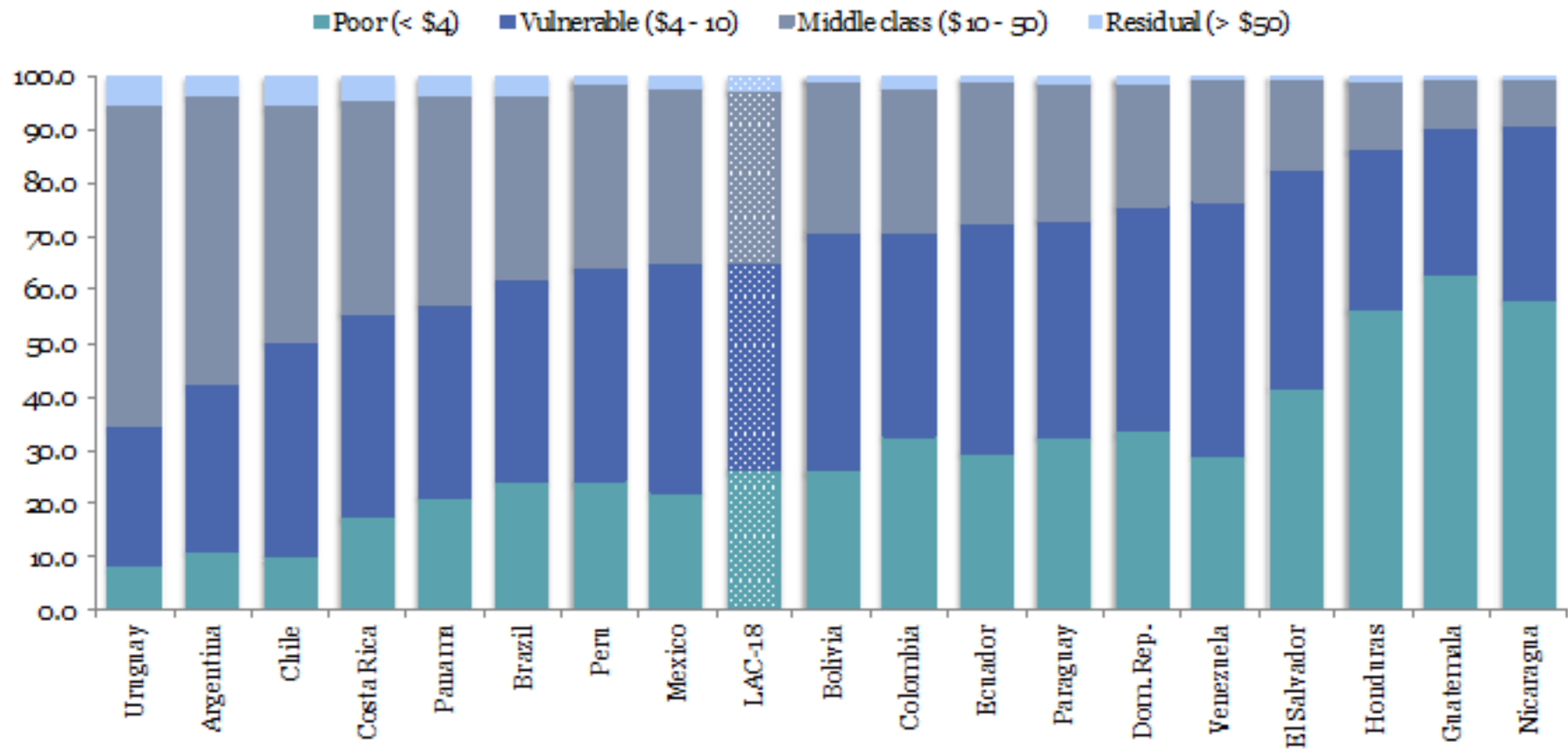
Evolution of poverty, vulnerability and the middle class in the LAC region
Population shares



Source: López-Calva et al. 2014 CEDLAS, based on data from SEDLAC (CEDLAS and The World Bank).

Heterogeneity across countries

Percentage of population in social groups; Latin America, c. 2011/a



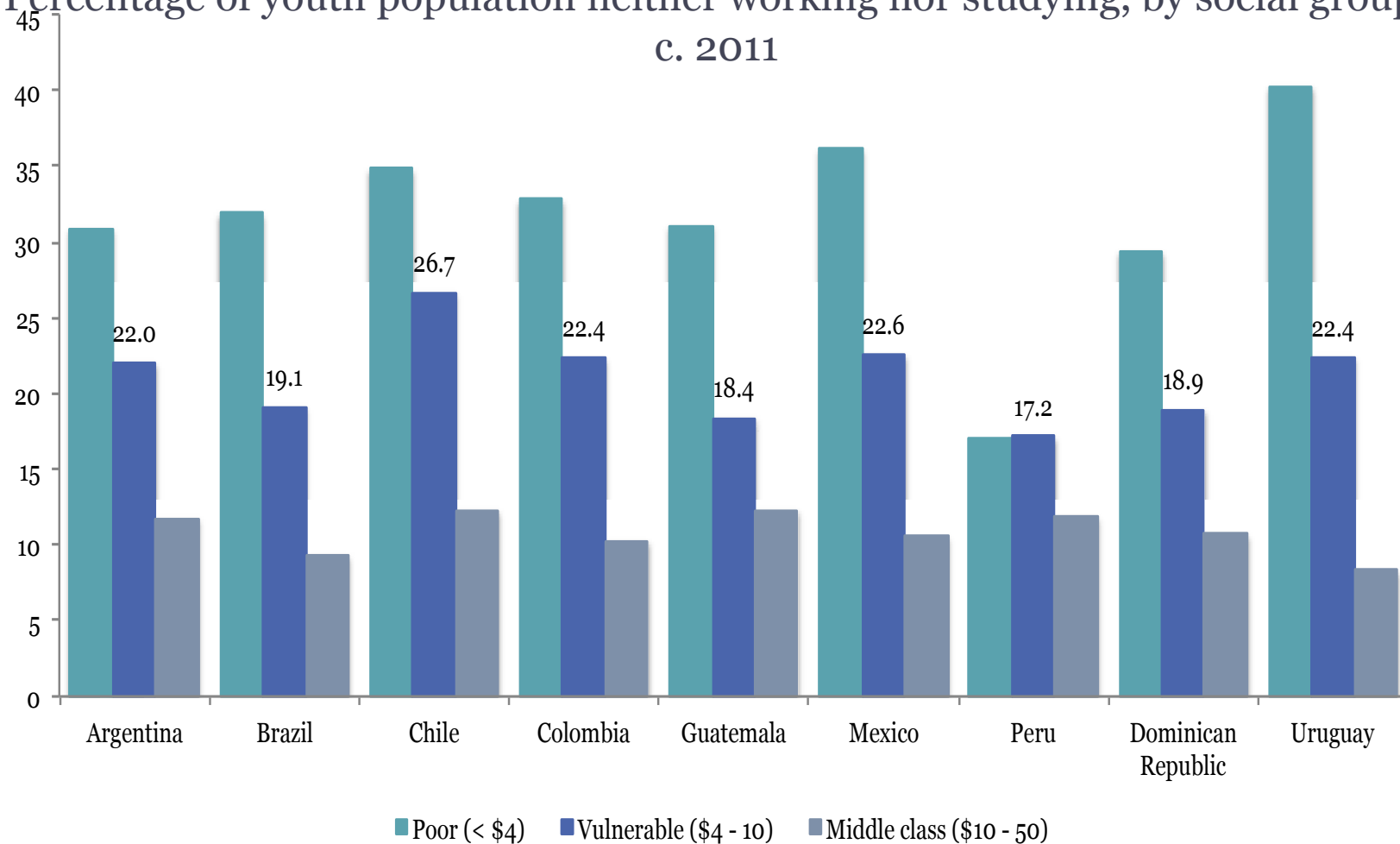
Critical: protect population in transit of falling into **poverty traps**

- About half of the vulnerable population in the region without access to medical services, 46% without social security .
- Both figures twice as large as those for the middle class
- Over half of the vulnerable population in informality: 53 percent of vulnerable workers in the region do not have an employment contract



Vulnerable among the vulnerable:

Percentage of youth population neither working nor studying, by social group;
c. 2011






4. Middle class and values

Some thoughts

- While not yet a middle class society, the Latin American middle class is certainly on the rise
- **Implications** of a growing middle class in the region?
- The middle class has been associated with **economic and democratic development, and stability**
- This would imply that the middle class possesses certain **values and orientations** that differentiate it from the lower and the upper classes

- 
- **¿ Will the middle class lead to more inclusive and stable societies?**
 - **¿Or will the middle class pragmatically push for reforms that only benefit its members?**

Evidence

- López-Calva et al. (2011) analyze whether the Latin American middle class has a specific set of values and orientations
- Look at whether political and social values vary across income and class, as opposed to education and social origins

(analysis is strictly on associations between income and values, without implying causal relationship)

The middle class:

- Does not appear to have any distinguishable class values
 - Pragmatism in its quest for economic security
 - Characterizing value: *Moderation*
-
- May lead to increased social cohesion, to the degree that this target aligns with the class's objective goals
 - But, members could also opt out from the social contract if little benefit to them is perceived
 - Key variable: quality of public services (middle class demands services in the private markets, which reduces incentives to contribute to the financing of public provision)



Thank you.