Economic Mobility and the Rise of the Latin American Middle Class

Preliminary Findings
LAC Regional Flagship 2012

This presentation summarizes preliminary findings from work in progress by a team that includes Francisco H. G. Ferreira, Luis Felipe López-Calva, María Ana Lugo, Julián Messina, Jamele Rigolini, and Renos Vakis. The team has benefited enormously from substantial inputs from João Pedro Azevedo, Maurizio Bussolo, Guillermo Cruces, Peter Lanjouw, Norman Loayza, Leonardo Lucchetti, William Maloney, Eduardo Ortiz-Juarez, Elizaveta Perova, Roby Senderowitsch, Florencia Torche and Mariana Viollaz. Guidance was gratefully received from Nancy Birdsall, François Bourguignon, Gary Fields and James Foster (as well as Augusto de la Torre, Louise Cord, Phil Keefer and Ana Revenga), but the usual disclaimer applies. We are grateful to Manuel Fernandez Sierra, Gonzalo Llorente, Owen McCarthy and Nathaly Rivera Casanova for excellent research assistance.
Structure of the Report

1. Introduction and Motivation
2. Concepts and Measurement
3. Inter-generational Mobility
4. Intra-generational Mobility
5. The Rise of the Latin American Middle Class
6. Implications of a Larger Middle Class: Political economy and economic policy
7. Preliminary Conclusions
Poverty and inequality fell in the 2000s...

- The 2000s were a good decade for Latin America. Growth in GDP per capita averaged 2.0% per annum between 2000 and 2009, despite the global recession of 2008-09.

- In addition, inequality fell in 13 of the 18 countries for which data are available.

- As a result, (moderate) poverty fell by about a quarter, from 39.8% in 2000 to 29.5% in 2009. In net terms, 32 million Latin Americans left poverty over the period.

### Change in the Gini Coefficient (points), C.2000-2009

Note: * denotes final year between 2004-2006
Source: SEDLAC
... but who escaped poverty, and where did they go?

- But 160 million people are still poor in the region.

1. How and why were some Latin Americans capable of seizing opportunities to escape poverty, while so many others were not?
   i. How much does family background matter for individual achievement?
   ii. What are the correlates of successful income growth – and escaping poverty?
   iii. What policies, programs or broader economic institutions facilitate upward mobility?

2. How are Latin American middle classes changing as a result of these processes of economic mobility?
   i. Who belongs to the continent’s middle classes?
   ii. Are the composition, profile, beliefs and behaviors of the middle classes changing?
   iii. Will this matter for the region’s future development path? If so, how?
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Mobility and the middle class have long been seen as important

“Consider two societies that have the same distribution of annual income. In one, there is great mobility and change so that the position of particular families in the income hierarchy varies widely from year to year. In the other, there is great rigidity so that each family stays in the same position year after year. Clearly, in any meaningful sense, the second would be the more unequal society”


“It is possible for those states to be well governed that are of the kind in which the middle class is numerous, and preferably stronger than both the other two classes, or at all events than one of them...”

Aristotle (c. 350 BC [1932]): *Politics*
But mobility means different things to different people

- Sociological vs. economic approaches.
- Mobility of what?
  - **Spaces**: educational attainment, achievement, incomes, consumption...
  - **Domains**: inter-generational vs. intra-generational
  - **Concepts**: movement (incomes, shares, positions); origin independence; equalization of long-term incomes

<table>
<thead>
<tr>
<th>Concept \ Domain</th>
<th>Inter-generational</th>
<th>Intra-generational</th>
</tr>
</thead>
<tbody>
<tr>
<td>Origin independence</td>
<td><strong>Basic idea: equality of opportunity.</strong></td>
<td>Lifetime transitions.</td>
</tr>
<tr>
<td></td>
<td>Does your parents’ place in the distribution determine your own?</td>
<td></td>
</tr>
<tr>
<td>Directional income movement</td>
<td>Absolute progress across generations.</td>
<td><strong>Basic idea: individual income growth.</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Who moves in and out of poverty; and in and out of the middle class. And why?</td>
</tr>
</tbody>
</table>
So does “middle class”

- Large sociological literature
- Recent literature in economics uses fairly arbitrary lines.
- We draw on an “economic security” approach, applied specifically to LAC:

![Figure 2.2: Vulnerability to poverty](image-url)

Source: Lopez-Calva and Ortiz-Juarez (2011).
So does “middle class”

- Large sociological literature
- Recent literature in economics uses fairly arbitrary lines.
- We draw on an “economic security” approach, applied specifically to LAC:

![Figure 2.2: Vulnerability to poverty](image)

**Source:** Lopez-Calva and Ortiz-Juarez (2011).
A meaningful and robust definition?

- Possible concern about arbitrariness of the vulnerability threshold
- Independent validation from a subjective approach, using five Ecosocial surveys (and corresponding household surveys):

![Figure 2.3: Distribution of self-reported class status for Mexico (2007)](image)

Note: Densities are weighted by class size. Source: Authors’ calculations based on *Ecosocial* (2007) and the *Encuesta Nacional de Ingreso y Gastos de los Hogares* (2008).
A meaningful and robust definition?

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![Figure 2.3: Distribution of self-reported class status for Mexico (2007)](image)

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A meaningful and robust definition?

The upper bound of the middle class, and the resulting four classes in the LAC-wide income distribution.

Average per capita income in the US, 2009

Proposed upper threshold for LAC (percentile 97.8)
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Mobility in educational attainment between generations is low in LAC...

Impact of one sd. of parental education on educational attainment of the children

Note: The graph shows the average impact of a standard deviation in the years of education of the parents on children’s years of education. One regression is run separately for each country and birth cohort, using survey weights and each bar represents the average across birth cohorts. Source: Own calculations based on Hertz (2007)
...and if we look at achievement, things do not look much better...
...especially if one considers that the average performance is fairly poor.

Note: The graph shows the impact of one standard deviation in the socioeconomic status (SES) of the parents on children’s reading test scores against the average test score in the country. To determine the impact, one regression is run separately for each country using survey weights. Each regression includes SES, gender, first and second generation immigration status, country dummies and a small town (less than 1,500 inhabitants) dummy. Source: PISA 2009
But mobility has improved somewhat, especially during the last two decades.

The impact of one sd. in parental education on years of completed education of the children.

Note: Own calculations based on Hertz (2008)
An example of policy interventions: the case of student loans and tertiary education in Chile (I)

Source: Solis (2011)
An example of policy interventions: the case of student loans and tertiary education in Chile (II)

Source: Solis (2011)
An example of policy interventions: the case of student loans and tertiary education in Chile (III)

Source: Solis (2011)
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High levels of upward long term mobility last 15 years in the region...

<table>
<thead>
<tr>
<th>Circa 1995</th>
<th>Circa 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td>51.1</td>
</tr>
<tr>
<td>Vulnerable</td>
<td>43.9</td>
</tr>
<tr>
<td>Middle Class</td>
<td>4.9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Circa 1995</th>
<th>Vulnerable</th>
<th>Middle Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td>3.1</td>
<td>46</td>
</tr>
<tr>
<td>Vulnerable</td>
<td>46</td>
<td>50.9</td>
</tr>
<tr>
<td>Middle Class</td>
<td>0.5</td>
<td>3.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>c2009 Margins</th>
<th>c1995 Margins</th>
</tr>
</thead>
<tbody>
<tr>
<td>25.2</td>
<td>47.0</td>
</tr>
<tr>
<td>37.0</td>
<td>34.0</td>
</tr>
<tr>
<td>37.8</td>
<td>19.0</td>
</tr>
</tbody>
</table>

Education is a key driver for mobility across countries

...as it is access to formal jobs, especially to enter the middle class

Living in urban areas is an important factor promoting upward mobility.

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Latin America is becoming a middle class society...

Source: Authors’ own calculations.
...although strong heterogeneities persist

![Bar chart showing percentage distribution across different classes in various countries.](chart.png)

Source: Authors’ own calculations.
The emergence of China

Micro-linked CGE forecasts

Who are middle class households? (1/2)

Household size

Source: Authors’ own calculations.
Who are middle class households? (2/2)

Median Years of Education

Source: Authors’ own calculations.
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The middle classes have been attributed many virtues...

- These virtues include values leading to greater social cohesion, political stability and growth
- But there is little empirical evidence

Cross-country GMM regressions (World)

<table>
<thead>
<tr>
<th></th>
<th>Social Policy</th>
<th>Economic Structure</th>
<th>Governance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Health</td>
<td>Education</td>
<td>Mean Applied</td>
</tr>
<tr>
<td>Middle Class</td>
<td>Expenditures</td>
<td>Expenditures</td>
<td>Tariff</td>
</tr>
<tr>
<td>(% of population</td>
<td>/ GDP</td>
<td>/ GDP</td>
<td></td>
</tr>
<tr>
<td>Poverty</td>
<td>-3.716**</td>
<td>3.028</td>
<td>20.736***</td>
</tr>
<tr>
<td>(2.5 USD a day</td>
<td>[-2.456]</td>
<td>[1.360]</td>
<td>[3.373]</td>
</tr>
<tr>
<td>Poverty Headcount)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inequality</td>
<td>-3.716**</td>
<td>3.028</td>
<td>20.736***</td>
</tr>
<tr>
<td>(Gini Index)</td>
<td>[-2.456]</td>
<td>[1.360]</td>
<td>[3.373]</td>
</tr>
<tr>
<td>Output per capita</td>
<td>0.121</td>
<td>-0.922</td>
<td>5.485**</td>
</tr>
<tr>
<td>(ln of GDP per capita)</td>
<td>[0.416]</td>
<td>[-1.310]</td>
<td>[2.439]</td>
</tr>
<tr>
<td>Observations (5</td>
<td>269</td>
<td>192</td>
<td>265</td>
</tr>
<tr>
<td>year averages)</td>
<td>Number of</td>
<td>countries</td>
<td></td>
</tr>
<tr>
<td></td>
<td>107</td>
<td>97</td>
<td>103</td>
</tr>
<tr>
<td>Hansen Test - p value</td>
<td>0.174</td>
<td>0.640</td>
<td>0.934</td>
</tr>
</tbody>
</table>
...but does it hold for LAC?

- We investigate *how LAC middle classes think*, and *how the social contract in LAC may foster or hinder mobility out of poverty*.

- Looking at values, we find little evidence of a “middle class particularism”
  
  - We group values into *Trust in institutions; Political alienation; Perception of mobility and opportunity; Support for individual rights; Legitimization of political violence; Voted; Social tolerance; Nationalism; Political ideology; Interpersonal trust; and Interpersonal alienation.*
  
  - We find little evidence of particularism – middle class values stand between the ones of the rich and the poor.
  
  - Variation across countries is much larger than the one dictated by income.
  
  - Overall, class and individual characteristics explain little of the variation in values (low R squared).
Middle class “particularisms”

Support of individual rights under any circumstances

Social tolerance

The social contract in LAC (1/3)

- In some countries social policies may have become more progressive...

Source: Lustig (2011), “Fiscal Policy, Fiscal Mobility, the Poor, the Vulnerable and the Middle Class in Latin America,” mimeo.
The social contract in LAC (2/3)

- ...but overall taxation and social policies seem to affect little class transitions – or even to foster *downwards* transitions

### Brazil

<table>
<thead>
<tr>
<th>Market Income</th>
<th>Post-fiscal Income</th>
<th>y &lt; 2.5</th>
<th>2.5 &lt; y &lt; 4</th>
<th>4 &lt; y &lt; 10</th>
<th>10 &lt; y &lt; 50</th>
<th>y &gt; 50</th>
</tr>
</thead>
<tbody>
<tr>
<td>y &lt; 2.5</td>
<td></td>
<td>88%</td>
<td>8%</td>
<td>4%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>2.5 &lt; y &lt; 4</td>
<td></td>
<td>18%</td>
<td>72%</td>
<td>9%</td>
<td>1%</td>
<td>0%</td>
</tr>
<tr>
<td>4 &lt; y &lt; 10</td>
<td></td>
<td>0%</td>
<td>13%</td>
<td>84%</td>
<td>3%</td>
<td>0%</td>
</tr>
<tr>
<td>10 &lt; y &lt; 50</td>
<td></td>
<td>0%</td>
<td>0%</td>
<td>18%</td>
<td>82%</td>
<td>0%</td>
</tr>
<tr>
<td>y &gt; 50</td>
<td></td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>35%</td>
<td>65%</td>
</tr>
</tbody>
</table>

### Peru

<table>
<thead>
<tr>
<th>Market Income</th>
<th>Post-fiscal Income</th>
<th>y &lt; 2.5</th>
<th>2.5 &lt; y &lt; 4</th>
<th>4 &lt; y &lt; 10</th>
<th>10 &lt; y &lt; 50</th>
<th>y &gt; 50</th>
</tr>
</thead>
<tbody>
<tr>
<td>y &lt; 2.5</td>
<td></td>
<td>92%</td>
<td>8%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>2.5 &lt; y &lt; 4</td>
<td></td>
<td>1%</td>
<td>94%</td>
<td>5%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>4 &lt; y &lt; 10</td>
<td></td>
<td>0%</td>
<td>2%</td>
<td>98%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>10 &lt; y &lt; 50</td>
<td></td>
<td>0%</td>
<td>0%</td>
<td>8%</td>
<td>92%</td>
<td>0%</td>
</tr>
<tr>
<td>y &gt; 50</td>
<td></td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>16%</td>
<td>84%</td>
</tr>
</tbody>
</table>

Source: Lustig (2011), “Fiscal Policy, Fiscal Mobility, the Poor, the Vulnerable and the Middle Class in Latin America,” mimeo.
The social contract in LAC (3/3)

- Middle classes also appear to opt out from the social contract because of poor quality of services

Percentage of 6-12 years old students enrolled in private schools

![Graph showing percentage of students enrolled in private schools across different countries.](graph)

Percentage of households with inverter or generator (Dom. Rep.)

![Bar chart showing percentage of households with inverter or generator.](bar_chart)

Source: Authors’ calculations and Sánchez and Senderowitsch (2011), “The Political Economy of the middle class in the Dominican Republic.”
What changes may growing middle classes bring in LAC?

- Middle classes may bring change, but, at least in LAC, they do not appear to hold particular values – are they different?

- LAC middle classes also appear to opt out from the social contract

- A more inclusive social contract with higher taxation and better services may be needed to break the intergenerational cycle of poverty

- But will LAC middle classes buy into it? Or is there a danger that, more and more, the remaining poor may be left alone?
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Preliminary Conclusions

1. Inter-generational mobility is low in LAC
   - Family background is highly associated with educational attainment and achievement
   - Though there is some evidence that it is becoming a little less so...
   - ...and that school-level and educational credit interventions, for example, may help

2. Within generations, there has been substantial upward income movement
   - About half of those who were originally poor *circa* 1995 have moved out of poverty
   - But only 10% of *those* made it to the middle class.
   - Key correlates of upward movement: more education and better jobs.

3. From 2002 to 2009, the size of the Latin America middle class grew by 52%
   - Although substantial heterogeneity persists across countries
   - Globally, larger middle classes are correlated with “better” policies
   - But in LAC, there is less evidence of a “middle-class exceptionalism”
   - In the prevailing social contract, LAC middle classes often opt out of public services (and taxation...)
   - Challenge is to better anchor the new, larger middle class into a progressive social contract for LAC
Thank you