LAC not significantly more informal than comparable countries...

2 Measures of Informality vs Income per Capita

- Lack of Pensions (% Labor Force)
- Self Employment (% of Labor Force)

Graphs showing the relationship between income per capita and measures of informality (lack of pensions and self-employment) across different regions: Latin America, Advanced Countries, and Rest of the World.
...But, a disturbing trend in the nineties
Why do we care?

- Unprotected workers: issue of welfare, equity and efficiency
- Productivity: firms too small? Barriers to growth?
- Indicator of regulatory distortions
- Low and distorted tax collections and poor provision of public services
- Weak rule of law and Governance: A problem in our social contract?
Exit and Exclusion

- Traditional exclusion view of informality
  - Labor: inferior jobs in a segmented market
  - Firms: denied access to services by high entry costs (de Soto)
- Exit view: agents analyze costs vs. benefits of becoming formal
  - Labor: informality offers flexibility, avoidance of poorly designed benefits programs, and provides “decent” work
  - Firms: don’t need/want State programs, don’t pay for them
  - Larger firms and individuals: Why pay taxes if can avoid?
- Both exist to varying degrees across countries but have different implications for policy
The Informal Worker

Comparative Advantage and Constraints
Two Distinct Types of Informal Worker

Distribution of informal workers in Latin America

% Not Contributing to Social Security System

- Informal Salaried
- Informal independent

% employed workers

Countries and Years:
- Chile 2003
- Uruguay 2004
- Brazil 2003
- Argentina 2005
- El Salvador 2003
- Venezuela 2003
- Mexico 2002
- Dom. Republic 2006
- Guatemala 2002
- Colombia 2006
- Nicaragua 2001
- Ecuador 1998
- Bolivia 2005
- Peru 2002
Two distinct types of informal workers. Role of Each Changes across Life-Cycle

- **Informal Salaried**
  - port of entry for youth
  - accumulate experience for Formal Salaried or independent work
  - Most in micro firms

- **Self Employment**
  - prevalent among prime or older
  - have capital and skills to open a business

Brazil: Employment as share of age cohort

Cunningham (2007)
Most informal workers found in small firms

- 75% of Mexican and Argentine in firms of at most 5 workers
- However, expansion in large firms in Arg, Bra over 1990s

The allocation of Informal Workers across firm size

Mexico (Urban Areas)

- 1994
- 2004

Argentina (Gran Buenos Aires)

- 1980
- 2003
Workers tell us of both exit and exclusion

- Most (~2/3) of independent workers are voluntary
  - not queuing for formal jobs
  - value flexibility, esp. women
  - opting out of Social Protection

![Self-rated Poverty Relative to Formal Workers](chart.png)
Workers tell us of both exit and exclusion

- Most Informal Salaried are involuntary
  - would prefer to be FS or SE
  - Brazil: 30% do not want to leave
  - Exceptions Dominican Republic, Mexico
  - youth: difficulty entering workforce

![Graph showing self-rated poverty relative to formal workers]
And their transitions suggest both voluntary entry in Mexico

Bosch, Goñi, Maloney (2007)
Cyclical Patterns of Labor Informality

What drives countercyclically?

- However, new insights from OECD literature on why
- Job Finding in FS: volatile and pro-cyclical
- Job finding in the I Sector Informal sectors constant.
- Net: I-sector absorbs labor in downturns
What Was Behind Trends in 90’s?

- Boom in capital inflows and non tradable sectors in the early nineties
- Rise in female participation? (AR, perhaps, CO, BR no)
- Trade Reform: Ambiguous effects
  - Some ↑ in BR, AR; MX ↓
- Increased real minimum wages and/or more restrictive labor regulations (CO, BR, PE)
- Social security reform often lowered Benefit/ Cost ratio (except in CH)
- Temporary contracts and relaxed enforcement (AR)
Cyclical Patterns

- Informality mostly countercyclical
- But can be procyclical in some booms
  - Show voluntary entry
  - Depend on positive shocks
    - To Formal/ Tradable
    - To Informal/Nontradable
  - FS rigidities less binding in booms
- Increase in Informality in early 1990s
  - Boom in nontradables:
  - REER appreciation due to boom in capital inflows:
    - opening of Capital account, Exchange Rate Based Stabilization, improved expectations due to reforms

**Procyclical/Integrated**

**Countercyclical/Segmented**
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- Temporary contracts and relaxed enforcement (AR)
The symmetric pattern breaks down in Brazil after 1990

Bosch, Goñi, Maloney (2007)
Actual and predicted size of the formal sector in Brazil
Constitutional change or trade reforms?

\[ Y_{jt} = \alpha_j + \alpha_t + \overline{\text{TRADE}}_{jt} \beta_{\text{TRADE}} + \overline{D*CC}_j \beta_{D.CC} + u_{jt} \]


Trade Liberalization:

- Import Penetration: Muendler (2002)
- Real effective trade protection rates: Kume et al. (2003)

Constitutional Changes:

- **Firing Costs**: average tenure (in years) of workers fired (average 1983-1987, source: PME)
- **Overtime**: proportion of workers working more than 44 hours (average 1983-1987, source: PME)
- **Union density**: % of unionized workers (average 1986 and 1988, source: PNAD)
Constitutional change or trade reforms?
Regression analysis

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sector Size</th>
<th>Industry Differentials</th>
<th>Creation</th>
<th>Destruction</th>
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R2 (Weighted)       0.997        0.998        0.765        0.810
R2 (Unweighted)     0.986        0.964        0.736        0.378
Durbin Watson       2.08         2.06         2.10         2.03
Included observations 18          18           18           18
Cross-section included 18         18           18           18
Total pool observations 324       324          324          324
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The Informal Firm
Microfirm Dynamics: Very similar in LAC and the US

Example: as in the US, self-employment increases with age

Other similarities:

- Entry increases with:
  - Education (firms with some employees)
  - Conditional wages of salaried workers (overachievers)

- Firm exit and growth:
  - Higher for smaller microfirms (as predicted by Jovanovic)
  - Firm survival and growth increase with owner’s education, firm revenues
Why do the Majority of Microfirms Formalize as they Grow?

Formality by firm size (Brazil)

- Informal services & institutions may become insufficient:
  - Contract enforcement
  - Formal Credit
  - Sales to formal firms (e.g. if VA system)
  - Access to Government programs

- …or just increased probability of detection
Detection does seem to play an important role in driving firms to formalize (IFC surveys)

- Main motivation seems to be risk of being caught:
  - “comply with the law” (47%)
  - avoid bribes, fines (30%)

- Access to markets/services less important (<25%)

Main advantage of Formality (%)

- Comply with the law: 47%
- Avoid paying fines: 20%
- Expand and Gain new clients: 14%
- Avoid paying bribes: 9%
- Improve access to credit: 8%
- Improve contract enforcement: 2%

Source: IFC (Bolivia, Peru, Brazil, Honduras and Nicaragua)
And Small Firms often say they do not formalize because “they don’t need to”

- The DR and Mexico over 60% and 80% resp. say “they’re too small” or “they don’t need to formalize”

- Probably low detection probability, lack of demand for formal services

- Argentina: somewhat different picture, for 63% main motivation are formality costs
But note that informality is not just a small firm phenomenon

- Medium and Large Firms evade considerable Taxes and Social Security

- Firm level correlates of evasion:
  - firm size (-)
  - Productivity (-)
  - corruption (+)
  - rigidity of labor regulations (+)
  - linkages to large companies (-)
  - use of third party contract enforcement (-)
Recent Evidence on Policies to reduce Red Tape and Taxes

- **Mexico’s SARE program:**
  - Business registration in less than 3 days
  - Positive Impact on formality but effect is of small magnitude
    - Bruhn (2007): 5.6% increase in fraction of registered businesses but mostly increased entry salaried workers
    - Kaplan et al. (2007): increase is of only 0.7%

- **Brazil’s SIMPLES program:**
  - Tax burden reduction: 8% of revenues
    - Monteiro & Assunção (2005): 46% increase in registration rate for retail firms…at least in 1st year after SIMPLES
    - Evidence of improved firm performance as a result of formality
Impact of informality on Firm Productivity?

- Lower economies of scale as firms remain small:
  - To avoid detection
  - Because of low access to markets and services

- “Unfair” competition by low productivity informal firms?
  - Slows Schumpeterian creative destruction
  - Reduces market/investments of formal firms?

- Efficiency gains thanks to avoiding regulations?
  - Example: evidence of higher firm productivity associated with lower enforcement of labor regulations (Almeida and Carneiro, 2006)
Impact of informality on growth?

- Difficult to identify formality effects:
  - Regulation, education, etc. affect both informality and growth, but...

- Informality itself has negative but insignificant effects on growth

- Future research: how does the impact of informality on growth vary according to the specific factors that drive informality
Social Protection

Protecting all LAC’s citizens against risk

Andrew D. Mason
Senior Economist
Informality and Social Protection – Why do we care?

- Lack of access to social protection has welfare, equity and efficiency implications
- While individuals/families employ private risk management strategies – informally (prevention, self-insurance) and somewhat through the market (market insurance) …
- … Lack of access to formal social protection raises important concerns on several fronts
  - From the perspective of *household welfare*
    - Inefficient coping, impoverishing shocks (particular concerns in health and old age security)
  - From the *societal perspective*
    - Too much uninsured risk can have external costs, productivity effects
  - On the *social protection system*
    - Small, inefficient risk pools, foregone savings
Social Security Coverage is Low and Stagnant – or Declining – in Many Countries

Coverage Rates for the Economically Active Population
(% of economically active)

Source: Rofman and Luccetti (2006)
LAC’s “Truncated Welfare State” – The Poor Have Largely Lacked Access

Pension Coverage by Income Quintile (% of economically active)
Persistent “Truncation” Helped Spawn the Rise of Social Assistance Programs

- Over the last decade, LAC countries have launched a variety of programs to better reach the poor, e.g.:
  - CCTs
  - Social assistance pensions
  - Subsidized health insurance
  - Subsidized housing
  - etc.

### Absolute Incidence of CCTs in Brazil and LAC

- BR-Bolsa Familia
- PNAD 2004
- CL-SUF/Solidario 2003
- MX-Oportunidades 2002
- AR-Jefes 2003

% of total benefits received by each QUINTILE

- Q1
- Q2
- Q3
- Q4
- Q5

Poorest to richest (QUINTILES)
Government Failures are Pervasive and Create Incentives for Informality

- Government failures exist on at least two levels …
- Weak design of Social Security programs
  - High costs via payroll contributions; rigid one-size-fits-all approach (young vs. old; paying twice for health insurance)
  - Excessive “bundling” of benefits (health, pensions, disability, … but also housing, childcare, sports & recreation) taxes contributors
  - Weak accounting for labor mobility (too-high vesting periods for pensions, intermittent coverage in health)
  - Low quality of services/benefits
- Lack of Incentive Compatibility within the “System”
  - Noncontributory assistance for informal workers increasingly “compete” with Social Security reinforcing incentives for informality
The Design of Social Security is Inconsistent with Movement In-and-Out of the Formal Sector

- **In Mexico**
  - Low wage (affiliated) workers spend less than half their time in the IMSS system, on average
  - Would take over 50 years of qualify for a minimum pension

- **In Uruguay**
  - Less than 30 percent of workers are estimated to attain vesting requirements by age 65
Re-engineering Social Protection to Protect *all* Citizens

- Recommendations grounded in the economics of insurance (Comprehensive Insurance Framework) and in public economics (the appropriate role for public intervention)

- In the long-term, ensure
  - Universal “essential cover” in health, de-linked from the labor contract, and financed by general taxation
    - By facilitating widest possible risk pool, also enhances efficiency of the insurance model
    - Brazil-Fernandes, Gremaud and Narita (2006): replacing labor tax on first minimum wage with neutrality reduces informality (1.5%) if capital investments are exempt
  - Poverty prevention pensions, targeted to the poor, and incentive compatible with multi-pillar systems
    - Both pooling and savings components are important (complementary)
    - Targeted social assistance pensions for “large gap” countries; incentive compatible, integrated systems (a la Chile) for “smaller gap countries”
The Role of Institutions and Social Norms

Towards an Inclusive Social Contract
Informality Partially Reflects How Citizens Relate to the State

Self Employment and Quality of Institutions
(correlations controlling for GDP)

- Poor, untrustworthy institutions increase the costs, decrease benefits of formality
- High informality limits the action of the state
- Another vicious circle?

**Graphs:**
- **Government Effectiveness**
  - Coef = -0.7368668, se = 0.01583045, t = -4.65
- **Rule of Law Index**
  - Coef = -0.7296094, se = 0.01690364, t = -4.32
Institutional Performance also Shapes Citizens’ Perceptions about Effectiveness and Fairness of the State

Share of firms which are confident that the judiciary will enforce contractual and property rights

Correlation of informality and the Perception of impartiality of courts (controlling for GDP)

Coef. = -0.0262, t = -4.3
“Social Norms” of Compliance: Perceptions of State, of Each Other

- Collective perceptions of fairness/efficacy of state
- Strong reciprocity: I’ll comply if others comply
  - Ex: tax morale is negatively correlated to perceptions of State capture
- Lead to exit and a “culture of informality”
- Symptom of a dysfunctional” social contract?
Is Inequality Related to a High Informality / Weak Institutions Equilibrium?

Informality vs. Inequality

- High inequality correlated with:
  - Unequal access and exclusion
  - Differences in power, voice and influence
  - State capture by the rich and organized middle classes and low state legitimacy
  - But, Chile: strong institutions, low informality

coef = .71532765, se = .20185487, t = 3.54
Policies to Reduce Informality

- Reduce opportunity cost of informality: raise productivity in the formal sector
  - improved Investment Climate
  - higher human capital accumulation

- Remove segmenting distortions in labor markets where applicable

- Tilt the benefit/cost ratio of firms and workers to opt for formality:
  - removing distortionary incentives in Social Protection Systems,
  - reducing cost of doing business for all firms
  - improving services associated with formality especially for SME’s,

- Improve quality and fairness of institutions and policies and even handed enforcement: move social norms towards a culture of compliance. A potential virtuous circle
Addendum: Detailed Policy Recommendations
Labor Policy I: Three channels of influence on informality

- Reduce excessive costs that reduce labor demand in large firm sector
  - Minimum wages need to be kept realistic. In Colombia creates very segmented market.
  - Non wage burdens in Brazil, Colombia, and Peru need to moderate
  - High severance costs don’t segment, but reduce labor demand. LAC highest in the world.

- Reduce incentives to opt out
  - Reform of Social Protection systems (see next)
  - Other restrictions that encourage workers to exit
    - More time flexibility for women without creating discriminatory incentives
    - Less rigid “escalafon”
    - Graduated burden for smaller firms

- Reduce legislation that inhibits productivity growth (the largest determinant of informality)
  - Reduce Labor code or union induced constraints on internal reorganization or resistance to adopting new technologies.
  - Ensure an adequate safety net for separated workers.
Labor Policy II

- Stronger enforcement of a *reformed* code
  - More stringent enforcement of present will do damage
  - Care with special contracts- yes flexibility, but contribute to “culture of informality”?
- Strengthen capacity of labor ministries
- Improvements in educational quality and training
- Numerous recent studies on above for details
Firms: Improving Opportunities in Formal Sector while Reducing Barriers to Formality

- Improving formal sector productivity:
  - Through educational policies and improvements in the investment climate
  - To diminish entry into SE and reduce turnover (by increasing opportunity cost)

- Reducing administrative barriers to firm registration:
  - Benefits for high ability entrepreneurs, positive impact on firm growth
  - But small effect on overall informality: registration costs not the binding constraint for most informal micro-firms

- Increasing the benefits of formality:
  - High rates of return to capital: large potential from increased access to credit
  - Other services: improved training, business development, public procurement, supplier development, legal services, information services

- Reducing the costs of formality:
  - Comprehensive regulatory reviews: anachronistic regulations vs. relevant ones, regulations motivated by private vs. public interests, cut excessive bureaucracy
  - Importance of reducing corruption and improving even-handed enforcement
Tax Policy

- Moving towards more equitable and efficient tax regimes
  - Tax authority as a service institution: system simplification, taxpayer education, making easier to comply
  - Increase even handed enforcement
  - Reforms in tax structure: reduction of exemptions and loopholes
  - Change social norm of non tax compliance

- Tax collections in the region are below what expected for level of government.
  - Some evidence points out that in many countries taxes (and the size of government) should increase
  - But a precondition is to establish the mechanisms to increase government effectiveness
Re-engineering social protection to protect all citizens

- In the long-term, ensure
  - Universal “essential cover” in health, de-linked from the labor contract, and financed by general taxation
  - Poverty prevention pensions, targeted to the poor, and incentive compatible with multi-pillar systems

- To get from here to there, focus on
  - Incremental reforms, shaped by initial conditions, labor market structure, and fiscal constraints, that
    - Raise the net benefits of social security (e.g., unbundling, efficiency reforms in health and pensions, increased flexibility, portability, improved service quality)
    - Strengthening incentive compatibility of the overall “system”
Enhancing the effectiveness and legitimacy of the State (who it represent and serves)

- Improving the efficiency, equity and quality of services and access to formal institutions for small and medium size firms

- Improving the efficiency, equity and quality of state services received by workers and citizens in general to increase incentives for formality
  - directly by generating more value for what they pay for their taxes and social security contributions,
  - indirectly by improving the individual and collective perception of citizens about the adequate use of public resources,

- Reducing red tape and high costs of compliance while enhancing enforcement

- Move strongly to a state that is more accountable, effective, and fair
  - improving monitoring systems of public programs,
  - improving dramatically national, regional and sectoral information systems,
  - Increasing transparency of public action at all levels