Informality, Social Insurance and Pensions

WB Seminar on Pension Systems

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The “Truncated” Welfare State
In many countries in LA, social insurance is associated with labor status.

Workers

- **salaried** (firm involved)
- **self-employed** (no firm involved)
- **non-salaried**
  - **comisionistas** (firm involved)

**Salaried workers** have a boss/firm and are paid a wage; there is a relationship of subordination. They have a right to contributory social insurance (CSI).

**Non-salaried workers** are self-employed, or have non-subordinated relationships with firms: contracts to elicit effort or share risk, with commissions, profit-sharing or other pay structures. They receive various benefits under the rubric of non-contributory social insurance (NCSI).
CSI and NCSI are not the same:

**CSI:** Benefits are *bundled and obligatory*. Its costs per worker are:

\[ T_f = \text{[health insurance} \oplus \text{retirement pensions} \oplus \text{disability pensions} \oplus \text{life insurance} \oplus \text{work-risk pensions} \oplus \text{day care centers} \oplus \text{housing loans} \oplus \text{contingent costs of severance pay} \oplus \text{transaction costs of compliance}]. \]

Workers’ valuations depend on preferences, access and quality of services, and so on. The utility of a salaried job is:

\[ U_f = w_f (1 + \beta_f T_f) \]

**NCSI:** Benefits are *unbundled and voluntary*. Its costs per worker are:

\[ T_i = \text{[health + retirement pensions + day care + housing]} \]

The utility of a non-salaried job is:

\[ U_i = w_i + \beta_i T_i \]

**NOTE:** Poverty programs \( \neq \) NCSI programs.
Valuation of CSI and NCSI

- $T_f$ is a bundle: workers need to value all of it at the same time. Its valuation is key as it determines the implicit tax on salaried labor.

- $T_i$ is unbundled; its size and valuation determines the implicit subsidy to non-salaried labor.

- Research shows that workers do not fully value the retirement component of $T_f$ because of information problems (financial literacy), high discount rates, trust and other reasons (Nopo and Pages, 2009).

- Voluntary contributions into workers retirement accounts are practically non-existent (in Mexico, less than 1% of accumulated savings).
Workers Mobility in the Labor Market
On average, high (low) wage workers who were enrolled in IMSS in 1997 have been in formality 77% (49%) of their time.
Distribution of workers by years in formal employment and frequency of entry and exit into formality, 1997-2006

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<th>N</th>
<th>Average years in formality</th>
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<tbody>
<tr>
<td>High wage</td>
<td>2,320,389</td>
<td>7.7</td>
</tr>
<tr>
<td>Low wage</td>
<td>3,707,089</td>
<td>4.9</td>
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</table>
Employment surveys*: around 20% of all workers change status in one year

*Workers 16-65 who did not change location, and were continuously interviewed from 2005 II to 2006 II.
Two key empirical results:

1. Low wage workers have lower average permanence in formality than high wage workers;

2. Low wage workers have greater frequency of entry and exit in formality than high wage.

The problem for low wage workers is not “entering” into a formal job at any wage. The problem is that they have infrequent stays in formality and earn “low” wages.

This contrasts with the “barriers to entry view”, that suggests that workers in the informal sector cannot get formal jobs at any wage. But regardless of the cause (exit vs. exclusion), the key point is that there is large transit from formal to informal status and vice-versa.
Implications for social insurance

• Distinction between “formal worker” vs. “worker at present hired formally”. Most workers have spells of formal and informal employment.

  [There is (almost) no such thing as a formal worker].

• Some firms hire formal and informal workers simultaneously.

• Only when workers are formal do they consume the bundle that the government wants (health, life and disability insurance, save for retirement, severance pay).

• Coverage against risks erratic and incomplete: when formal yes, when informal, partially (given unbundled nature of social protection programs).
Implications for retirement pensions

Data from 37.8 million individual retirement accounts, of which 79% are low wage and 21% high wage.

The average contribution density in the 1997-2007 period was 45%. Replacement rates will be low, particularly for low wage workers. Most low wage workers will not qualify for the guaranteed minimum pension (at least 25 years of contribution).
What are the Policy Options?
Policy needs to begin by recognizing that the government is trapped

- The institutional distinction between the rights of salaried and non-salaried workers creates a formal-informal dichotomy;

- From the social point of view, the government cannot leave workers excluded from social security without protection against social risks;

- However, NCSI does not really solve the social problem (because of the unbundled nature of programs), while at the same time deepen the reasons that account for bad firms and bad jobs, low productivity and low growth;

- In parallel, the government de facto subsidies illegal behavior, and undermines the tax base and the Rule of Law (as illegally hired salaried workers cannot be left without social benefits).
The policy challenge has two parts:

- From the **social point of view**, to insure that all workers are protected all the time against the relevant social risks regardless of whether they are salaried or non-salaried;

- From the **economic point of view**, to provide benefits with programs that by-pass the distortions in the allocation of labor and capital and avoid undermining the tax base.

**It is essential to focus on both objectives SIMULTANEOUSLY.**
Proposal for universal social insurance

Simple idea: provide all workers with (almost) the same bundle of social insurance; make these benefits a legal entitlements; and fund all these benefits with a consumption tax earmarked for these benefits.

Key point: Firms and workers cannot avoid this tax by changing status between salaried and non-salaried employment, so:

- no taxes on firm growth;
- no subsidies to self-employment;
- no subsidies to small illegal firms;
- no reasons to change the duration of labor contracts or disguise salaried employment relationships as non-salaried;
- distortions in the allocation of capital and labor coming from social programs are (practically) eliminated.

Observation: The result would be the same as if all workers were salaried and CSI was fully enforced. But since there are efficient reasons for non-salaried employment, and enforcement of CSI will never be perfect, universal social insurance will never be reached under the formal-informal dichotomy.
If all workers were salaried, and if there was no evasion, and if consumption taxes could be ear-marked to pay for social security benefits, then social security contributions and consumption taxes would be equivalent.
Social insurance: CSI + NCSI vs. USI

**CSI + NCSI**

\[
T_f = \left[ \ldots \oplus \ldots \oplus \ldots \oplus \ldots \oplus \ldots \right] \\
T_i = \left[ \ldots + \ldots + \ldots \right] \\
\frac{\partial Q_f}{\partial L_f} - \left[ w_f + (1 - \theta_f)T_f \right] = 0 \\
\frac{\partial Q_f}{\partial L_{if}} - \left[ w_{if} + \lambda F + \lambda^\prime FL_{if} \right] = 0 \\
\frac{\partial Q_i}{\partial L_i} - w_i = 0 \\
w_f + \beta_f T_f = w_{if} + \beta_i T_i = w_i + \beta_i T_i \\
L_f + L_{if} + L_i = L \\
G_{os} + \left[ \theta_f T_f L_f + T_i (L_{if} + L_i) \right] = R_c + R_\pi + OR
\]

**USI**

\[
T^* = \left[ \ldots \oplus \ldots \oplus \ldots \right] \\
\frac{\partial Q_f}{\partial L_f} - w_f = 0 \\
\frac{\partial Q_i}{\partial L_i} - w_i = 0 \\
w_f + \beta T^* = w_i + \beta T^* \\
L_f + L_i = L \\
G_{os} + T^* (L_f + L_i) = R^*_c + R_c + R_\pi + OR
\]

$T^*$ is the bundle of social insurance benefits that the government considers that all workers should have and $\beta$ is worker’s valuation of that bundle; $R^*_c$ reflects those consumption taxes that are specifically earmarked to pay for universal social insurance that result from higher consumption tax rates, so that: $T^*(L_f + L_i) = R^*_c$. 
<table>
<thead>
<tr>
<th>Structure of benefits</th>
<th>Observations</th>
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<tbody>
<tr>
<td>$T^* = \text{[health insurance } \oplus \text{ retirement pensions } \oplus \text{ life insurance } \oplus \text{ disability insurance]}$</td>
<td>Bundled protection for all workers for these risks</td>
</tr>
<tr>
<td>$T_f^* = \text{[work-risk insurance } \oplus \text{ unemployment insurance (+?) retirement pensions]}$</td>
<td>Salaried workers get additional protection for risks specific to salaried work (and more pensions?)</td>
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**Labor Market**

$\frac{\partial Q_f}{\partial L_f} - (w_f + T_f^*) = 0$

$\frac{\partial Q_i}{\partial L_i} - w_i = 0$

$w_f + \beta T^* + \beta_f T_f^* = w_i + \beta T^*$

**Note:** This scheme allows for a two-pillar retirement pension system (only when workers are salaried-employed), by including a retirement pension component in $T_f^*$. 

Firms hiring salaried workers pay for $T_f^*$

Non-salaried workers do not get $T_f^*$

Wage-based benefits distort only if $\beta_f^* < 1$; note that $T_f^*$ contains only monetary benefits, so $\beta_f^* \approx 1$
Role for voluntary savings and MDCs

• A two-pillar system of savings could help increase retirement pensions, but the additional forced savings would only occur when workers are salaried employed.

• It is difficult to tell what salaried/non-salaried transits would be under universal social insurance, but even if transits are reduced, there would be an important segment of the labor force that is not salaried employed.

• MDC’s can be a useful complement to USI to induce everybody to save more, and provide for more consumption smoothing.

• Research is needed to determine the structure of incentives of MDC’s, but it is key that they do not distort incentives for salaried vs. non-salaried work.
Thank you!