



# Unemployment Insurance in Developing Countries: the Case of Brazil

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# Motivation for a Discussion of UI

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- ◆ Unemployment is increasing and persistent in many developing countries
- ◆ Existing social programs may not be adequate
- ◆ Unemployment insurance is widely used in industrialized countries, but it has the potential to create perverse labor market behavior



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# Roadmap for this discussion

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- I. Introduction to UI
- II. The Case of Brazil
- III. Effects of UI on Brazilian workers
- IV. Conclusions



# I. Introduction to UI





# What is UI?

Direct transfer of money from the government to an (involuntarily) unemployed person:

- ⇒ May be funded by the employer, employee, general tax, or any mix of these
- ⇒ Value, frequency, and duration of payments vary widely across countries
- ⇒ A form of insurance, so only those who pay into the system can withdraw from it



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# Objective of UI

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- ◆ Income smoothing at the level of the individual
- ◆ Risk pooling
- ◆ Resources to conduct a job search
- ◆ Macroeconomic stabilization



# Challenges of UI

- ◆ Potential to create moral hazard
- ◆ Requires costly monitoring to prevent leakages and inefficiencies
- ◆ Does not include those who are not in the formal labor market
- ◆ Counter-cyclical so potentially fiscally burdensome

# Why consider UI in a developing country context?

- ◆ The incentives created by UI may differ from those in industrialized countries
- ◆ The program may be less efficient than in industrialized countries

Due to . . .

- (i) the existence of a large informal sector in developing countries
- (ii) limited access to capital markets in developing countries
- (iii) limited institutional capacity



## (i) Existence of a large informal sector

**Informal sector** defined as jobs that are not recognized by the government so employment cannot be monitored

- potential to work in the informal sector and collect UI (integration v. segmentation)
  - ⇒ inefficiency & high fiscal burden
- a large portion of the labor force is not covered
  - ⇒ limited social safety net, especially for poor



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## (ii) Limited Access to Credit Markets

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Obtaining small loans, for business start-up, is often very difficult

- ◆ use UI as a source of financing?
  - ⇒ inefficiency?



## (iii) Limited Institutional Capacity



To lower inefficiencies, need strong institutions

- Developing countries are in the process of building strong social protection institutions
  - ⇒ Capacity to administrate the program is limited, creating inefficiencies.
- The monitoring costs and processes of UI are high so the system is easily abused by recipients
  - ⇒ inefficiency



## II. The Case of Brazil





# Case study: Brazil

## Why Do we Study Brazil?

- Large program
- 14 years of experience
- natural experiments (many changes in system)
- large informal sector (nearly 50% of workforce)
- limited access to credit markets



# Brief History of UI in Brazil

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- ◆ 1946 Constitution
- ◆ 1964 a limited program began
- ◆ 1986 a universal program implemented
  - Unions?
  - Politics?
  - Stabilization plan?
- ◆ Modified in 1990, 1994



# Objective



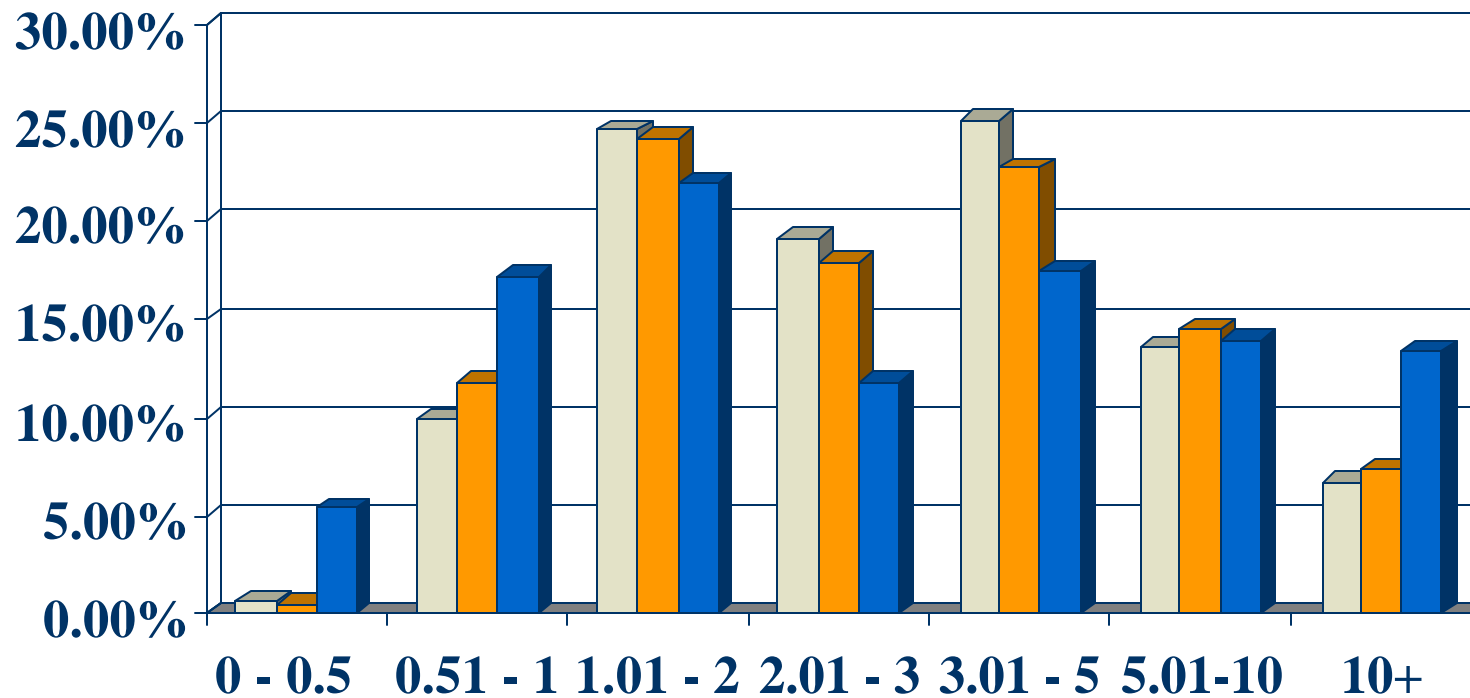
- “... Provide benefits for a determined time and with a value established in accordance with the contributions made. In the case of UI, the whole society is contributing. . .” => risk pooling
- “... UI is not a salary. The workers, in the period in which he/she is receiving benefits, should look for new employment. . .” => job search tool



# Eligibility

- ◆ Employee's firm paid into the social security system for 15 of the 24 months prior to dismissal
- ◆ unemployed for 7-120 days at the time of filing
- ◆ worked as a salaried employee (with a *carteira assignada*) in the six months prior to dismissal
- ◆ not a recipient of retirement pay, government pensions, or disability pay

# Income distribution of the unemployed



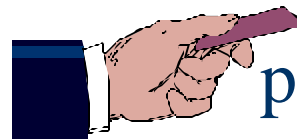
collectors of UI eligible non-collectors ineligible

# Participation (Program coverage)

	<b>Program Participants (% of LF)</b>	<b>Unemployed (% of LF)</b>	<b>Beneficiaries (as % of unemployed)</b>
1992	44.19%	6.42%	13.7%
1993	42.78%	6.19%	12.17
1994	---	---	---
1995	41.13%	5.95%	13.29
1996	41.19%	6.76%	12.4
1997	39.55%	8.33%	11.76

# Collection Process

Become unemployed



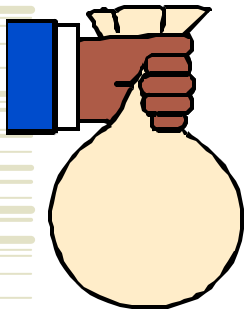
present dismissal data  
from employer to government



g'vt. verifies  
information



distribution  
of UI benefits at  
collection sites



**NOTE: no monitoring.**

# Characteristics of UI Collectors

<b>age</b>		<b>education</b>	
14-19	4.0%	none	7.5%
20-29	38.0	1-4	10.0
30-49	46.4	5-8	56.3
50-59	5.6	9-11	21.9
60+	1.8	complete	4.2
mean (in years)	33.3		
<b>position in household</b>		<b>race</b>	
head	68.4%	white	50.0%
spouse	0.6	black	5.7
son/daughter	24.0	mixed	44.1
<b>gender</b>			
female	36.0%		
male	64.0		

# Beneficiaries

<b>year</b>	<b># requests</b>	<b># granted</b>	<b>percent</b>
1986	204,324	150,741	73.78%
1987	999,967	734,260	73.43%
1988	1,322,432	1,045,534	79.06%
1989	1,912,185	1,620,543	84.75%
1990	3,099,910	2,806,820	90.55%
1991	3,724,840	3,498,235	93.92%
1992	4,015,225	3,895,157	97.01%
1993	3,825,547	3,756,365	98.19%
1994	4,091,318	4,029,718	98.49%
1995	4,789,198	4,735,148	98.87%
1996	4,395,977	4,359,092	99.16%
1997	4,425,296	4,381,498	99.01%
1998	4,821,572	4,762,788	98.86%

# Value of Benefits

- ◆ Monthly benefit where:

$w_{\mu} \in (0, p)$  then UI maximizes  $[mw, 0.8 * w_{\mu}]$

$w_{\mu} \in (p, q]$  then  $UI = 0.8 * p + (w_{\mu} - p) * 0.5$

$w_{\mu} \in (q, \infty)$  then  $UI = 2 m.w.$

where  $p$  is a lower bound and  $q$  is an upper bound  
exogenously set

- ◆ Duration of collection is a function of time paid into the system

6-11 months of past 36: 3 months of UI

12-23 months of past 36: 4 months of UI

24+ months of past 36: 5 months of UI

# Payments

year	number of checks	value of checks (US\$)	average value of checks (mw)	checks per claimant
1986	244,123	16,006,745	--	1.62
1987	3,103,220	166,289,225	1.15	4.23
1988	4,200,087	198,676,074	1.22	4.02
1989	4,743,382	398,393,493	1.7	2.93
1990	9,243,381	1,236,731,294	1.75	3.29
1991	12,476,087	1,412,893,566	1.83	3.57
1992	13,858,069	1,440,626,233	1.69	3.56
1993	15,016,649	1,559,105,700	1.41	4.0
1994	15,115,459	1,846,798,526	1.55	3.75
1995	20,836,194	3,146,551,407	1.54	4.40
1996	19,593,192	3,289,269,149	1.56	--
1997	18,678,583	3,200,347,989	1.57	--
<b>TOTAL</b>	<b>98,836,651</b>	<b>11,422,072,263</b>		



# Funding

- ◆ FAT: Special fund for UI, abono and BNDES
- ◆ tax on 0.65% of firm revenues, 1% of revenues in public firms, 1% of costs in non-profits
- ◆ advisory board to monitor FAT
- ◆ FAT surplus since its creation in 1990



# III. Impact of UI on Brazilian workers





# Methodology

- ◆ Econometric exercise using a natural experiment and a difference-in-differences methodology
- ◆ For program analysis methodologies, see:  
Baker, Judy (2000) *Evaluating the Impacts of Development Projects on Poverty: A Handbook for Practitioners* (World Bank: Washington, DC)



# Wages

**Theory**: wages may be higher, lower, or the same among those who collect UI, compared to those who do not.

**Findings**: no difference in post-unemployment wages when UI benefits are increased (similar to industrialized country findings)

# Duration of unemployment

**Theory**: may increase or not change

**Findings**: does not change in general (increases in industrialized countries), but does increase among those who leave unemployment to open their own firms  
=> UI is being used as a source of financing in a credit constrained economy



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# Family welfare

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**Theory:** Household consumption decreases less in households that collect unemployment insurance

**Findings:** This appears to be the case in Brazil



# IV. Conclusions



# Conclusions of UI in a Developing Country

- ◆ Not an anti-poverty program
- ◆ Fails to reach most of the unemployed
- ◆ The incentive effects of UI in developing countries differ from those in industrialized countries:
  - UI is less efficient in developing countries since those who collect may also be working in the informal sector
  - UI may be used as a substitute for capital markets, but this is not necessarily a bad.
- ◆ Can be sustainable even with economic volatility



# Issues to Consider

- ◆ Structure of the labor market
- ◆ Target group => are recipients the poor? Does it matter?
- ◆ Private risk management => UI plays a role in smoothing income, but it may crowd out private mechanisms
- ◆ The frequency and duration of shocks
- ◆ Institutional capacity to manage the program



## For More Information. . .



De Ferranti et. al. (2000) *Securing Our Future  
in a Global Economy* (IBRD: Washington).