

# PRODUCING HIGHER QUALITY JOBS: ENFORCING MANDATED JOB BENEFITS IN BRAZILIAN CITIES BETWEEN 1996-2007

Rita Almeida<sup>1</sup>   Pedro Carneiro<sup>2</sup>   Renata Narita<sup>3</sup>

<sup>1</sup>World Bank, IZA

<sup>2</sup>UCL, IFS, Cemmap

<sup>3</sup>University of Sao Paulo

2015 ABCDE “Productivity, Growth, and the Law”  
Mexico city, June 15-16

# Motivation

Many factors improved a lot in the past two decades in Brazil

- poverty and inequality reduction

- lower unemployment and informality

- lower mortality rates

- higher wages for the low skill workers

However, productivity and growth has not accompanied social development

- GDP to decline 1.5% next year, the biggest contraction since 1990

## Motivation

Education (access and attendance) did not improve productivity in Brazil



(Source: Naercio Menezes-Filho at Valor Economico newspaper, 05/22/15)



## Main question

Our paper looks at one aspect of institutions that can affect welfare and perhaps labor productivity

enforcement of labor regulations

We do not model welfare, but we investigate what happens to vacancy characteristics with stricter enforcement:

Mandated benefits (registration, social security, transport subsidy, MW, max. working period)

## Literature

**Compensating wage differentials:** firms tend to compensate higher cost of mandated benefits through adjustment in wages and other negotiable benefits

**Wages respond inversely to changes in payroll taxes** [ex: Boeri, Helppie and Macis (2008), Kugler and Kugler (2002), Gruber (1997)]



## Labor Regulation in Brazil

Registration (worker's card): entitles worker to employment protection

paid annual leave, maternity leave, severance, 44 hours/week, unemployment insurance and transportation benefits

Severance Pay: 8.5% wage; worker entitled if fired for no reasons; it costs to the employers a 50% fine, a notice period of 1 month, and 2 hours/day to the worker to seek jobs

Payroll tax: 20%

Transportation benefit, varies by city and transport means

Minimum wage: set by the federal gov. R\$ 112 in 1996 and R\$ 380 in 2007 (approx. 50% of mean wage)

Other costs (e.g., sector contributions): Up to 6% of gross wage



## Enforcement in Brazil

Enforcement gained importance during the 90s:

From beginning 90s: to increase compliance with Federal Constitution/1988 which increased severance pay, payroll tax, paid leave, maternity leave and reduced weekly permitted working hours

After mid-90s: to reduce public deficit led the government to search for alternative ways to collect revenue

This was motivated by the large payroll tax evasion (57% of workforce and significant non-compliance with severance pay by firms)

## How does enforcement work?

Inspections (and fines) are mostly to ensure compliance of firms with worker's registration, severance pay, MW, maximum working period/shifts

Evasion of one of these dimensions accounts for approximately 62% of all fines issued in 2006

Fines are significant:

fixed per worker (R\$ 403 ~1MW) for lack of registration, or vary with firm's profitability, e.g. R\$40- 4,025 per worker for fines related to working period [average profit of a small firm is R\$ 600, ECINF 2003]

recidivism doubles the penalty

## How does enforcement work?

An inspection may be triggered by a random firm audit, or by a report (often anonymous) of non-compliance

Inspectors' wages are relatively high and tied to performance. Top 10% wages in Brazil's labour market. They have to rotate across offices

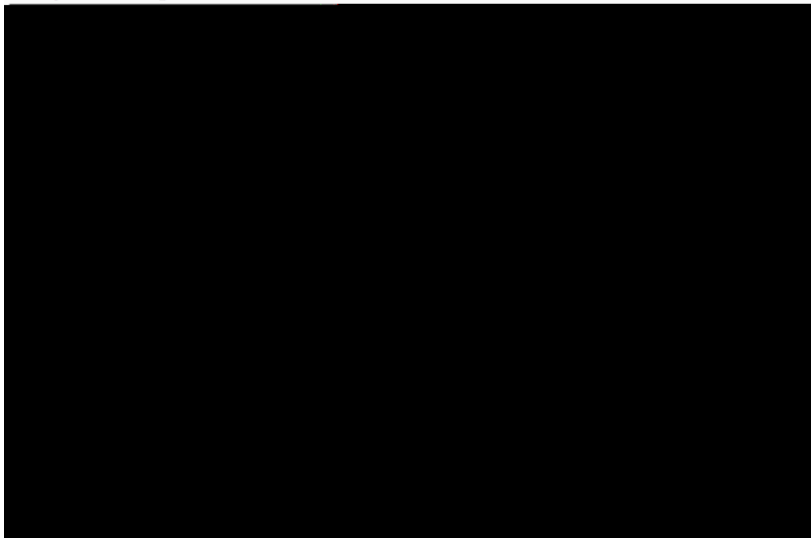
Enforcement is decentralized at the district level

# Data

We construct a panel of cities using PNAD (Brazilian HH

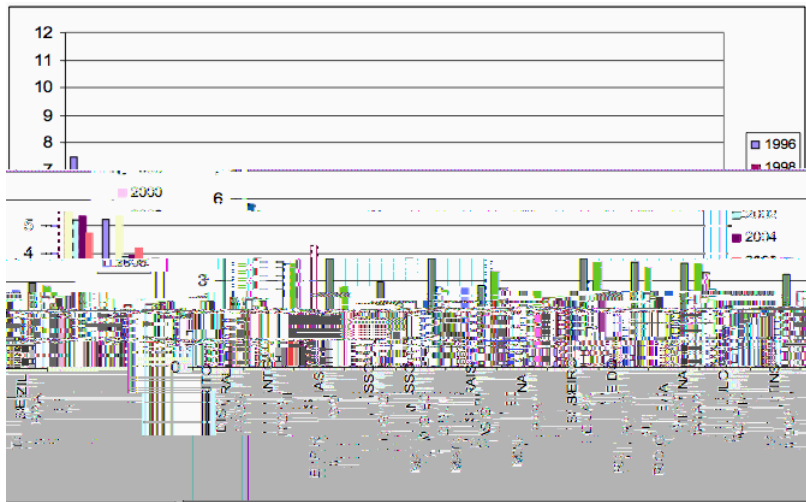
## Large within country and time variation

Labor Inspections/1,000 residents: North and Northeast States



## Large within country and time variation

Labor Inspections/1,000 residents: Center and Southern States



## Baseline regression

$$Y_{it} = \alpha + \beta E_{it-1} + \gamma X_{it-1} + \epsilon_{it}$$

## Other specifications

1. We consider changes over time in unobserved state-level variables possibly correlated with enforcement

We control for trends by state

2. We did find that enforcement (1996-2006) relates to some outcomes in the past (1980-1991)

We control for past trend in the outcomes constructed from census data 1980 and 1991



## Enforcement and Employment Status

Self-

Fixed Effects

	Unpaid Workers	Wage Earners	Self-Employed	Unpaid Workers	Wage Earners	Self-Employed
Log # Inspections	0.020	-0.008	0.019	-0.016		
	(0.001)**	(0.001)**	(0.001)**	(0.001)**		
Fixed Effects	0.002	-0.016	-0.020	0.016	-0.011	
	(0.001)**	(0.001)**	(0.001)**	(0.001)**	(0.001)**	
Observations	4834	4834	4834	4834	4834	4834

Fixed Effects

Log # Inspections

Unpaid Workers

Wage Earners

Self-Employed

Observations

A 10% increase in inspections (in the city) raises of the share of wage earners (0.32pp), decreases the share of self-employed (-0.16pp, not sig.) and increases the share of unpaid workers (0.16pp).





# Enforcement and wages

(10th, 50th, 90th percentile log-wages)

Dependent Variable:	D10	Median	D90	D10	Median	D90
ln_wage	-0.359	-0.111	-0.007	0.243	0.005	-
ln_wage	(0.189)	(0.183)	(0.190)	(0.090)	(0.180)	(0.185)
ln_wage	-0.036	-0.087	-0.341***	-0.231	-0.077	0.195
ln_wage	(0.007)	(0.050)	(0.085)	(0.150)	(0.100)	(0.080)

The share of formal increased, this should have decreased wages in the informal sector, or

CWD: Stricter enforcement increases the cost of providing mandated benefits; decreases wages for workers with mandated benefits and increase for workers without it

Cannot decrease the lowest wages because of MW: tends to affect most high rather than low paid workers

## Conclusion

Brazil has a heavily regulated labour market, enforcement is likely important

With stricter enforcement, CWD theory predicts firms try to avoid compliance and/or adjust wages and voluntary benefits – that may be more valued by workers and can be related to worker productivity

**Our results for Brazil show that stricter enforcement increases compliance with mandated benefits**

**Enforcement does not affect employment but increases the fraction of unpaid workers**

**Enforcement reduces provision of negotiable benefits (wages of high skill workers, food benefits, and employer-provided health)**

Effects on total welfare depend on the valuation and costs of provision of each benefit (agenda)