

Labour Regulations in India

Much Ado About Something?

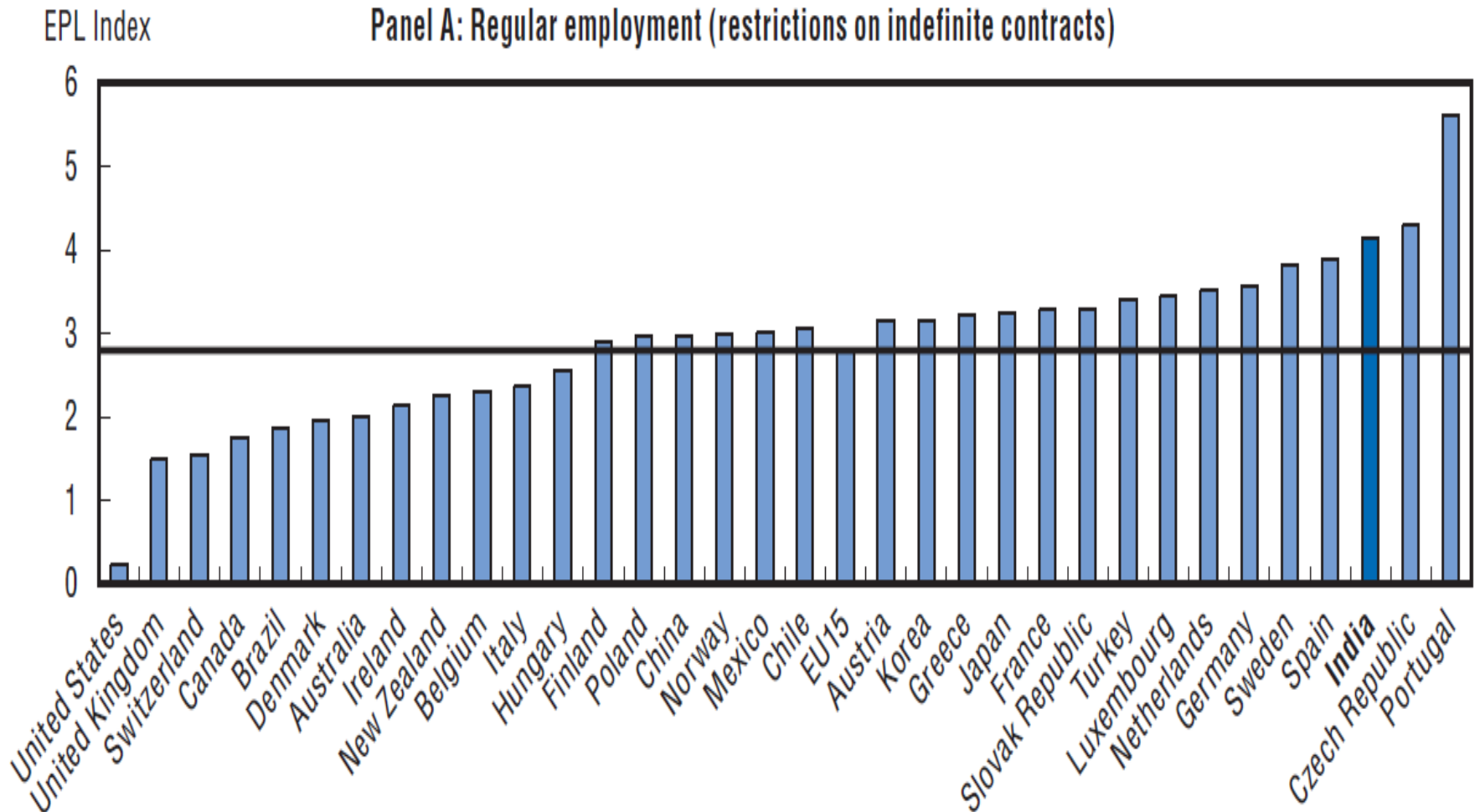


Based on ongoing research with P.P. Krishnapriya

“Labor policies can address labor market imperfections. But interventions can hinder dynamism in some cases, while the lack of mechanisms for voice and social protection affects the most vulnerable”.

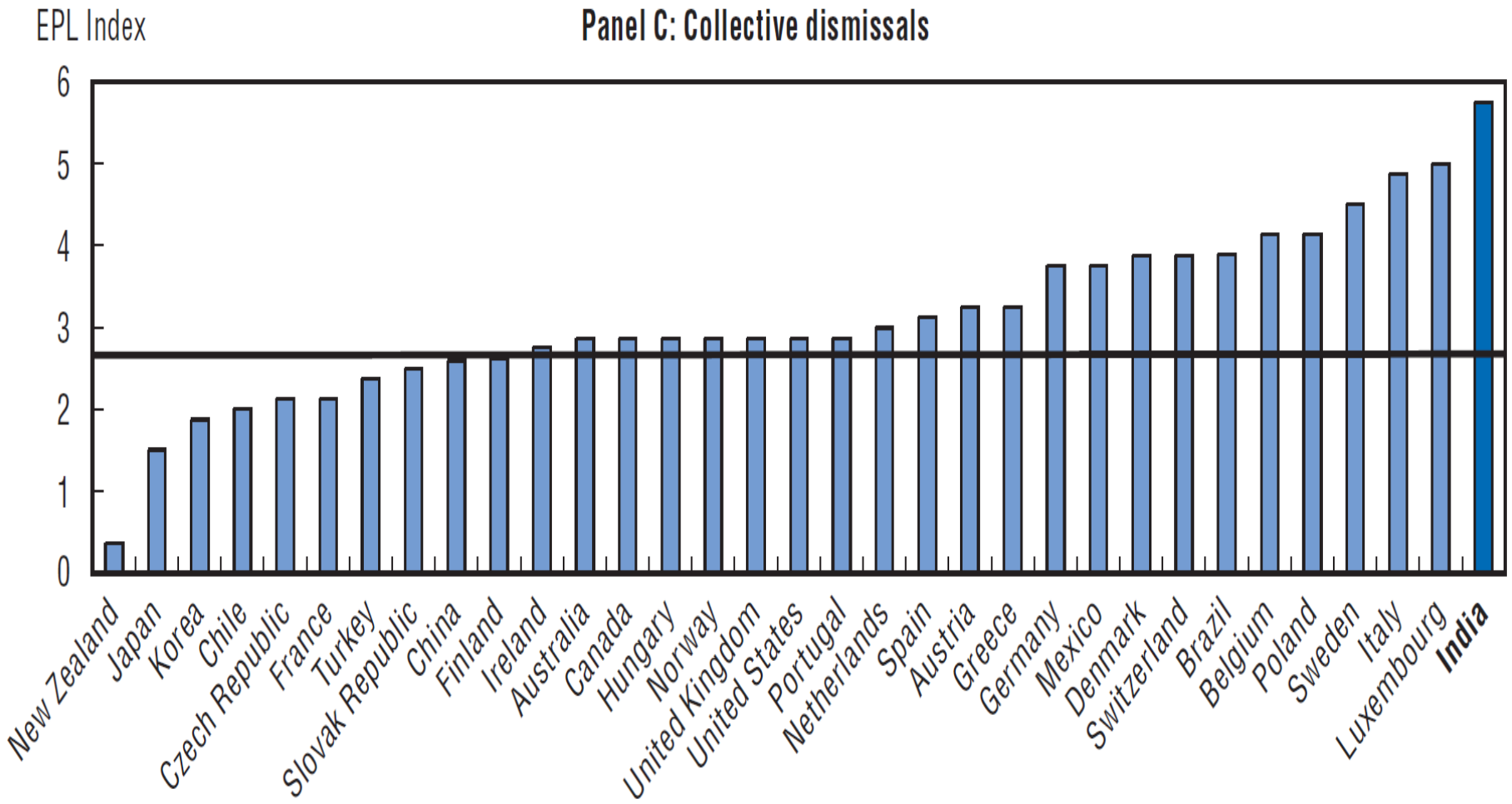
(World Development Report, 2013)

India's labour laws are more rigid than those in most countries...



Source: OECD Economic Survey (2007)

India's stance is especially onerous for collective dismissals...



Source: OECD Economic Survey (2007)

Problems with the Labour Regulatory Mechanism

- Too many labour laws

45 different national and 200 state level labour legislations

- Many laws are far too detailed and antiquated, making them difficult to implement.

The Factories Act prescribes the use of earthen pots filled with water (water coolers are not sufficient) and the use of red painted buckets with sand (instead of fire extinguishers)

- Few specific pieces of legislation are particularly constraining

Chapter VB of IDA makes it necessary for firms employing more than 100 workers to obtain permission of state governments in order to retrench or lay off workers

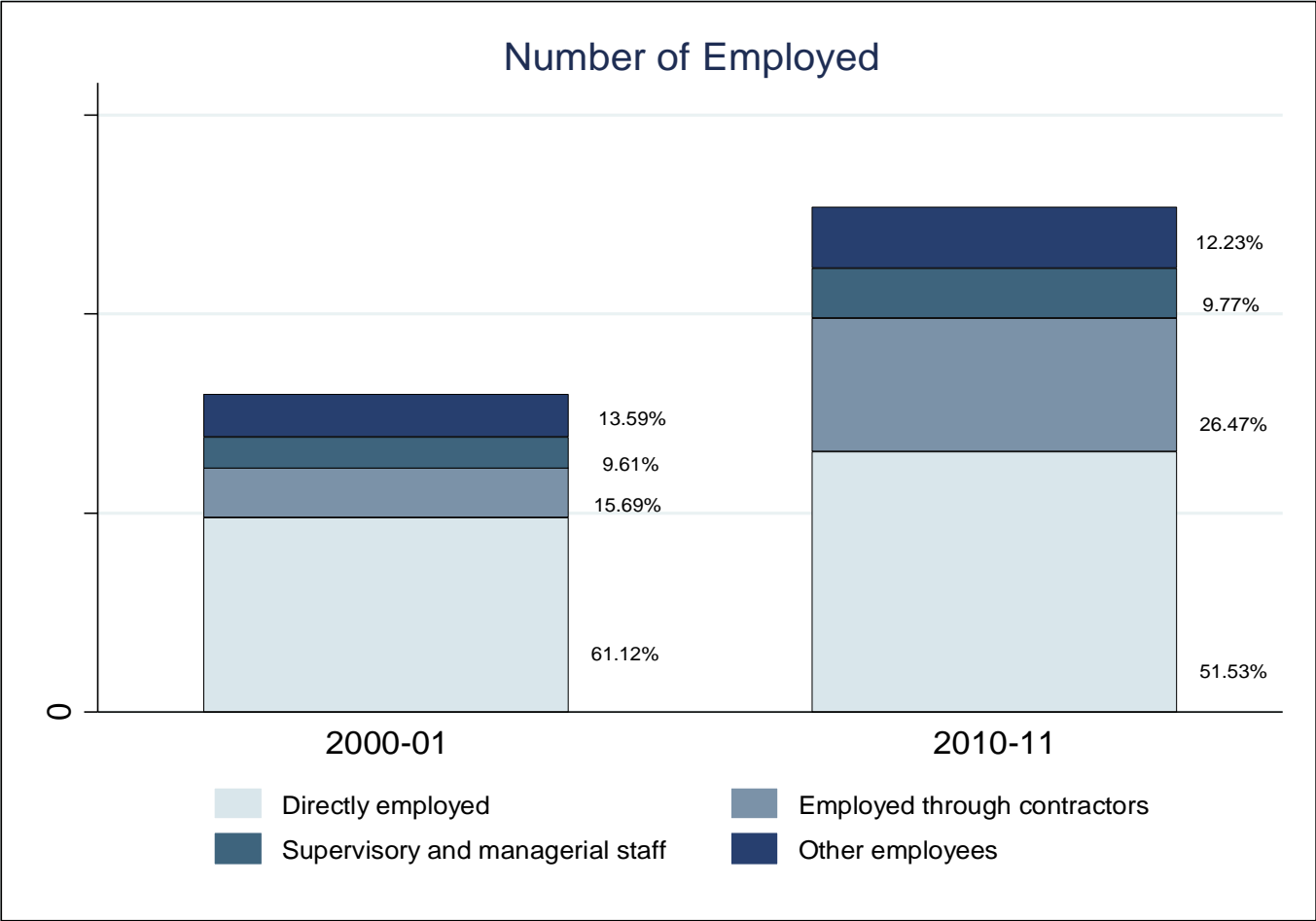
Literature Review

- Industrial performance weaker in states with pro-worker labour laws (**Besley and Burgess (2004), Aghion et al. (2005), Topalova (2004), and Sanyal and Menon (2005)**)
- **Hasan et al (2008)** combine various Labour Market Regulation(LMR) measures (**Besley & Burgess, Ahsan & Pages, OECD, Bhattacharjea**) to obtain a composite LMR measure at state level. They find that states with relatively inflexible labor regulations experienced slower growth of labour intensive industries and slower employment growth.
- **Dougherty et al (2011)** using plant level data find that firms in labour intensive industries and in states with flexible labour laws have 14% higher TFP than their counterparts in states with more stringent labour laws.

How have firms responded to these rigidities

- By hiring contract workers
- By resorting to informal arrangements in order to remain outside of the formal sector altogether
- By choosing to stay small (and below the relevant thresholds where labour regulations become binding).

Stylized fact #1 : Increasing contractualisation of India's workforce



Source: ASI published statistics

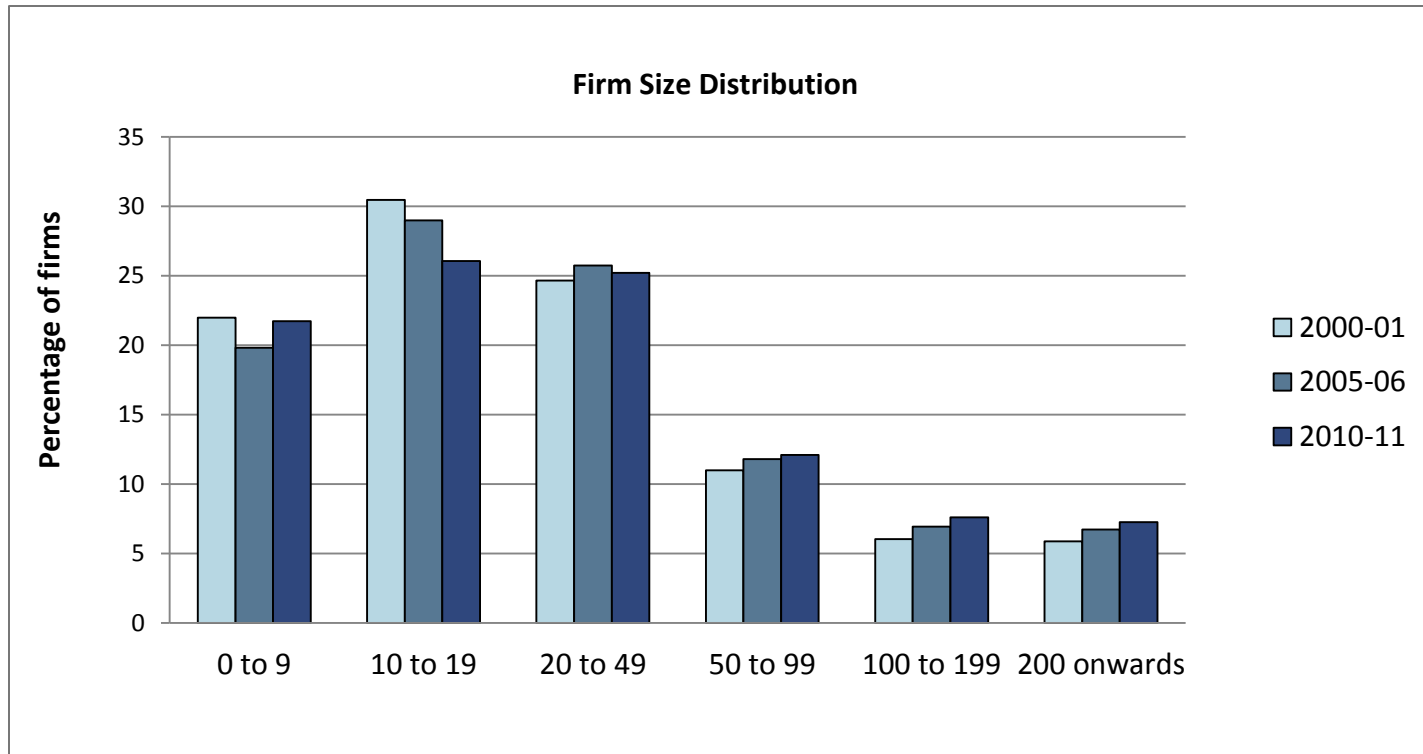
Stylized fact#2 :Extent of informality stands out

Shares of the organized and unorganized sectors

	2000-01			2005-06			2010-11		
	Employment	GVA	Output	Employment	GVA	Output	Employment	GVA	Output
Unorganised	82.8	21.2	17.7	80.8	33.1	37.8	73.9	17.3	9.3
Organised	17.2	78.8	82.3	19.2	66.9	62.2	26.1	82.7	90.7

Source: ASI and NSS unit level data

Stylized fact#3 : Proliferation of small firms



Source: ASI unit level data

The Question

Are labour regulations alone responsible for these trends or are there other factors at play?

The Approach

Examine the extent to which stringent LMR impact

- Contractualisation
- Informality
- Firm Size Distribution

Data

- ASI database covers firms that are registered under the Factories Act (firms employing 10 or more workers using power, or 20 or more workers without using power).
- Time period: 2000-01 to 2011-12
- Build panel of firm data on value added, output, employment(contract and regular workers), age, size, capital, and profits .
- Build a panel of state industry data on GVA and employment in the formal sector and compute their respective shares in the total employment and output in each industry i in state s at time t .
- Build a panel of state industry data on number of firms for three types of firms (small/medium/large industries) and compute their respective shares in each industry i in state s at time t .

Empirical Specification

$$(1) \quad \ln \left(\frac{CW}{TW} \right)_{fist} = \theta_0 + \theta_1 Time + \theta_1 LMR_s + \theta_2 PMR_s + \\ \theta_3 \left(\frac{w_c}{w_d} \right)_{fist} + \theta_4 Size_{fist} + \\ \theta_5 Labour Intensity_{fist} + \varepsilon_{fist}$$

$$(2) \quad \theta_{ist}^{formal} = \sum \alpha_i d_i + \sum \alpha_s d_s + \beta T + \mu LMR_s + \\ \lambda(Other\ controls) + \varepsilon_{ist}$$

$$(3) \quad \theta_{ist}^k = \sum \alpha_i d_i + \sum \alpha_s d_s + \beta T + \gamma(Size\ Dummy) + \\ \delta(Size\ Dummy * LMR_s) + \lambda(Other\ controls) + \varepsilon_{ist}$$

Stringent LMR are not the only factor incentivizing firms to hire contract workers

	Dependent Variable: Share of Contract Workers in Total Workforce			
	(1)	(2)	(3)	(4)
$\ln(W_c/W_d)$	0.42* (0.19)	0.27* (0.17)	0.39* (0.24)	0.56* (0.25)
LMR	-0.03* (0.01)	-0.02* (0.01)	-0.03* (0.01)	-0.03** (0.01)
PMR	0.01 (0.01)	0.05*** (0.01)	0.05*** (0.01)	0.06*** (0.01)
$\ln(\text{teledensity})$		-0.08*** (0.01)	-0.09*** (0.01)	-0.09*** (0.01)
$\ln(\text{size})$			-0.01 (0.03)	0.27*** (0.03)
$\ln(\text{size}^2)$				-0.03*** (0.00)
time	0.02*** (0.00)	0.04*** (0.00)	0.04*** (0.00)	0.04*** (0.00)
<i>N</i>	69402	68556	68556	68556

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Share of the formal sector is significantly lower in states with more stringent LMR

	Dependent Variable: Share of employment in formal sector		Dependent Variable: Share of real GVA in formal sector	
	(1)	(2)	(3)	(4)
LMR	0.10*** (0.01)	0.10*** (0.01)	0.04*** (0.01)	0.04*** (0.01)
ln(SGDP)	0.16*** (0.03)	0.16*** (0.03)	-0.15 (0.10)	-0.15 (0.10)
Physical Infrastructure Index	0.04** (0.02)	-0.05 (0.03)	0.08*** (0.02)	0.07* (0.04)
Financial Development Index		0.09*** (0.03)		0.01 (0.05)
State fixed effects	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes
Time	Yes	Yes	Yes	Yes
R-squared	0.72	0.72	0.63	0.63
N	2592	2592	2592	2592

Share of mid sized and large firms is not higher in states with flexible LMR

Dependent Variable : Share of firms

	(1)	(2)	(3)
LMR	0.03*** (0.01)	0.03*** (0.01)	0.02*** (0.01)
Size Group 2: 50-99	-0.04*** (0.01)	-0.04*** (0.01)	-0.04*** (0.01)
Size Group 3: 100+	-0.05*** (0.01)	-0.05*** (0.01)	-0.05*** (0.01)
LMR* Size Group 2	-0.01** (0.01)	-0.01** (0.01)	-0.01** (0.01)
LMR* Size Group 3	-0.01* (0.01)	-0.01* (0.01)	-0.01* (0.01)
ln(SGDP)		-0.04 (0.02)	
Physical Infrastructure index			0.04*** (0.01)
Financial Development index			-0.01 (0.01)
<i>N</i>	2931	2931	2931

Conclusion

- It is not just about how rigid or flexible LMR are, a confluence of factors matter.
- India's labour laws give a high degree of protection to very few workers in the organised sector, while leaving a large proportion of its workforce unprotected against any contingencies and arbitrary actions of employers.
- Need to reduce “dualism in the regulatory regime by bringing in the largely excluded segments of the unorganized sector into a regulatory framework.
- The role of labour market regulations in meeting India's challenge of creating “good jobs” maybe more modest than the intensity of the debate suggests.