

# Informality and Vulnerability of Employment in Two cities in India

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# Introduction/Background

- In 1950 & 1960s Dualistic nature of Developing economies was emphasized
- In 1970s, ILO city-studies popularized ‘Informal-sector’.
- In 1980s, Structuralist tradition: Existence of the informal sector was not merely a bad state-policy but dynamic nature constraints and opportunities for capital accumulation. (*Portes et. El 1989*)

## Continued.....

- The Legalist View:

The legal framework impose excessive transaction costs on informal enterprises.

provision of legal property rights to help informal enterprises convert their assets into capital.

- While each of these perspectives reflects one or other part of the informal economy, **a recent view is that it is much more heterogeneous and complex than a sum of these parts** ([www.wiego.org](http://www.wiego.org)).

# Measuring Informality: Issues and Recent approaches

- Though these two terms are used interchangeably they imply different aspects of the labour market. Given the broad nature of the definition(s) it is obvious that there are multiple forms and structures of informality.
- It is quite often that international definitions are not strictly followed at the actual research and policy analysis. Issues related to the data availability as well as the research objectives are some of the factors responsible for it (Gasparini and Tornaroli, 2007).

## Continued.....

- The empirical implementation of these definitions gives rise to multiple measures.
- Indicators used to identify informal employment include share of self-employed in the labour force (Loayza and Rigolini, 2006), lack of work contract (Amuedo-Dorantes, 2004), unskilled self-employed, salaried worker in small private firm and zero-income earners and no right to pension (Gasparini and Tornaroli, 2007), as quoted in Jütting et. al. (2007).

## Continued.....

- Most frequently used employment relationship criteria are permanence of work, written contract, and employer's contributions to pension or retirement fund, paid leave and employer's medical aid payments.

*In this context to evaluate the possible size of informal sector and employment in Delhi and Ranchi in the context of different approaches the following schema was developed.....*

# Indicators used to define informal sector (IS) and informal employment (IE) in each approach

## Wage Employees:

	Informal Sector		Informal Employment				
	IS-ILO	IS-NCEUS	IE-ILO	IE-NCEUS	IE-1	IE-2	IE-3
Employee							
1.1 Registered Enterprise <sup>1</sup>							
1.2 With <10 workers							
1.3 Social protection from employer <sup>2</sup>							
1.5 Paid Leave							
1.6 Contract <sup>3</sup>							
2.7 State sponsored pension							

# Self-Employed:

	Informal Sector		Informal Employment				
	IS-ILO	IS-NCEUS	IE-ILO	IE-NCEUS	IE-1	IE-2	IE -3
<b>2. Self employed: Employer or Own Account Worker</b>							
2.1 Registered Enterprise <sup>1</sup>	■	■	■				
2.2 With <10 workers		■					
2.3 Social protection from employer <sup>2</sup>			■	■	■	■	■
2.5 Paid Leave					■	■	■
2.6 Contract <sup>3</sup>					■	■	■
2.7 State sponsored pension							■
<b>3. Self employed: Contributing Family Helper</b>							
All contributing family helpers are in informal sector and informal employment by all approaches							



## Notes for Indicators Table:

- Indian Factories Act for manufacturing Units, Company Act for others, Cooperative Societies Act, etc.
- Gratuity, Employees State Insurance (ESI), Employees Provident Fund (EPF), Pension under EPF
- Open ended regular contract or Long term fixed contract for more than one year.

## Informal Employment Indicators:

- **IE1:** A worker who gets standard social protection or paid leave is formal and a worker who does not get both is informal (Number of Indicators used: 2).
- **IE2:** A worker who gets standard social protection or paid leave or has an open ended regular contract/long term fixed contract for more than one year is formal. And a worker who does not get standard social protection, paid leave *and* a regular contract is informal (Number of Indicators used: 3).
- **IE3:** A worker who gets standard social protection or paid leave or has an open ended regular contract/long term fixed contract for more than one year or state sponsored pension is formal.  
And a worker who does not get standard social protection, paid leave, regular contract *and* state sponsored pension is informal (Number of Indicators used: 4).

## Estimation:

### Informal Sector:

- The size of the informal sector is close to 57 percent in Delhi by both definitions, while in Ranchi the size of the informal sector by the NCEUS definition is smaller (66 percent) compared to the ILO definition (71 percent)

### Informal employment:

- Informal employment by the ILO and NCEUS definitions remain the same at about 86 and 88 percent respectively.
- Taking each criterion separately, we found that the majority of the workers in Delhi and Ranchi did not obtain state sponsored pensions, while 86 and 88 percent did not get paid leave. A relatively larger percentage of workers had a regular long term contract, particularly in Delhi.

## Matrix of Informality in the Non Agricultural sector, Delhi and Ranchi, 2009-10

Informality	Approach	DELHI		RANCHI	
		Informal	Formal	Informal	Formal
Sector	IS_ILO <sup>1</sup> .	56.82	32.83	70.96	22.93
	IS_NCEUS	57.63	42.47	65.93	35.10
Employment	IE_ILO	86.36	13.64	88.31	11.69
	IE_NCEUS	86.36	13.64	88.31	11.69
	IE1	84.26	15.74	86.98	13.02
	IE2	71.03	28.97	83.43	16.57
	IE3	70.98	29.02	83.43	16.57
Entitlement	<b>Percentage of workers by each criterion</b>				
	IE_Paid leave	86.47	13.53	88.53	11.47
	IE_Contract	77.28	22.72	85.39	14.61
	IE_Pension	99.68	0.32	99.93	0.07
	IE_LCP	71.93	28.07	84.05	15.95

## Continued.....

The most vulnerable workers so defined form a much higher proportion than *informal sector* but lower than informal *employment* by the ILO or NCEUS definitions. Thus, the concept of informal sector hides much of the vulnerability of workers while workers in informal employment may be getting some benefits other than traditional enterprise based social security cover.

This idea is further explored by developing a **Vulnerability Index**.

## Informality among Wage Employees (Non Agricultural sector)

The self employed entities show extreme form of informality (almost 100 per cent) whether we consider the sector aspect or the characteristics of their employment. This implies that variation in informality among workers stems mainly from the wage employed workers. (Table below)

Definitions	Delhi (2009-10)			Ranchi (2009-10)		
	Regular	Casual	Total	Regular	Casual	Total
IS1_ILO	32.63	55.17	39.16	43.94	86.41	60.57
IS2_NCEUS	35.21	56.61	41.43	48.23	61.97	53.66
IE_ILO	72.97	100.00	80.82	74.22	98.35	83.77
IE_NCEUS	72.97	100.00	80.82	74.22	96.05	82.86
IE1	68.80	100.00	77.86	71.95	99.53	82.86
IE2	43.16	100.00	59.67	64.72	99.53	78.49
IE3	43.13	100.00	59.65	64.72	99.53	78.49

# Estimating Vulnerability

Besides informality related to work, to understand the different degrees of vulnerability, we have constructed vulnerability indices based upon information available on types of social protection benefits obtained from enterprises, the state and private benefits.

## Vulnerability Indices for Wage Employees

Index	Components
SS-I Social Security Index-I	Enterprise based Benefits <sup>1</sup> , State <sup>2</sup> /Private <sup>3</sup> Benefits
SS-II Social Security Index-II	Enterprise based Benefits, State/Private Benefits, PDS <sup>4</sup> .
JS-I Job Security Index-I	Contract, Sick leave, Paid Leave
JS-II Job Security Index-II	Contract, Sick leave, Paid Leave, Workplace <sup>5</sup> .
VI-I Vulnerability Index-1	Job security Index-I + Social Security Index-I
VI-II Vulnerability Index-2	Job security Index-I + Social Security Index-II
VI-III Vulnerability Index-3	Job security Index-II + Social Security Index-I
VI-IV Vulnerability Index-4	Job security Index-II + Social Security Index-II

## Estimating Vulnerability.....

The Vulnerability Index approach helps to capture a range of worker's vulnerabilities in terms of their job characteristics, and access to state and private benefits. Next table presents proportion of wage employees across various indices showing various degrees of vulnerability.

Vulnerability	Social Security		Job Security		Vulnerability			
	SS-I	SS-II	JS-I	JS-II	VI-I	VI-II	VI-III	VI-IV
<b>0 (Most Vulnerable)</b>	64.0	39.1	56.4	23.6	46.5	29.1	19.8	12.2
<b>&gt; 0 - 0.5 (Less Vulnerable)</b>	28.9	54.9	27.7	46.6	38.1	56.2	62.1	69.8
<b>&gt; 0.5 (Least Vulnerable)</b>	7.1	6.1	15.8	29.8	15.4	14.7	18.0	18.0
<b>Total</b>	100	100	100	100	100	100	100	100



## Estimating Vulnerability.....

The picture related to vulnerability is clear: proportion of most vulnerable workers decreases when using minimum criteria (VI-I) to maximum criteria (VI-IV). This implies that workers are less vulnerable when we look at the broader criteria. However, the majority is concentrated in the middle of the vulnerability spectrum, nearly 70 percent have some form of security (VI-IV) and 12 percent have no form of security and are extremely vulnerable.

## Degree of Vulnerability by Informality and Other Characteristics

- The wage employees in the informal sector are extremely vulnerable compared to wage employees in the formal sector.
- There is a close relation between firm-size and vulnerability as mean-score increases with firm size for each index.
- Similar association is found between workplace and vulnerability mean-scores. The workers who are working at conventional places like office are relatively more secure while working at home or in open places (construction workers, street vendors etc) show lesser mean scores and hence more vulnerability.

## Continued.....

Characteristics	% Wage Employees	Social Security		Job Security		Vulnerability			
		SS-I	SS-II	JS-I	JS-II	VI-I	VI-II	VI-III	VI-IV
<b>1. Sector</b>									
Informal	59.48	0.042	0.152	0.111	0.264	0.072	0.140	0.160	0.210
Formal	40.52	0.249	0.262	0.478	0.594	0.351	0.362	0.437	0.439
<b>2. Informality</b>									
Informal Employment	82.19	0.034	0.138	0.136	0.293	0.078	0.143	0.174	0.219
Formal Employment	17.81	0.553	0.467	0.832	0.878	0.665	0.625	0.717	0.680
<b>3. Firm Size</b>									
1	11.96	0.022	0.163	0.091	0.207	0.052	0.142	0.123	0.192
below 10	47.78	0.076	0.167	0.182	0.345	0.121	0.178	0.219	0.258
above 10	40.26	0.218	0.241	0.402	0.517	0.299	0.317	0.380	0.388
<b>4. Work-Place</b>									
Conventional	62.91	0.184	0.223	0.367	0.578	0.265	0.292	0.399	0.410
Home	8.76	0.026	0.171	0.123	0.249	0.069	0.160	0.148	0.217
Open	28.33	0.030	0.145	0.063	0.042	0.045	0.119	0.037	0.099
<b>5. State (City)</b>									
Delhi	64.97	0.144	0.220	0.299	0.438	0.212	0.261	0.303	0.336
Ranchi	35.03	0.093	0.152	0.188	0.323	0.132	0.170	0.214	0.239
<b>6. Sex</b>									
Male	83.82	0.127	0.196	0.260	0.400	0.184	0.229	0.273	0.303
Female	16.18	0.120	0.200	0.259	0.383	0.180	0.231	0.260	0.296
<b>7. Migration</b>									
Migrant	11.78	0.130	0.132	0.267	0.408	0.191	0.192	0.281	0.275
Non-Migrants	88.63	0.126	0.205	0.259	0.396	0.185	0.237	0.273	0.309

## Continued.....

- The differences between mean scores for attributes such as sector, state, informality, size of firm and place of work are as per the expectation. But surprisingly mean scores indicate almost same level of vulnerability among male and female workers as well as among migrants and non-migrant workers. Being male or female and migrant or non-migrant does not seem to make a difference to the level of vulnerability.

## Conclusion:

- There are strong inter-linkages between the formal and informal sectors and second, there is more of a continuum of employment relationships in the economy rather than a dualistic structure.
- About 71 percent of workers in Delhi and 83 percent in Ranchi did not get any enterprise or state benefits at all. Only about 14 percent in Delhi and 12 percent in Ranchi were in extremely formal work relationships, getting all the enterprise and state benefits. While the former workers are in most vulnerable work situations, the latter are most secure

## Conclusion:

- The most vulnerable workers so defined form a much higher proportion than *informal sector* but lower than *informal employment* by the ILO or NCEUS definitions. Thus, the concept of informal sector hides much of the vulnerability of workers while workers in informal employment may be getting some benefits other than traditional enterprise based social security cover.
- The proportion of most vulnerable workers decreases when using minimum criteria (VI-I) to maximum criteria (VI-IV). This implies that workers are less vulnerable when we look at the broader criteria. However, the majority is concentrated in the middle of the vulnerability spectrum, nearly 70 percent have some form of security (VI-IV) and 12 percent have no form of security and are extremely vulnerable

**THANK YOU.....**