

Data analysis of informal employment in China and India

Xizhe Peng, Yaowu Wu, Jeemol Unni

MOTIVATION

- Employment is primary channel through which growth translates into better living standards, reduced poverty, and welfare improvements.
- Why China and India?
- Large rapidly growing economies
- Different employment structures
- Employment may be responding differently to growth in both countries

Importance of Informal Employment

- Informal employment: Crucial issue in both countries. Either very high rates of or increasing rates of informal employment
- India – increases in employment have taken place mainly in informal employment; formal employment has not grown.
- China – Rapid increasing in informal employment recently.

Major differences between China and India in Informal employment:

- Growing informal employment in China is a recent phenomenon. India has always had high levels of informal employment.
- China: Wide coverage of social security in urban areas, even for informal workers previously employed in formal sectors. But this was never the case in India.

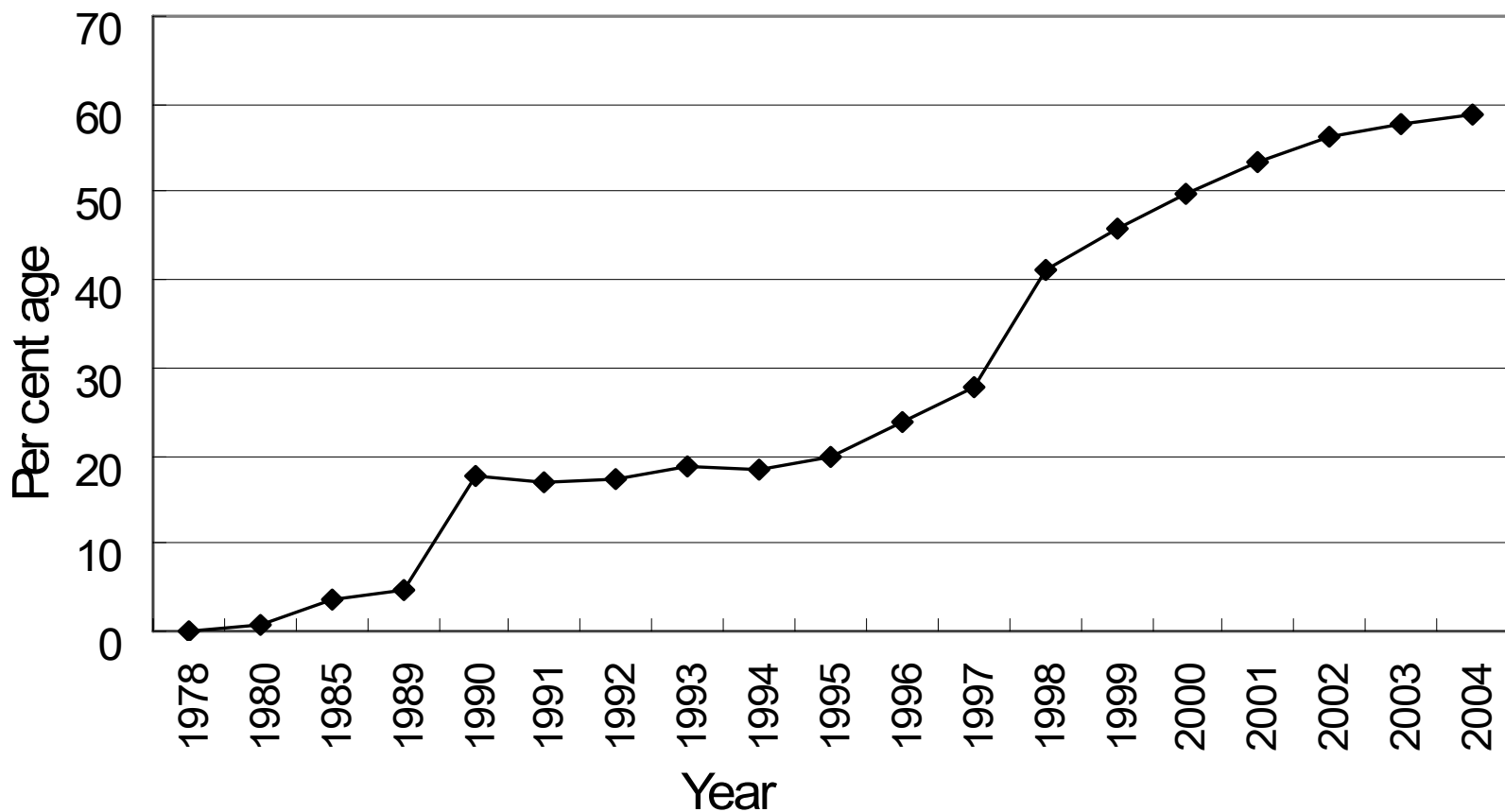
Similarities

- Both countries are in the process of socioeconomic reform.
- Patterns of growth and employment influenced by global trade.
- A growing share of the Chinese labor force are now engaging in informal work. In both countries, contribution to GDP is significant.

Data analysis

- Emerging research opportunities in both China and India
- New sources of data in both countries enable us to examine these issues in both countries.
- India: 55th (99/00)/ 61st (04/05) NSS rounds
- China: Administrative data, LFS, sample surveys – MOLSS, other

The share of informal employment to all employment in urban China, estimated by residual method (%)



Based on official statistics

Estimates of Informal employment in Urban China

中国城镇非正规就业规模

Millions

年份 years	非正规就业总量 下限 (汇总法) 1 Sum-up method	非正规就业总量 上限 (差值法) 2 Residual method	非正规就业总量 (中间值) 3 Average method
years	56.1278	51.708	53.9179
1998	68.2495	79.823	74.0363
1999	79.1265	88.838	83.9823
2000	93.4701	96.615	95.0426
2001	95.6158	127.742	111.6789
2002	102.6175	137.948	120.2828
2003	109.408	146.7	128.054
2004	116.0965	155.927	136.0118

Contribution of informal employment to GDP, income methods (2002)

非正规就业分类		就业规模	工资性收入	增加值估计	增加值占GDP
Type of informal employment		Total employment (万人)	Total income (亿元)	Value added (亿元)	比重 (%) % to GDP
城镇人口下限					
Urban low-end		10765.1	9850.42	20173.49	19.18
城镇人口上限					
Urban high-end		12406.0	11351.9	23248.49	22.11
农民工城镇					
Migrant worker		8574.93	7846.34	16069.18	15.28
城镇社区					
Urban community		842.12	498.6	978.72	0.93
合计 Total	下限	20182.15	-	37221.39	35.39
	上限	21823.05	-	40296.39	38.32

■ **Sample surveys in urban China**

- 1. Chinese household income project survey (CHIPS) 1988, 1995 and 2002, 8 provinces.
- 2. China Urban Labor Survey (CULS), 2001 and 2005, five cities: Institute of Population and Labor Economics, CASS
- 3. MOLSS Labor Force Employment and Social Security in Urban China in 2002, 66 cities.

Percentage of informal employment calculated using different datasets

Age group	1988 CHIP	1995 CHIP	2002 MOLSS	2002 MOLSS*	2005 (CULS)*
16-24	8.1	15.7	59.2	50.5	38.2
25-34	3.1	7.4	45.1	43.2	37.3
35-44	2.9	6.7	42.4	41.8	44.3
45-54	3.9	7.8	42.4	41.2	43.0
55-64	9.3	16.3	54.7	54.5	44.2
Total	4.2	8.9	45.4	43.5	42.0

* Large size city (population exceeding 2 million)

Resource: 1988 and 1995, CHIP's data; 2002, MOLSS' 66 city data; 2005, CULS2.

Table 3: Personal characteristics and welfare by different types of jobs unit:%

	Informally employed	Formally employed
Total employed	45.25	54.75
Gender		
Male	42.16	57.84
Female	49.52	50.48
Years of schooling	10.4	12.3
Hourly wage (yuan)	4.15	6.47
Work hours per week (hours)	51.79	42.99
Wage arrear rate (employee)	7.87	6.69
Social security :		
Pension (%)	36.99	84.52
Unemployment insurance (%)	20.67	72.54
Health insurance (%)	14.10	61.52
Contributing methods of pension :		
Individual and unit contribution combined	59.17	93.53
Solely contributed by the employee	32.94	2.47
Solely contributed by empolyee's unit	7.89	4.00

66 city data

Data Analysis Questions:

- What are the key differences and similarities in macro trends in employment, and links with economic growth, trade, poverty, and inequality in the two countries?
- What are the consequences in each country – in terms of average earnings, poverty risk, and social protection – of working in different categories of employment?
- What are the key differences in the structure of employment *within* both countries e.g. rural/urban, by region, gender, etc.?

Specific questions:

TOTAL EMPLOYMENT

- **labor force participation rate for men and women**
- **structure of the labor force by sector, employment status, place of work, and gender**
- **change in structure of labor force over time**

INFORMAL EMPLOYMENT

- **share of informal labor force by sector, employment status, place of work**
- **share of informal employment by gender**
- **Quality of employment: earnings, poverty risk, social protection**

ACTIVITIES

- analysis of existing data on GDP growth, productivity, trade liberalization, poverty, and inequality in both countries
- analysis of structure of employment by sex (new MDG#3 indicator) and poverty risk methodology
- further analysis in India of *links between informality and poverty*: comparing 55th and 61st rounds of the National Sample Survey
- analysis of *structure of employment in rural and urban areas* using existing data