

JUNE 27, 2011

UPDATE

BSE-30: 18,412

**Where have all the girls gone?** Analysis of newly released data from the 66th round of the National Sample Survey Organization (NSSO) survey reveals (1) stagnation in employment creation as women drop out of the workforce, (2) an increasing dependency ratio, and (3) increased 'casualization'. On the brighter side, (1) manufacturing jobs are being generated and (2) wage increases significantly overshadow consumer price inflation. India needs a better job-creating machine.

### Unemployment falls; female labor force participation falls even more dramatically

Unemployment rate has fallen dramatically (see Exhibit 1) between the two NSSO surveys (66th round covering 100,957 households over the period July 2009 to June 2010 and 61st round covering 79,306 households over July 2004 to June 2005), whether measured on usual status (to 2% from 2.3%) or current daily status (to 6.6% from 8.2%). There has been a dramatic fall in the labor force participation ratio (LFPR) of women in both rural areas (to 26.5% from 33.3%) and urban (to 14.6% from 17.8%). Less than one in four women now works, down from three in 10.

### Men replace women as few new jobs created; dependency ratio rises

Reading the survey numbers along with the recently released Census findings (for more, please refer our April 4 note: "*Census 2011: More of the same*"), the fall in the overall workforce participation ratio (WPR, driven by the fall in female LFPR) has meant that only 4 mn new employment opportunities have been created between the two survey periods (while the population rose by 91 mn). As fewer active workers fend for an increasing population, the dependency ratio has risen to 1.6 from 1.2 over the two survey periods (see Exhibit 2).

### Casualization of labor is increasing, even as manufacturing is creating jobs

A larger proportion of workers across both rural areas (at 38.6% from 34.6%) and urban (at 17.5% from 11.8%) have become 'casual labor', even as the proportion of 'self-employed' and 'regular wage/salaried' falls (see Exhibit 3). Manufacturing created 16 mn employment opportunities (of which 12 mn for rural males) even as agriculture lost 17 mn workers (as 20 mn rural women went out). Tertiary sector created 5 mn opportunities, almost all for males.

### Wages have risen strongly across India, beating consumer price inflation

The brightest sign for workers across the country is that average wage rates over the country (across both urban and rural, and men and women) have risen between 11.4-15.1% per annum over the survey periods, which compares very favorably with the consumer price inflation of 8.5% per annum between the two survey periods (see Exhibit 4). Urban India has seen better wage hikes than rural India in the 'regular wage/salaried' segment while the 'casual laborer' in rural India saw a marginally better rise than his urban counterpart.

### India needs to create better and more employment opportunities

We note that women in rural areas receive ₹69 for casual labor in works other than public works, while in public works (whether under MGNREGS or otherwise), they receive close to ₹87. There is limited data to say whether rural women are moving to public works: in FY2011, women comprised 48% of the person-days in MGNREGS). India needs to create a significantly better and larger number of employment opportunities for both men and women so as to ably harness the upcoming 'demographic dividend'.

### QUICK NUMBERS

- **Less than one in four women now works; down from three in 10**
- **Only 4 mn new employment opportunities even as population rose by 91 mn**
- **Wages have risen between 11.4-15.1% pa, compared to consumer price inflation of 8.5% pa**

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### Understanding the terminology

Labor-force refers to persons who were either 'employed' or 'unemployed'. The labor-force participation rate (LFPR), as represented in the exhibits below, is defined as the number of persons in the labor-force per 100 persons. Similarly, the number of persons/person-days employed per 100 persons/person-days is referred to as work-force participation rates (WFPR) or worker-population ratio (WPR).

Employment and unemployment were measured, with three different approaches, viz., usual status approach (us), current weekly status approach (cws) and current daily status approach (cds) by using three different reference periods. For the usual status approach, the reference period was one year and that for current weekly status approach was one week. The current daily status was determined based on the activities pursued by persons on each day of the reference week. In the survey, information on usual principal activity (ps) as well as usual subsidiary activities (ss) pursued by the sample persons was collected.

**Exhibit 1: Unemployment falls; female labor force participation falls even more dramatically**  
Employment statistics, various NSSO rounds, June year-ends, 2005 and 2010

NSS - 66th round	Rural			Urban			Rural+Urban		
	Male	Female	Person	Male	Female	Person	Male	Female	Person
Labor force participation ratio	55.6	26.5	41.4	55.9	14.6	36.2	55.7	23.3	40.0
Workforce participation ratio	54.7	26.1	40.8	54.3	13.8	35.0	54.6	22.8	39.2
Persons unemployed	0.9	0.4	0.7	1.6	0.8	1.2	1.1	0.5	0.8
Unemployment rate (ps+ss)	1.6	1.6	1.6	2.8	5.7	3.4	2.0	2.3	2.0
Unemployment rate (cws)	6.4	8.0	6.8	5.1	9.1	5.8	6.1	8.2	6.6
<b>NSS - 61st round</b>									
Labor force participation ratio	55.5	33.3	44.6	57.0	17.8	38.2	55.9	29.4	43.0
Workforce participation ratio	54.6	32.7	43.9	54.9	16.6	36.5	54.7	28.7	42.0
Persons unemployed	0.9	0.6	0.7	2.2	1.2	1.7	1.2	0.8	1.0
Unemployment rate (ps+ss)	1.6	1.8	1.7	3.8	6.9	4.5	2.2	2.6	2.3
Unemployment rate (cws)	8.0	8.7	8.2	7.5	11.6	8.3	7.8	9.2	8.2
<b>Difference</b>									
Labor force participation ratio	0.1	-6.8	-3.2	-1.1	-3.2	-2.0	-0.2	-6.1	-3.0
Workforce participation ratio	0.1	-6.6	-3.1	-0.6	-2.8	-1.5	-0.1	-5.9	-2.8
Persons unemployed	-	-0.2	-	-0.6	-0.4	-0.5	-0.1	-0.3	-0.2
Unemployment rate (ps+ss)	-	-0.2	-0.1	-1.0	-1.2	-1.1	-0.2	-0.3	-0.3
Unemployment rate (cws)	-1.6	-0.7	-1.4	-2.4	-2.5	-2.5	-1.7	-1.0	-1.6

Source: NSSO-66th round, KIE calculations

Exhibit 2: Men replace women as few new jobs created; dependency ratio rises  
Employment statistics and dependency ratios, June year-ends, 2005 and 2010

Population (mn)	Rural			Urban			Rural+Urban		
	Male	Female	Person	Male	Female	Person	Male	Female	Person
Census 2011	449	425	874	177	160	337	627	584	1,211
Census 2001	172	161	333	360	336	696	532	497	1,029
Derived population of 2006	416	393	808	164	148	312	579	541	1,120
Difference	34	32	66	13	12	25	47	44	91
<b>Labor force participation (mn)</b>									
2011	250	113	362	99	23	122	349	136	484
2006	231	131	361	93	26	119	324	157	482
Difference	19	-18	1	6	-3	3	25	-21	3
<b>Workforce participation (mn)</b>									
2011	246	111	357	96	22	118	342	133	475
2006	227	128	355	90	25	114	317	153	470
Difference	19	-18	2	6	-2	4	25	-20	4
<b>Dependency ratio (X)</b>									
2011									1.6
2006									1.2
Difference									0.4
<b>Memo:</b>									
Proportion (2001, %)	37	35	72	15	13	28	52	48	100

Source: Census of India, NSSO- 61st and 66th round, KIE calculations

Exhibit 3: Casualization of labor is increasing

Employment status, various NSSO rounds, June year-ends, 2005 and 2010 (%)

NSS - 66th round	Rural	Urban
Self employed	54.2	41.1
Casual labor	38.6	17.5
Regular wage/salaried	7.3	41.4
<b>Total</b>	<b>100.1</b>	<b>100.0</b>
<b>NSS - 61st round</b>		
Self employed	56.5	43.4
Casual labor	34.6	11.8
Regular wage/salaried	8.8	44.8
<b>Total</b>	<b>99.9</b>	<b>100.0</b>
<b>Difference</b>		
Self employed	-2.3	-2.3
Casual labor	4.0	5.7
Regular wage/salaried	-1.5	-3.4

Source: NSSO-61st and 66th rounds, KIE calculations

**Exhibit 4: Manufacturing is creating jobs**

Employment status, various NSSO rounds, June year-ends, 2005 and 2010

	Percentage				Numbers (mn)			
	Rural		Urban		Rural		Urban	
	Male	Female	Male	Female	Male	Female	Male	Female
<b>NSS - 66th round</b>								
Agriculture (primary)	63	79	6	14	157	89	6	3
Secondary (manufacturing)	19	13	35	33	47	15	35	8
Tertiary	18	8	59	53	45	9	58	12
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>250</b>	<b>113</b>	<b>99</b>	<b>23</b>
<b>NSS - 61st round</b>								
Agriculture (primary)	67	83	6	18	153	109	6	5
Secondary (manufacturing)	15	10	34	32	35	13	31	8
Tertiary	18	7	60	50	42	9	56	13
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>231</b>	<b>131</b>	<b>93</b>	<b>26</b>
<b>Difference</b>								
Agriculture (primary)	-4	-4	-0	-4	4	-20	0	-1
Secondary (manufacturing)	4	3	1	1	12	1	3	-1
Tertiary	-0	2	-1	3	3	1	2	-1

Source: NSSO-61st and 66th rounds, Census of India, KIE calculations

**Exhibit 5: Wages have risen strongly across India, beating consumer price inflation**

Wages, various NSSO rounds, June year-ends, 2005 and 2010 (%)

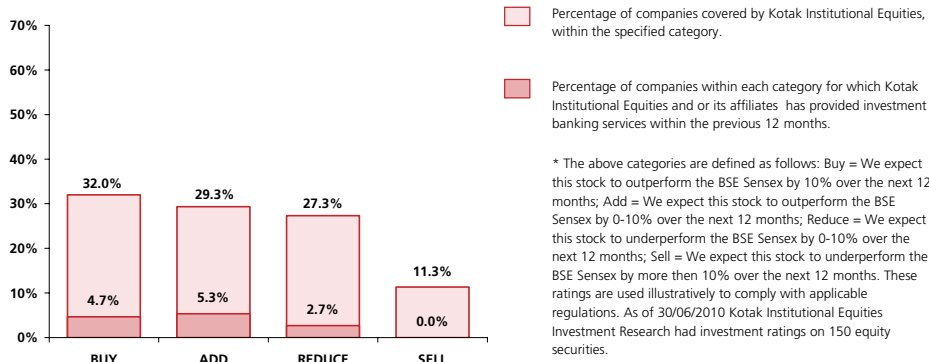
	Rural			Urban		
	Male	Female	Person	Male	Female	Person
<b>NSS - 66th round</b>						
Regular wage/salaried	249	156	232	377	309	365
Casual labor						
- other than public works	102	69	93	132	77	122
- in public works (other than MGNREGS)	98	86				
- in public works (MGNREGS)	91	87				
<b>NSS - 61st round</b>						
Regular wage/salaried	145	90	134	203	153	194
Casual labor	57	36		76	44	
<b>Compounded annual increase (% pa)</b>						
Regular wage/salaried	11.4	11.7	11.6	13.1	15.1	13.5
Casual labor	12.5	13.8		11.8	11.7	
Consumer price inflation index	8.5	8.5	8.5	8.5	8.5	8.5

Source: NSSO-61st and 66th rounds, Bloomberg, KIE calculations

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As of June 30, 2010

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