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# MANUFACTURING EMPLOYMENT IN EAST PAKISTAN 1960

by

### W. Eric Gustafson and Azizul Haque Chaudhury\*

This is the first of a series of reports which will be concerned with the evaluation of available statistics on large-scale and small-scale industry in Pakistan. Our findings in this report indicate two things:

- Inspector of Factories in East Pakistan indicate that the Census of Manufacturing Industries' (CMI) coverage of the universe it is intended to cover in East Pakistan is perhaps not too bad, although it is ha/d to be extremely definite on this point.
- 2. The universe which the CMI intends to cover is too restricted to make sense for many kinds of economic analysis. We also present data by district in East Pakistan on manufacturing employment, both large-and small-scale.

#### 1 Data

The data presented here are data on employment in large—and small—scale manufacturing industry in East Pakistan. These data—not available otherwise in detail, as far as we know — are taken from the District Census Reports of the 1961 Census of Pakistan. For each district in East Pakistan, the District Census Report (DCR) gives data on "Average Daily Number of Workers Employed in 1960" for large—and small—scale industry separately / 5\_7. The employment is classified by industry on a classification

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scheme which seems to antedate Partition. We have reclassified these industries into two-digit groups to accord with the Pakistan Standard Industrial Classification [2], used in the Census of Manufacturing Industries. We have excluded industries which have registered establishments, but are not included in the CMI. The amount of registered employment excluded for purposes of comparison with the CMI was 9059 in large-scale industry and 30 in small-scale industry.

The source of the data is given as Inspector of Factories, Directorate of Labour, East Pakistan. According the note attached to the tables, "Large-scale industries mean establishments employing 20 and more workers and using power in their manufacturing process as provided under Factories Act, 1934. n [5,p.II=10\_7. The definition as given in the Act includes all power-using factories with 20 or more workers on any day of the preceding 12 months;  $2^7$ , p.7.7. This is the same definition as that used in the CMI.

Small scale industries are defined as "establishments ... employing less than twenty workers and not using power in their manufacturing processes as provided under section 5(1) of the Factories Act, 1934. Section 5(1) of the Factories Act in fact, as we read it, seems to call for registration of Factories which had more than ten employees at any time during the year, whether using power or not.  $\mathbf{Z}^{\sim}7_{l}$ , pp.12-13  $\mathbf{J}$ . In particular, then, the definition given in the DCR-s is wrong in three respects:

- 1. under the definition given in the Act, factories having less than ten workerS throtrghout the year would not be required to register, whether or not they use power;
  - 2. under the definition given in the Act, factories having

more than twenty workers but not using power would be required to register;

3. under the definition given in the Act, factories with between ten and twenty workers and using power would be required to register.

Presumably these differences merely reflect sloppiness on the part of the person who wrote the footnote, but perhaps one should not exclude the hypothesis that the authorities do not apply act the/as written. The <u>Draft Directory of Industrial Units in East Pakistan / 4\_7</u>, shows instances of all three types of establishments which are registered, although the <u>Draft Directory</u> does not specify the section under which they are registered, so we assume that definition is correctly applied in principle.

# II. Comparison with the Census of Manufactures

Table A-1 presents the data on large-and small-scale manufacturing employment as given in the DCE-s, classified by industry. Our reclassification is perhaps a little sloppy at a couple of points, but the numbers involved in potentially erroneous classifications are small, so we have let it stand. This table indicates the average daily registered employment in manufacturing industry in 1960 in both small-and large-scale industry. Table A-1 also includes for comparative purposes the figures from the 1959-60 Census of Manufacturing Industries for two-digit industries.

One would expect these two sets of figures to be close if the Census were well done, since they are supposed to cover the identical universe. In point of fact the DCR-s show 11,097 more employees than does the CMI. Two hypotheses (at least) are possible to account for the difference. One is that average daily industrial

employment was larger in the twelve months of 1960 than it was in the last six months of 1959 plus the first six of 1960. This was probably the case. The second is that the Census missed some employment, which is also certainly the case. According to Gustav Papanek, the Central Statistical Office checked the undercoverage of value added in the 1959-60 CMI by actually going out to firms which had not returned their questionnaires and checking on the amount of value added missed. The estimate they came to 1 was nine per\_cent for East Pakistan / 6\_7, in view of the possibility of growth in manufacturing industry in the six months, and in view of the fact that the CMI for 1959-60 shows only eight per cent undercoverage of employment as compared to the i960 DCR's, inconsistent with the hypothesis that CMI undercoverage of registered employment and value-added was reasonably low, on the order of nine per cent. Undercoverage in employment could of course be different from undercoverage in value added, since value acded per worker differs by size of establishment.

The unwary should take no comfort from this weak finding.

A subsequent Research Report will demonstrate that the registration system is poor and allows a large amount of industrial employment to escape unregistered. If it does not get registered, then it has no chance of being in the CMI.

Preliminary estimates suggest that this underCoverage may be sizeable.

# Ill. Small Industry

Manufacturing enterprises do not cease to be manufacturing enterprises when they have fewer than 20 employees or do not use power. The CMI misses a very substantial volpme of manufacturing

employment registered under Section 5(1) of the Factories Act rather than Section 2(j). The CMI includes only firms registered under Section 2(j). Table A=1 shows £6,767 employees in such small manufacturing establishments for 1960, or 62 per cent of the employment shown for large-scale industry in the CMI. The missed employment is substantial in tobacco, cotton textiles, and to a much lesser extent in chemicals, The unduly restrictive intended coverage of the CMI clearly deprives us of much information.

teration system is much worse for Section 5(1) than it is for Section 2(j). Section 2(j) has been in force for years and the Inspector of Factories has had time to assemble reasonably comprehensive list of the larger establishments. But registration under Section 50) was made mandatory in East Pakistan only in the middle of 195&/T 7, p.1f\_7, which allowed only a relatively short period of time before the end of 1960 for establishment of a register. However, the labour and social welfare division indicates 933 factories reporting under both sections of the Factories Act for 195# more than double that number (1961) in 1959 and again almost a doubling in 1960 (3371)

We should also note that even including employment registered under Section 5(1) does not complete the picture by any means, since establishments with fewer than 10 employees throughbut the year are not required to register. The employment in such establishments is doubtless substantial; the value-added involved would be less important, since small establishments generally have low value-added per worker,

Further investigations of the statistics for the small-scale sector are underway in the Institute.

IV; Data by Districts

We have presented in Table A-2 the totals for manufacturing for each district, both for large-scale and small-scale. The industries included are the same as those covered in Table A-1, those which appear in the CMI. Since the CMI does not break its data down geographically within the province, these numbers may prove of some use. Industrial detail for each district is of course available in each district's DCE. (Beware of totals for industry groups in the DCH-s, since the addition is frequently wrong.)

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TABLE A=1 f

Average Daily Manufacturing Employment in East Pakistan, 1960
Compared to Census of Manufacturing Industries figures for 1959-60

	*	From D (D Large- scale	istrict Cens (2) Small- scale	us Report (3) Total	(4) CMI	(5) (1) minus (4)
20. Food Manufacturing Industries	<u> </u>	19,274	963	20,237	13,421	5,853
Food canning and bottling Flour-mills (G & IF) Rice Mills Bakeries, biscuit, and confect Sugar (seasonal) Oil mills Tea (seasonal) Misc.food, drink, & tobacco	ctioner	3, 231 726 6, 424 1, 449 6, 700 209	2 85 448 399 17 14	49 436 3,366 1,174 6,424 1,848 6,717 223		
21. Beverage industries		237	67	304	159	78
Breweries and distilleries Ice and aerated water		60 177	<del>-</del> 67	60 244	2 1	4
22. <u>Tobacco manufactures</u> Tcbacco	- 3-	398 398	65,970 65,970	66,363 66,368	473	- 75
23. <u>Msnufacture of textiles</u>		79,790	10,443	90,233	81,954	<b>-</b> 2,164
Cctton (spinning, weaving, & Page nries Woollen mills (G & IF) Jute mills Silk mills	other)	23,313 344 55,542 25	10,393	33,706 344 55,542	23, 246 56, 310	
MJC. textiles (perennial)  24. Menufacture of footvear, other apparel, and made-up textile  25. Manufacture of leather and lepioducts, skeept footwear and	goods ather	566 ring	50	616		
w anng apparel	i Other	2,365	1,242	7	2,606	<b>-</b> 241

M U		_K .				
7* - 7* - (1)	-:	<b>s</b> r»	301	34) )	tine.	
and the second of the second of the second of the second of	(1)	( 2 )	(3)	(4)	( 5 )	
Hosiery Tanneries (G & T.F) Tanneries Leather & shoe	551 40 1,670 104	651 - 206 365	1,202 40 1,876 <b>469</b>		and the	20- 11-9.
25. Manufacture of wood & cork, except manufacture of furniture 26. Manufacture of furniture and fixtures	266	135	401	1,079	- 813	
ULW mills C* rpentry and cabinet-making 27. Mcnufacture of paper and paper productions	69 197 ts 4,687	39 96 -	108 293 4,687	3,276	1,409	. +
Pc per mills	4,687	_	4,687	3,2,0	- 5 10 5	16
26.Printing, publishing, and allied	3, 084	611	3,695	3,716	- 632	
Printing, bookbinding, etc., Painting presses (G & LF) Misc. paper and printing	1,706 1,230 146	363 15 233	2,069 1,245 361		7.5	Eg g
30. Manufacture of rubber products	1,031	45	1,076	147	- 684	110
Rubber goods 31 • Manufacture of chemicals and chemical products	1,031 6,165	45 2,682	1,076 10,847	9,275	1,110	· · ·
Chemicals Bone and manure Paints	763 137 130	556 46 96	1,341 183 <b>228</b>	, ,		1 3 2 4 4 2 5 6 4 6
Soap Matches Misc• chemicals, dyes, etc•	$6, \frac{296}{516}$ $301$	1,008 - 972	$ \begin{array}{r} 1,304 \\ 6,516 \\ \cdot 1,273 \end{array} $	<u> </u>		11 12

÷	(1)	(2)	(3)	(4)	(5)
Manufacture of Non-metallic mineral	4 2 4 5	400	4 7 ( 7	2 102	1.60
products	4,345	422	4,767	3,182	1,163
Cement, lime, and potteries	253	86	339		-4
Bricks and tiles Glass	$\frac{465}{2,613}$	62 65	2,678		
Misc. Processes relating wood, stone	9 * •				••
and glass;	1,014	209	1,223	. 7	
Basic metal industries	702		702	393	: 309
Iron & steel smelting and rolling	702		4		4
mills	702	-	702	/o •·	
Manufacture of metal products Machinery, except electrical					508
mad inery	9,541	1,655	11,196	6,260	3,281
Metal stamping	1,661	_	1,661	i i	5,201
Steel, trunk, lock, and cutting		175	175		4
Kiercsene tinning and packing General engineering	846 4,747	5 <del>9</del> 1	846		
Engineering (Genl.) (G & LF)	1,016	$\frac{391}{20}$	$\frac{5,338}{1,038}$		
Misc. engineering	1,269	869	2,138		100
Electrical machinery	.477	34	511	362	115
Electrical engineering	30	34	64		
EjLedtrical engineering (G & LF)	477	-	447		
Manufacturing of transport equipment	1,507	24	1,531	2,547	1,040
Shipbuilding and engineering	1,038	24	1,062	7 40	100
Coaching and motor-car repairing  Miscellaneous manufacturing, 1	.469	2 474	,469	x 10 170	. 7
	4,238	2,474	16,712	10,153	,4,0 <b>S</b> 0
Cibttong ginning and baling (seasonal)	147	_	147		
Cotton ginning and baling	1	_			
(Perennial)	$\frac{117}{7261}$	1 227	13,953	4 40	s
Itrte prosses (seasonal) 1 Kapok Mills (seasonal)	2,7261 68	1,227	13,953		
Miscellaneous manufacturing	1,180	1,247	2,427		
GRAND TOTAL $\overline{15}$	0,107	86,767	236,874	139,010	11,097

TABLE -A-2v Distribution of Manufacturing Employment by District, East Pakistan, 1960.

· A		the second	
r-, <b>t</b>	t iifr	Small- Seal 6	Tptal
DACCA DIVISION;	g I T	)	- (
Dacca District	731693 &	23,651	97,344
Mymensingh District	2,876	5,370	8,246
Faridpur Districtj	124	2*,494	2,618
CHITTAGONG DIVISION:		1 .	:- i
Chittagong District (incl. Chittagong Hill, Tracts)	26,644	12,304	38,948
Noakhali District	229	4,487	4,716
Comilla District	1,595	8,499	10,094
Sylhet District	6,897	4,112	11,009
KHULNA DIVISION;		î ·	1- 1-3-
Khulna District	23,494	2,485	25,979
Barisal District	238	3,122	3,360
Kushtia District	3,660	843	4,503
Jessore District	26	381	407
RAJSHAHI DIVISION:	152 / 16 Te	i '-	i i r
Rajshahi District	1,842	2,561	4,403
Pabna District	<b>j</b> ,044	5,378	6,422
Bogra District	1,562	2,589	4,101
Rangpur District	2,117	8,028	: 10,145
Dinajpur District	4,066	513	4,579
Total for East Pakistan	150,107	y 86,767	236,874

Source: Calculated from the District Census Reports for East Pakistan. See