## Labour Force Matrix of Pakistan 1987-88

KHWAJA SARMAD and FAZAL HUSAIN\*

### 1. INTRODUCTION

Changes which have a direct bearing on the growth and composition of the country's labour force can be identified using a labour force matrix, which provides a detailed classification of the labour force. This paper reports the results of a mainly statistical exercise. It presents a Labour Force Matrix (LFM) of Pakistan for the year 1987-88 [Government of Pakistan (1989)] on the basis of the Labour Force Survey 1987-88 using the same classification as the LFM 1982-83 [see Cohen (1985)]. The use of a common classification enables to highlight some dynamic characteristics of the labour force during the period 1982-83 to 1987-88. On the basis of labour force trends during this period a LFM is estimated for the year 1992-93.

#### 2. THE LABOUR FORCE MATRIX OF PAKISTAN 1987-88

The characteristic feature of the LFM is a four-way classification of the labour force according to activity, occupation, status and education, by rural and urban areas. Table 1 reports the labour force matrix for the year 1987-88, which following Cohen (1985) classifies the total number of workers in the labour force into 70 rows describing the location, status and education of workers, and 63 columns, which identify the economic sector of employment and occupation. The LFM (1987-88) has been compiled using the cross-tabulations reported in the Labour Force Survey for 1987-88 [Government of Pakistan (1989)]. The rows describe the location of the labour force according to rural and urban areas, the status of the workers by five types i.e., employers, employees, self-employed, family workers and unemployed, and seven educational levels i.e., below primary, primary, middle secondary, higher secondary, intermediate, degree and post-degree. The columns identify the labour force according to nine economic sectors i.e., agriculture, mining, manufacturing, electricity, construction, trade, transport, finance, and services, and seven occupation

<sup>\*</sup>The authors are Chief of Research and Staff Economist at the Pakistan Institute of Development Economics, Islamabad.

Table 1

The Labour Force Matrix of Pakistan for 1987-88 (Status and Education by Activity and Occupation)

Agr.         Prod.         Prod.         Admm.         Cer.         Sales         Service         Agr.         Prod.         Prof.         Admm.         Cer.         Sales         Service         Agr.         Prof.         Admm.         Cer.         Sales         Service         Agr.         Prof.         Agr.         A					Aoriculture					Mining/Ouerving	Mining/Ouarving	Larving						Manufacturine	urine			
Mathematical Mat		1	Admn.	'	Sales	Service	¥	Prod	Prof.	Admn.	G.	. I	Service	Şē.	Pad	Prof.	Admn.	Ģ.		Service	Agr.	Prod.
44         89         62         89         0         334         0         334         0         334         0         334         0         334         0         334         0         334         0         334         0         334         0         334         0         334         0         334         0         334         0         334         0         334         0         334         0         334         0											URBAN											
1   3   3   4   5   5   5   5   5   5   5   5   5	EMPLOYER	4	88	622	86	0	25019	889	0	0	334	0	0	0	502	1086	1210	2543	716	815	4	54609
1   3   4   56   12   13   13   14   15   15   15   15   15   15   15	BPRIM.	4	S	11	39	0	18775	519	0	0	38	0	0	0	293	88	2	291	311	490	37	31883
1   14   144   154   15   12   12   12   12   12   12   12	PRIM.	-	3	37	13	0	2206	14	0	0	20	0	0	0	80	53	37	152	108	86	4	8672
11   14   194   154	MSEC.	7	4	99	12	0	2165	101	0	0	30	0	0	0	8	57	23	230	8	8	4	6581
7         16         19         5         9         18         0         64         0         0         1         18         23         486         489 <th>HSEC.</th> <td>==</td> <td>14</td> <td>194</td> <td>15</td> <td>•</td> <td>1207</td> <td>94</td> <td>0</td> <td>0</td> <td>10</td> <td>0</td> <td>0</td> <td>0</td> <td>53</td> <td>263</td> <td>196</td> <td>791</td> <td>119</td> <td>8</td> <td>7</td> <td>5777</td>	HSEC.	==	14	194	15	•	1207	94	0	0	10	0	0	0	53	263	196	791	119	8	7	5777
9         32         120         4         0         167         8         0         64         0         0         5         232         440         489           10         14         25         12         0         164         0         14         0         167         18         0         14         0         19         1         26         196         19         1         26         196         19         1         26         196         19         1         26         196         196         1         2         1         2         2         196         196         1         2         1         2         2         1         2         2         2         2         2         2         2         3         2         2         2         2         2         2         2         3         3         3         3         3         3         3         3         3         3         3         4         3         3         4         3         4         4         4         4         4         4         4         4         4         4         4         4         4         4<	INTE	7	16	119	2	0	291	18	0	0	4	0	0	0	01	180	223	486	4	23	-	1084
1	DEGR.	0,	32	120	4	0	167	•	0	0	2	0	0	0	S	232	4	489	31	15	0	497
394         789         5524         788         0         234         0         0         334         0         0         234         0         2524         388         0         234         0         252         1120         1345         1252         466         0         38         0         0         203         1910         658         301         184         184         184         185         0	POST	9	7	25	-	0	708	2	0	0	7	0	0	0	-	236	196	104	∞	7	0	115
32         42         631         342         0 166624         460         0         38         0         0         293         910         658         3001           11         24         331         119         0 19581         1233         0         0         0         0         0         0         90         90         90         393         384         157           21         35         500         109         0         19212         951         0         0         0         0         0         0         0         90         90         90         394         157         90         104         0         0         0         0         0         0         0         90         90         90         394         157         90	SELF EMP	394	789	5521	789	0	222042	7888	0	0	334	0	0	0	203	11220	12495	26264	7395	8415	510	564043
11         24         331         119         0         19581         1533         0         20         0         0         0         0         0         30         394         1575           21         35         500         109         0         19212         951         0         0         0         0         0         60         592         548         2377           95         128         1718         131         0         10714         834         0         0         0         0         60         69         69         59         548         2377         548         2377         5028         8170           64         145         105         147         17         0         0         64         0         0         0         67         5297         549         5701	BPRIM.	32	42	631	342	0	166624	4605	0	0	38	0	0	0	293	910	658	3001	3209	2066	383	329311
21         35         500         109         0         30         0         30         0         30         60         60         65         592         548         2377           95         128         1718         131         0         10714         834         0         104         0         0         6         53         2715         2028         8170           65         145         1056         45         0         104         0         0         6         3715         2028         8170           84         287         1056         34         0         147         0         0         64         0         0         0         458         5021         8021           86         128         128         0         144         72         0         0         64         0         0         0         4548         5021         1         1449         5028         1070         1         1         444         4548         5021         1         1         444         444         1         0         0         0         0         0         0         0         0         0         0	PRIM.	11	54	331	119	0	19581	1253	0	0	20	0	0	0	8	303	384	1575	1117	1015	45	89573
95         128         1718         131         0         10714         834         0         104         0         0         63         2715         2028         8170           65         145         1056         45         0         284         0         0         64         0         0         0         1         1863         2302         8071           84         287         1062         34         0         1478         72         0         64         0         0         3         2397         4548         5071           201         403         1847         17         0         64         0         0         3         2397         4548         5071           201         403         11346         407         0         0         14         0         0         2         2397         4548         5071           11         18         232         175         0         9997         640         0         30         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	MSEC.	21	35	200	109	0	19212	951	0	0	30	0	0	0	9	592	548	2377	1019	827	4	67970
65         145         1056         45         0         64         0         0         64         0         0         64         0         0         64         0         0         64         0         0         64         0         0         64         0         0         64         0         0         64         0         0         64         0         0         64         0         0         0         5         2397         4548         5051           201         428         128         128         40         0         14         0         0         1         440         0         0         0         1         440         0	HSEC.	95	128	1718	131	0	10714	834	0	0	<u>ş</u>	0	0	0	53	2715	2028	8170	1229	1036	22	59671
84         287         1062         34         0         1478         72         0         64         0         0         5         2397         4548         5051           86         128         225         8         0         1847         17         0         0         14         0         0         1         2440         2028         1070           201         403         2819         403         0         1336         0         0         0         0         0         0         0         0         0         2441         473         977         1           16         21         322         175         0         8907         640         0	INTE	65	145	1056	45	0	2586	121	0	0	2	0	0	0	01	1863	2302	5021	424	241	9	11197
86         128         225         8         0         1847         17         0         0         14         0         0         1         2440         2028         1070           201         403         2819         403         0         11346         4027         0         0         334         0         0         0         2441         4723         977         2           16         21         322         175         0         88072         2351         0         0         0         0         0         0         0         0         20         0         0         49         144         473         977         398         144         499         148         0	DEGR.	2	287	1062	34	0	1478	22	0	0	2	0	0	0	S	2397	4548	5051	317	157	e	5137
201         403         2819         403         0 113366         4027         0         334         0         0         0         60         60         60         60         404         4723         957         473         957         473         957         473         957         473         957         473         957         474         475         957         474         475         957         475         134         77         957         475         134         77         957         475         97 <th>POST</th> <td><b>%</b></td> <td>128</td> <td>225</td> <td><b>∞</b>0</td> <td>0</td> <td>1847</td> <td>17</td> <td>0</td> <td>0</td> <td>4</td> <td>0</td> <td>0</td> <td>0</td> <td>-</td> <td>2440</td> <td>2028</td> <td>1070</td> <td>29</td> <td>73</td> <td>4</td> <td>1186</td>	POST	<b>%</b>	128	225	<b>∞</b> 0	0	1847	17	0	0	4	0	0	0	-	2440	2028	1070	29	73	4	1186
16         21         322         175         0         85072         2351         0         0         38         0         0         0         293         344         249         1134         1           1         12         169         61         0         990         640         0         0         0         0         0         0         0         11         145         595           49         65         877         67         9809         485         0         0         0         0         0         0         0         20         0         20         0         20         0         20         <	FAMILY WK	201	50	2819	403	0	113366	4027	0	0	334	0	0	0	502	4241	4723	7266	2795	3181	193	213199
5         12         169         61         0         9997         640         0         0         0         0         0         0         11         145         395           11         18         255         55         0         9809         485         0         0         0         0         0         0         224         207         898           49         65         877         67         0         476         0         0         104         0         0         0         765         308         308         0         0         0         0         0         10         0         0         10         0         0         0         10         0 <td< td=""><th>BPRIM.</th><td>16</td><td>21</td><td>322</td><td>175</td><td>0</td><td>85072</td><td>2351</td><td>0</td><td>0</td><td>38</td><td>0</td><td>0</td><td>0</td><td>293</td><td><del>8</del></td><td>249</td><td>1134</td><td>1213</td><td>1915</td><td>145</td><td>124474</td></td<>	BPRIM.	16	21	322	175	0	85072	2351	0	0	38	0	0	0	293	<del>8</del>	249	1134	1213	1915	145	124474
11         18         255         55         6         9809         485         0         30         0         0         0         60         62         24         207         898           49         65         877         67         0         44         67         0         44         67         0         44         67         0         44         67         0         1320         80         0         64         0         0         0         10         70         870         1898           43         147         542         17         0         755         37         0         64         0         0         0         70         870         1719         1909           44         65         115         4         0         943         8         0         14         0         0         0         1         922         766         404	PRIM.	•	12	169	61	0	7666	640	0	0	70	0	0	0	8	115	145	595	422	<b>38</b>	17	33857
49         65         877         67         0         426         0         104         0         0         0         33         1026         766         3088           33         74         539         23         0         1320         80         0         0         64         0         0         0         10         704         870         1898           43         147         542         17         0         755         37         0         0         64         0         0         0         79         1909           44         65         115         4         0         943         8         0         0         14         0         0         1         922         766         404	MSEC.	==	81	255	55	0	6086	485	0	0	30	0	0	0	9	224	207	868	382	313	17	25691
33 74 539 23 0 1320 80 0 0 64 0 0 0 10 704 870 1898 43 147 542 17 0 755 37 0 0 64 0 0 0 5 906 1719 1909 44 65 115 4 0 943 8 0 0 14 0 0 0 1 922 766 404	HSEC.	<del>4</del>	89	877	67	0	5470	426	0	0	<u>\$</u>	0	0	0	53	1026	766	3088	465	392	6	22555
43 147 542 17 0 755 37 0 0 64 0 0 0 5 906 1719 1909 44 65 115 4 0 943 8 0 0 14 0 0 0 1 922 766 404	INTE.	33	4	539	23	0	1320	80	0	0	2	0	•	0	01	Ş	870	1898	160	2	7	4232
44 65 115 4 0 943 8 0 0 14 0 0 0 1 922 766 404	DEGR.	€	147	542	17	0	755	37	0	0	2	0	0	0	8	8	1719	1909	120	29	-	1942
	POST	4	65	115	4	0	943	∞	0	0	<b>4</b>	0	0	0	-	922	766	\$	8	78	7	448

Total - (Continued)	,																				
EMPLOYEE	197	394	2761	394	0 1	111021	3944	0	0	9003	0	0	0		20237 2	22537 4	47373 1	13338 1	15178	920	017373
BPRIM	16	21	315	171	0	83312	2303	0	0	115	0	0	0	879	<b>64</b> 1	1186	5413	5789	9137	969	286565
PRIM.	٠,	12	166	8	0	1626	979	0	0	8	0	0	0		547	692	2840	2014	1831		161563
MSEC.	01	11	250	\$	0	9096	475	0	0	16	0	0	0	181	890]	88	4287	1838	1491	8	122598
HSEC.	84	2	859	8	0	5357	417	0	0	312	0	0	0	129	9681	3657 1	14737	2218	1869	4	107630
INTE.	33	52	528	23	0	1293	82	0	0	192	0	0	0		3360	4152	2087	765	434	=	20195
DEGR.	42	<u> </u>	531	11	0	739	36	0	0	193	0	0	0	4	1323	8204	9110	572	283	9	9266
POST	4	\$	112	4	0	924	••	0	0	<del>4</del>	0	0	0	т т	20	3657	1929	143	132	00	2138
UNEMP.	0	0	1445	0	0	56939	3611	0	0	0	0	0	0	•	1083	0	104	522	522	0	72228
BPRIM.	0	0	995	0	0	26095	1655	0	0	0	0	0	0	0	497	0	184	239	239	0	33102
PRIM.	0	0	961	•	0	7710	489	0	0	0	0	•	0	0	147	0	54	1	11	0	9780
MSEC.	0	0	208	0	0	8199	220	0	0	0	0	0	0	0	156	0	28	75	75	0	10401
HSEC.	•	0	220	•	0	8683	551	0	0	0	0	0	0	0	165	0	61	8	8	0	11015
INTE	0	•	81	0	0	3177	202	0	0	0	0	0	0	0	8	0	22	62	53	0	4030
DEGR	0	0	62	0	0	2460	156	0	0	0	0	0	0	0	41	0	11	23	23	0	3120
POST	0	•	16	0	0	615	33	0	0	0	0	0	0	0	12	0	4	9	9	0	780

ole 1 - (Continued)

	ı		
	i	q	
٠	'n	ì	
	4	٠	
	1	c	
	1	2	
1	۲	•	
١	٠		
•	۱		
•	۰	ı	
•		ı	
•		ı	
		1	
•			

			E	Electricity/Gas/Water	1s/Water						Construction	<u>8</u>						Trade			
	Prof.	Admn.	Qer.	Seles	Service	Agr.	Prod.	Prof.	Admn.	Eg.	Seles	Service	¥8	Prod	Prof.	Admn.	Ger.	Seles	Service	Ą	Prod.
EMPLOYER	163	118	340	15	30	15	166	699	1152	699	37	260	0	23965	172	201	099	67262	3241	143	2725
BPRIM.	13	9	39	9	18	==	579	54	19	9/	16	157	0	13992	14	11	7.5	29191	1951	108	1591
PRIM.	4	4	20	7	4	-	157	18	35	\$	9	31	0	3806	s	9	4	10156	391	13	433
MSEC.	6	\$	31	7	3	-	119	35	51	<b>19</b>	S	92	0	2888	٥	6	8	8926	318	12	328
HSEC.	39	19	106	7	4	-	105	162	187	208	9	32	0	2535	42	33	202	11183	399	7	288
INTE	27	22	9	-	-	0	20	Ξ	212	128	7	7	0	476	53	37	126	3857	93	7	54
DEGR.	35	43	8	-	-	0	0	143	419	129	7	2	0	218	37	73	127	2886	8	-	25
POST	35	19	4	0	0	0	7	145	187	27	0	2	0	20	37	33	27	721	78	-	9
SELF EMP	651	473	1361	29	118	29	3965	8235	14182	8235	457	3202	0	295072	3193	3725	12238 1247741	247741	60126	2660	50548
BPRIM.	23	22	156	70	17	4	2315	899	746	941	199	1928	0	172275	259	961	1398 54151	41511	36195	9661	29512
PRIM.	18	15	82	6	4	S	630	223	435	494	69	386	0	46859	88	114	734 13	188397	7254	235	8027
MSEC.	34	21	123	<b>∞</b>	12	S	478	435	622	745	63	315	0	35557	168	163	1108 1	171925	8069	230	1609
HSEC.	158	11	423	01	15	Э	420	1992	2301	2562	76	394	•	31216	277	<b>§</b>	3807 20	207442	7404	128	5348
INTE.	108	87	260	e	က	-	62	1367	2612	1574	98	23	0	5857	530	989	2340	71550	1720	31	1003
DEGR	139	12	262	e	7	0	36	1759	5163	1584	8	8	0	2687	682	1356	2353	53533	1122	18	460
POST	142	11	22	-	-	0	••	1791	2301	332	'n	28	•	620	694	8	498	13383	523	22	90
FAMILY WK	2 <del>4</del>	178	510	22	4	22	1487	313	240	313	11	122	0	11234	915	1067	3506 357469	57469	17226	762	14482
BPRIM	20	0	28	01	27	1	898	25	78	36	•	73	0	6229	74	99	40 1.	155139	10370	572	8455
PRIM.	7	S	31	ო	S	7	736	<b>00</b>	11	19	8	15	0	1784	22	33	210	53974	2078	29	2300
MSEC.	13	<b>∞</b>	4	m	4	7	179	17	24	28	7	12	0	1354	48	47	317	49255	1693	99	1745
HSEC.	89	53	159	4	s	-	157	92	88	86	6	15	0	1188	221	173	1091	59431	2121	37	1532
INTE	4	33	86	-	-	0	30	22	8	8	-	ю	•	223	152	197	029	20498	493	6	287
DEGR.	22	65	86	-	-	0	7	29	197	8	-	7	0	102	195	388	674	15337	321	S	132
POST	53	53	77	0	0	0	e	8	88	13	0	-	0	24	199	173	143	3834	150	9	30

-ontimed-

						ļ															
EMPLOYEE	8301	6037	17356	755	1509	755	50559	5810	10006	5810	323	2260	0	208198	737	860	2824 20	287940 1	13875	614	11665
BPRIM.	673	318	1983	327	86	999	29519	471	272	<b>2</b> 6	5	1360	0	121554	9	45	323 13	24964	8353	461	6810
PRIM.	224	185	19 14	114	182	42	8029	157	307	348	64	273	ò	33063	20	92	169	43476	1674	\$	1852
MSEC.	438	265	1571	<u>5</u>	148	65	6093	307	439	526	4	222	0	25089	36	38	256	39675	1363	S	1406
HSEC.	2008	980	5399	125	186	36	5349	1406	1624	1807	54	278	0	22026	178	139	628	47871	1709	30	1234
INTE.	1378	1112	3318	43	43	0	1004	965	1843	1111	19	65	0	4133	122	158	540	16511	397	7	232
DEGR	1773	2198	3338	32	28	s	9	1241	3643	1117	7	42	0	1896	157	313	543	12354	259	4	90
POST	1805	980	707	œ	13	9	98	1264	1624	237	ю	8	0	438	160	139	115	3088	121	s	22
UNEMP.	0	0	0	0	1083	0	2056	0	0	<del>6</del>	522	0	0	86232	0	0	0	37237	4936	0	3451
BPRIM.	0	0	0	0	497	0	2317	0	0	184	239	0	0	39520	0	0	0	17066	2262	0	1582
PRIM.	0	0	0	0	147	0	685	0	0	54	11	0	0	11676	0	0	0	5042	899	0	467
MSEC.	0	0	0	0	156	0	728	0	0	28	75	0	0	12417	0	0	0	5362	711	0	497
HSEC.	•	0	0	0	165	0	171	0	0	9	8	0	0	13150	0	0	0	8679	753	0	526
INTE.	0	0	0	0	9	0	282	0	0	22	53	0	0	4812	0	0	0	2078	275	0	193
DEGR.	0	0	0	0	47	0	218	0	0	11	23	0	0	3725	0	0	0	1609	213	0	149
POST	0	•	•	0	12	0	25	0	0	4	9	0	0	931	0	0	0	402	53	0	37

ble 1 = (Continued)

ç
Š.
•
۳
۳
٣
۳
Ť
Ĭ
Ĭ
Ĭ
<u>) - (</u>
<u> </u>
) - [
e 1 – (
) - [
) - [
) - [
) - [
) - [
) - [
) - [
) - [

			Transpo	rt/Com	fransport/Communication						Finance							Services	_		
	Prof.	Admn.	D E	Sales	Service	ķ	Prod.	Prof.	Admn.	Ę.	Sales	Service	Agr.	Prod.	Prof.	Admn.	Ger.	Seles	Service	Agr.	Prod.
EMPLOYER	139	92	1070	8	271	۰	4234	126	438	989	211	78	•	<u>8</u>	<b>₹</b>	919	4400	117	5828	284	5759
BPRIM.	13	٧	122	Ξ	163	0	2472	13	23	78	8	41	0	64	519	32	503	51	3508	213	3362
PRIM.	4	٣	2	4	33	0	672	4	13	41	32	6	0	11	173	19	264	18	703	25	915
MSEC.	••	4	16	4	27	0	510	<b>00</b>	61	62	83	œ	0	13	338	27	398	16	573	22	694
HSEC	38	15	333	4	33	0	448	38	11	211	35	0	0	12	1550	901	1369	20	718	4	609
INTE.	56	17	205	7	œ	0	<b>2</b>	<b>5</b> 6	8	130	12	7	0	7	1063	113	841	7	167	33	114
DEGR	34	8	506	-	ĸ	ó	39	33	159	131	6	-	0	-	1368	224	846	S	109	7	52
POST	<b>£</b>	15	4	•	7	0	0	34	11	78	7	-	0	0	1393	8	179	-	51	7	13
SELF EMP	7382	4306	49831	1230	12612	0	197173	1953	5469	8497	2637	116	0	1367 1	14822	11044	78885	2104	104479	5084	03252
BPR.IM.	599	227	5693	534	7592	0	115117	158	288	116	14	588	0	862	9310	581	9013	913	96879	3815	60283
PRIM.	200	132	2988	186	1522	0	31312	23	168	209	398	118	0	217	3103	339	4730	318	12605	<b>4</b> 8	16397
MSEC.	330	189	4510	51	1239	0	23760	103	240	692	363	8	0	165	6029	48 48	7139	290	10266	4	12442
HSEC.	1786	669	15502	202	1553	0	20859	473	888	2643	438	120	0	145	27782	1792	24540	320	12865	248	10923
INTE	1226	793	9527	71	361	0	3914	324	1001	1624	151	28	0	27	19063	2034	15081	121	2989	23	2050
DEGR.	1577	1568	9583	53	235	0	1796	417	1991	1634	113	18	0	12	24531	4020	15170	8	1949	34	940
POST	1606	669	2029	13	011	0	414	425	888	346	28	6	0	33	24974	1792	3213	23	910	42	217
FAMILY WK	498	291	3363	83	851	0	13306	156	438	989	211	82	0	109	35224	3388	24200	<b>24</b>	32051	1560	31675
BPR IM.	4	12	384	36	512	0	1769	13	23	78	35	4	0	2	2856	178	2765	280	19295	1170	18493
PRIM.	13	6	202	13	103	0	2113	4	13	4	32	0	0	17	952	5	1451	6	3867	138	2030
MSEC.	<b>3</b> 6	13	304	=	2	0	1603	•	19	62	59	<b>∞</b> 0	0	13	1859	149	2190	88	3149	135	3817
HSEC.	121	47	1046	7	105	0	1408	38	11	211	32	01	0	12	8523	550	7528	107	3947	75	3351
INTE	83	72	643	v	24	0	264	70	81	130	12	7	0	.7	5848	624	4626	37	917	82	629
DEGR	106	98	647	4	16	0	121	33	159	131	6	-	0	-	7525	1233	4654	28	865	01	288
POST	108	41	137	-	7	0	28	*	17	28	7	1	0	0	1661	550	986	7	279	13	29
																					ĺ

ontinued

		į							-												
EMPLOYEE	12002	1001	81014	2000	20504	0	320557	14454	40472	62876	19513	7227	0	10118	390670	37576	268399	7157 3	355479	17297	351304
BPRIM.	973	368	9226	868	12343	0	187154	1172	2130	7184	8469	4351	0	5907	31676	1978	30665	3106 2	213995	2980	205105
PRIM	324	215	4857	302	2474	0	90609	391	1243	3770	2946	872	0	1607	10559	1154	16092	1081	42887	1525	55789
MSEC.	633	307	7332	276	2015	0	38628	763	1775	2690	5689	710	0	1219	20614	1648	24289	986	34929	1497	42334
HSEC.	2904	1136	25202	333	2525	0	33912	3497	8959	19560	3244	830	0	1070	94525	8609	83495	1190	43772	835	37165
INTE	1993	1290	15488	115	587	0	6363	2400	7455	12020	1119	207	0	701	64860	6922	51312	410	10169	701	6974
DEGR	2564	2549	15580	8	383	0	2920	3088	14733	12091	837	135	0	92	83464	13679	51615	307	6632	115	3200
POST	2610	1136	3299	21	179	0	674	3144	9959	2561	500	63	0	21	84972	8609	10930	11	3095	<u>¥</u>	738
UNEMP.	3330	0	6139	•	0	0	41491	0	0	522	2528	0	0	0	21548	0	1999	3852	11316	0	28209
BPRIM.	1526	0	2814	0	0	0	19015	0	0	239	1159	0	0	0	9875	0	3053	1765	5186	0	12928
PRIM.	451	0	831	0	0	0	5618	0	0	17	342	0	0	0	2918	0	805	522	1532	0	3819
MSEC.	480	•	<b>88</b>	0	0	0	5975	0	0	75	364	<b>o</b>	0	0	3103	0	929	555	1629	0	4062
HSEC.	208	0	936	0	0	0	6327	0	0	8	386	0	0	0	3286	0	1016	587	1726	0	4302
INTE	186	0	343	0	0	0	2315	0	0	53	14	0	0	0	1202	0	372	215	631	0	1574
DEGR.	<u>∓</u>	0	265	0	0	0	1792	0	0	23	601	0	0	0	931	0	288	991	489	0	1219
POST	36	0	99	•	0	0	448	0	•	9	23	0	0	0	233	0	72	42	122	0	305

tble 1 - (Continued)

n.         Cler.         Sales         Service           345         104         138           107         57         99           42         22         17           47         14         12           100         9         7           26         1         2           21         0         0           110367         3110         4147           3210         1705         2982           1263         660         513           1421         406         347           3000         284         222           789         41         55           631         5         28           53         10         0           8170         2451         3268           2530         1343         2350           995         520         404           1120         32         44           498         4         22           498         4         22	Agriculture					Mini	Mining/Quarrying	ying					W	Manufacturing	ring		
11	Sales	ervice Agr.	Prod.	Prof.	Admn.	Cler.	Sales	Service	Agr.	Prod.	Prof.	Admn.	Cler.	Sales	Service	Agr.	Prod.
11         24         104         345         104         118           11         24         107         57         99           26         24         42         22         17           29         12         100         9         7           4         18         21         0         1         2           5         12         26         1         2         1         2           6         4         18         21         0         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         2         0         1         1         2         1         2         1         2         1         2         2         1         2         2         1         2         2         1         2         2         2         2         2         2         2         <						RURAL											
11         24         107         57         99           6         24         42         22         17           29         12         100         9         7           4         18         21         0         7           5         12         26         11         2           6         4         18         21         0         1           7         18         21         0         1         2         1           2073         3110         1036         310         4147         6         1		138 229735	2520	0	0	0	0	0	0	0	42	45	245	22	267	77	17891
6         24         42         22         17           5         6         47         14         12           29         112         26         1         2           4         18         21         0         1           2073         3110         10367         3110         4147         6           328         732         3210         1705         2982         5         1           113         732         1263         660         513         1         1         447         6           113         732         1263         660         513         2         2         2         8         1         1         2         2         1         1         2         2         1         2         2         1         2         2         1         2         2         1         1         2         2         2         1         2		99 189570	1850	0	0	0	0	0	0	0	=	21	9/	12	192	18	13133
5         6         47         14         12           29         112         100         9         7           4         18         21         0         1           20         4         18         21         0         1           2073         3110         10367         3110         4147         6           328         321         1263         660         513         6           113         352         1263         660         513         6         6         547           138         183         1421         406         347         6         22         28         48         28         48         28         44         28         44         28         22         44         28         22         44         22         44         22         23         44         23         23         44         23         23         44         23		17 23025	418	0	0	0	0	0	0	0	9	10	30	s	33	7	2968
29         112         100         9         7           4         112         26         1         2           6         4         18         21         0         1           2073         3110         10367         3110         4147         6           328         3210         1705         2982         5         28         28           113         183         1421         406         347         28         44         28		12 11289	162	0	0	0	0	0	0	0	4	3	34	٣	22	-	1151
9         112         26         1         2         1         2         1         2         1         2         1		7 4853	8	0	0	0	0	0	0	0	88	s	71	7	14	0	266
4         18         21         0         1           6         4         2         0         0           2073         3110         10367         3110         4147           328         732         3263         598         598           113         732         1263         660         513           138         183         1421         406         347           864         366         3000         284         222           129         366         789         41         55           110         183         53         10         0           150         183         53         10         0           154         2451         8170         2451         3266           156         577         995         520         404           169         144         1120         326         474           169         288         2364         224         175           204         288         622         32         44           204         288         622         32         44           286         433         498	26 1	2 654	0,	0	0	0	0	0	0	0	90	'n	19	0	4	0	2
6         4         2         0         0           2073         3110         10367         3110         4147           328         732         3210         1705         2982           173         732         1421         406         313           138         183         1421         406         347           259         366         789         41         55           111         549         631         5         28           190         183         53         10         0           184         2451         8170         2451         3260           185         577         995         520         404           196         144         1120         326         474           197         288         2364         224         175           204         288         622         32         444           204         288         622         32         44           204         288         622         32         44		1 207	-	0	0	0	0	0	0	0	4	<b>∞</b>	15	0	7	0	6
2073         3110         10367         3110         4147           328         732         3210         1705         2982           1138         183         1421         406         347           864         366         3000         284         222           259         366         789         41         55           111         549         631         5         28           190         183         53         10         0           259         577         2530         1343         2350           1136         577         995         520         404           109         144         1120         326         47           204         288         2364         224         175           204         288         622         32         44           56         433         498         48         22	2 0	0 138	•	0	0	0	0	0	0	0	9	m	-	0	0	0	0
328         732         3210         1705         2982         582         582         582         582         582         582         583         584         584         584         587         584         587         587         587         587         587         587         587         587         587         587         587         588         587         588         588         588         588         588         588         588         588         588         589<	3110	147 6898144	75678	0	0	344	0	<del>2</del> 4	0	5499	3256	1712	11940	1085	13025	1085	872689
173         722         1263         660         513           138         183         1421         406         347           864         366         3000         284         222           259         366         789         41         55           111         549         631         5         28           190         183         53         10         0           291         577         2530         1343         2350           136         577         995         520         404           109         144         1120         326         473           109         288         2364         224         175           204         288         622         32         44           55         433         498         48         22	1705	982 5692131	55552	0	0	106	0	247	0	4036	516	51.1	3697	595	9366	968	640596
138         183         1421         406         347           864         366         300         284         222           259         366         789         41         55           121         549         631         5         28           190         183         53         10         0           4         1634         2451         316         404           136         577         995         520         404           136         577         995         520         404           109         144         1120         320         473           681         288         2364         273         474           204         288         622         42         475           204         288         622         42         475           35         438         458         474         175	099	513 691365	12555	0	0	42	0	£	0	912	271	511	1455	230	1612	109	144780
864         366         368         222           259         366         789         41         55           111         549         631         5         28         28           190         183         53         10         0         0         3         28         10 <t< td=""><td>406</td><td>347 338965</td><td>4868</td><td>ò</td><td>0</td><td>41</td><td>0</td><td>83</td><td>0</td><td>354</td><td>217</td><td>128</td><td>1636</td><td>142</td><td>1089</td><td>23</td><td>56130</td></t<>	406	347 338965	4868	ò	0	41	0	83	0	354	217	128	1636	142	1089	23	56130
259         366         789         41         58           121         549         631         5         28           190         183         53         10         0           4         1634         2451         310         2451         3268           259         577         2530         1343         2350         404           136         577         995         520         404           109         144         1120         320         273           681         288         2364         273         44           204         288         622         32         44           294         438         488         48         22	<b>584</b>	222 145714	2395	0	0	66	0	18	0	174	1357	255	3455	8	697	23	27620
121         549         631         5         28           190         183         53         10         0           181         2451         8170         2451         3268           189         577         2530         1343         2350           1136         577         995         520         404           109         144         1120         320         273           204         288         2364         224         175           204         288         622         32         44           55         433         498         42         22		55 19635	270	0	0	56	0	s	0	70	407	255	8	<del>7</del>	174	3	3118
K         1634         2451         8170         2451         3268           259         577         2530         1342         2550           136         577         995         520         404           109         144         1120         320         273           681         288         2364         273         44           204         288         622         32         44           55         433         498         42         22	631 5	28 6201	39	0	0	21	0	7	0	8	190	383	727	7	87	-	<b>4</b> 5
1634         2451         8170         2451         3268           259         577         2530         1343         2350           136         577         995         520         404           109         144         1120         320         273           681         288         2364         224         175           204         288         622         32         44           95         433         498         4         22		0 4134	•	0	0	7	0	0	0	0	298	128	19	4	0	-	0
259         577         2530         1343         2350           136         577         995         520         404           109         144         1120         320         273           204         288         2364         224         175           204         288         622         32         44           95         433         498         74         22	2451	268 5436380	59642	0	0	0	0	0	0	0	1016	<i>LL</i> 9	3726	339	4065	339	272343
136     577     995     520       109     144     1120     320       681     288     2364     224       204     288     622     32       95     433     498     4	1343	350 4485929	43780	0	0	0	0	0	0	•	191	159	1154	186	2923	280	199913
109     144     1120     320       681     288     2364     224       204     288     622     32       95     433     498     4	220	404 544860	5686	0	0	0	0	0	0	0	88	159	454	72	203	8	45182
681 288 2364 224 204 288 622 32 95 433 498 4	320	273 267136	3836	0	0	0	0	0	0	0	89	4	511	4	340	17	17517
204 288 622 32 4 95 433 498 4 2	224	175 114836	1888	0	0	0	0	0	0	0	423	80	1078	31	218	7	8619
95 433 498 4 2		44 15474	213	0	0	0	0	0	0	0	127	80	284	4	\$	-	973
	498 4	22 4887	3	0	0	0	0	0	0	0	89	120	722		27	0	139
150 144 41 8	41 8	0 3258	0	0	0	0	0	0	0	0	93	4	61	-	0	0	0

କ
ž
ě
Ę
۳
훒
<u></u>

EMPLOYEE	348		1739	522	\$69	1156806	12691	0	0	1833	0	1833	0	29327	1847	1231	6772	919	7388	919	494988
BPRIM.	25		538	286	900	954560	9316	0	0	268	0	1318	0	21528	292	290	2097	337	5312	80%	363345
PRIM.	83		212	111	8	115941	2105	0	0	223	0	227	0	4865	154	28	825	131	914	62	82119
MSEC.	23		238	89	28	56844	816	0	0	251	0	153	0	1886	123	22	828	8	819	30	31837
HSEC.	145		203	84	37	24436	402	0	0	530	0	86	0	928	0/1	145	1959	8	395	13	15666
INTE.	5	9	132	7	6	3293	45	0	0	140	0	25	0	105	231	145	516	00	8	2	1769
DEGR	8		901	-	S	1040	9	0	0	112	0	12	0	15	108	217	413	-	4	-	253
POST	32		6	7	0	693	0	0	0	6	0	0	0	0	169	72	¥	7	•	0	0
UNEMP.	0	0	1982	0	0	78109	4954	0	0	0	0	0	0	0	1486	0	550	716	716	0	99081
BPRĮM	0	0	111	0	0	45374	2878	0	0	0	0	0	0	0	863	0	320	416	416	Ö	57556
PRIM.	0	0	235	•	0	9264	588	0	0	0	0	0	0	0	176	0	9	82	88	•	11751
MSEC.	0	•	536	0	0	11685	741	0	0	0	0	0	0	0	222	0	83	107	101	0	14823
HSEC.	0	0	215	0	•	8483	538	0	0	0	0	0	0	0	191	0	8	82	78	0	10760
INTE.	0	0	2	0	0	2523	99	0	0	0	0	0	0	0	\$	0	18	23	23	0	3200
DEGR.	0	0	7	•	0	570	36	0	0	0	0	0	0	0	=	0	*	<b>5</b>	\$	•	723
POST	0	•	s	0	0	211	13	0	0	0	0	0	0	0	4	•	-	7	7	0	268

Continuec
Ī
·
Z

											;							;	1	Aor	֓֞֜֝֟֜֜֟֝֟֓֓֓֓֓֟֟֜֟֝֓֓֓֟֟֜֟֓֓֓֓֓֟֜֟֓֓֓֓֓֡֓֡֡֝
	Prof. Admn.	Admn.	Ç.	Sales	Service	Agr.	Prod.	Prof.	Admn.	ğ	8	Service	Ą	Ę.	Prof.	Admn.	Ger.	8	Nervice		Ę,
EMPLOYER	٥	0	٥	0	٥	0	٥	<u> </u>	ຊ	47	^	47	٥	3989	138	69	772	41612	3254	8	2008
BPRIM.	0	0	0	0	0	0	0	7	s	15	4	34	0	2928	22	16	98	22808	2340	57	1474
PRIM.	0	0	0	0	0	0	0	-	\$	9	-	9	0	662	12	16	8	8825	403	7	333
MSEC.	0	0	0	0	0	0	0	-	-	9	-	4	0	257	6	4	38	5431	272	ю	129
HSEC.	0	0	0	0	0	•	0	9	7	<b>7</b>	-	ю	0	126	28	<b>∞</b>	8	3801	174	-	2
INTE	0	0	0	0	0	0	0	7	7	4	0	-	0	4	11	œ	21	543	4	0	7
DEGR	0	0	0	0	0	0	0	-	4	m	0	0	0	7	œ	12	11	89	22	0	-
POST	0	0	0	•	0	•	0	-	-	0	0	0	0	0	13	4	-	136	0	0	0
SELF EMP	264	0	31 72	0	1057	529	5287	2458	3687	8604	1229	8604	0	723952	3028	1514	6067	6057 910032	71167	1514	43912
BPRIM.	42	0	982	0	760	436	3881	389	868	2664	674	6187	0	531415	479	356	1875 4	498811	51174	1249	32233
PRIM.	22	0	386	0	131	53	877	205	898	1048	261	1065	0	120104	252	356	738	738 192992	8807	152	7285
MSEC.	18	0	435	0	88	79	340	<u>3</u>	217	1179	160	417	0	46564	202	8	830	830 118764	5950	74	2824
HSEC.	110	0	816	0	57	11	167	1024	434	2489	112	460	0	22912	1262	178	1752	83135	3808	32	1390
INTE	33	0	242	0	4	7	19	307	434	655	16	115	0	2587	379	178	461	11876	952	4	157
DEGR.	15	0	193	0	7	•	3	143	651	524	7	28	0	370	171	267	369	1485	476	-	22
POST	<b>7</b> 5	0	16	0	0	•	•	225	217	<b>1</b>	4	•	0	0	278	88	31	2969	.0	-	0
FAMILY WK	ß	0	634	0	211	90	1057	163	2 <del>4</del>	269	<b>8</b>	995	0	47865	464	247	987	987 148355	11602	247	7159
BPRIM.	∞	•	136	0	152	87	176	<b>56</b>	57	176	45	409	0	35135	78	88	306	81317	8342	20 <b>4</b>	5255
PRIM.	4	0	77	0	76	=	175	7	57	69	11	20	0	7941	4	88	120	31462	1436	25	1188
MSEC.	4	0	87	0	18	v	89	Ξ	7	78	=	84	0	3079	33	15	135	19361	970	12	460
HSEC.	23	0	184	0	==	7	33	89	53	165	7	8	0	1515	206	53	286	13553	621	s	227
INTE	7	0	84	0	ю	0	4	20	53	<del>\$</del>	-	∞	0	171	62	53	75	1936	155	-	78
DEGR.	ဗ	0	39	•	-	0	-	6	43	32	0	4	0	24	53	4	8	242	78	0	4
POST	s	0	ю	0	0	•	0	15	14	m	0	0	0	0	45	15	2	484	0	0	0

Continued-

	,			-																	
EMPLOYEE	1745	0	20938	0	6269		34897	1483	2225	5191	742	5191	0	436764	464	232	1 726	139309	10894	232	6722
BPRIM.	276	0	6483	•	5019		25616	235	523	1607	406	3732	0	320606	73	55		76359	7834	191	4934
PRIM.	145	0	2551	0	<b>8</b>		5789	124	523	632	157	<b>£</b>	0	72460	33	55		29544	1348	23	1115
MSEC.	116	0	2870	0	584	171	2245	8	131	711	6	434	0	28092	31	41	127	18181	911	=	432
HSEC.	727	0	8909	0	373		1104	618	262	1502	89	278	0	13823	193	27	268	12726	583	S	213
INTE	218	0	1594	0	93		125	185	262	395	9	69	0	1561	88	77	11	1818	146	-	74
DEGR.	102	0	1275	0	41		18	87	393	316	-	35	0	223	27	41	8	722	73	0	က
POST	091	0	991	•	0	7	0	136	131	92	7	0	0	0	42	<u></u>	8	455	•	0	0
UNEMP.	•	0	0	0	1486	0	9669	0	0	550	716	0	0	118292	0	0	0	51082	1119	0	4734
BPRIM.	0	0	0	•	863	0	4029	0	0	320	416	0	0	91/89	0	0	0	29673	3933	0	2750
PRIM.	0	0	•	0	176	0	823	0	0	9	82	0	0	14029	0	0	•	6058	803	0	199
MSEC.	0	0	0	0	222	0	1038	0	0	82	107	0	0	17697	0	0	0	7642	1013	0	708
HSEC.	0	0	۰	0	191	0	753	0	0	8	78	0	0	12847	0	0		5547	735	0	514
INTE.	0	0	•	0	48	0	224	0	0	8	23	0	0	3821	0	0		1650	219	0	153
DEGR	0	0	•	0	Ξ	0	51	0	o	4	s	0	0	864	0	0	0	373	4	0	35
POST	0	0	•	•	4	•	61	0	0	-	7	0	0	319	0	0	•	138	18	0	13

Counting

କୃ
dmue
3
Ĭ
를
2

Hof.         Admin.         Opt.         Salet         Service         Agr.         Prod.         Admin.         Cler.         Salet         Service         Agr.         Prod.         Admin.         Cler.         Salet         Service         Agr.         Prod.         Admin.         Cler.         Salet         Agr.				Transpk	ort/Comm	Fransport/Communication						Finance							Services		i	
12         13         54         12         24         360         0<		Pof	Adm	1	Selec	Service	ξġ	Prod.	Prof.	Admn.	Cler.	Sales	Service	Agr.	Prod.	Prof.	Admn.	Ģ.	Seles	Service	Agr.	Prod
1         3         167         13         9         20         2571         0         0         0         0         0         0         0         9         20         2571         0 <t< td=""><td>EMPLOYER</td><td>12</td><td>12</td><td>538</td><td>24</td><td>12</td><td>¥</td><td>3503</td><td>۰</td><td>٥</td><td>٥</td><td>•</td><td>۰</td><td>•</td><td>0</td><td>671</td><td>12</td><td>291</td><td>۰</td><td>3</td><td>4</td><td>394</td></t<>	EMPLOYER	12	12	538	24	12	¥	3503	۰	٥	٥	•	۰	•	0	671	12	291	۰	3	4	394
1         3         66         5         1         2         581         0         0         0         0         6         5         3         3         3         3         4         1         74         3         1         1         225         0         0         0         0         0         4         1         4         1         4         3         1         1         225         0         0         0         0         0         0         0         4         1         4         0         1         1         4         1         1         4         0	BPRIM.	7	က	167	13	6	20	2571	0	0	0	0	0	0	0	106	6	8	3	463	8	289
1         14         34         3         1         1255         0         0         0         0         0         4         4         1         44         3         1         1255         1         11         11         10         <	PRIM.	-	က	99	v	-	7	581	0	0	0	0	0	0	0	99		35	-	8	4	9
4         1         156         2         1         12         12 <td>MSEC.</td> <td>-</td> <td>1</td> <td>74</td> <td>6</td> <td>-</td> <td>-</td> <td>225</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>45</td> <td>-</td> <td>4</td> <td>-</td> <td>\$</td> <td>7</td> <td>25</td>	MSEC.	-	1	74	6	-	-	225	0	0	0	0	0	0	0	45	-	4	-	\$	7	25
1         41         61         0         0         0         0         0         0         0         0         0         9         0         9         0         9         0         0         0         0         0         0         0         0         0         0         1         1         4         1         4         1         4         1         2         33         0	HSEC.	S	-	156	7	-	-	111	0	0	0	•	0	0	0	279	-	84	-	*	-	12
1         2         33         0	INTE.	-	-	41	٥		•	13	0	0	0	0	0	0	0	\$	-	22	0	6	0	-
1         1         3         0         0         0         0         0         0         0         1         1         1         3         0         0         0         0         0         0         1         1         1           1040         4880         2680         1040         2080         304721         206         619         1856         412         825         0         15         22938         584         1970         1970         1870         208         1875         226         875         226         875         102         102         1879         988         1874         875         146         575         226         875         102         1879         988         1875         186         275         226         875         187         <	DEGR.	-	7	33	0	•	0	7	0	0	0	0	0	0	0	39	7	18	0	4	0	0
1040         46800         2060         1040         2080         304731         206         619         1856         412         823         0         1244         675         6294         611         6294         675         226         693         0         151         2936         679         679         677         679         <	POST	-	-	m	•	0	0	0	0	0	0	0	0	0	0	19	-	-	0	•	0	•
165         245         1491         140         748         1716         223680         33         146         575         226         593         0         151         2298         1549         691           87         245         570         441         129         208         5054         17         146         226         87         102         0         34         12072         598         1649         56         16         246         86         254         54         69         0         13         668         169         16         36         16         36         26         87         102         0         34         120         36         48         86         73         34         49         69         0         13         66         16         16         16         16         16         16         16         16         16         16         16         16         16         16         16         16         16         17         146         16         16         16         16         16         16         16         16         16         16         16         16         16         16         16 </td <td>SELF EMP</td> <td>940</td> <td>1040</td> <td>46800</td> <td>2080</td> <td>1040</td> <td></td> <td>304721</td> <td>706</td> <td>619</td> <td>1856</td> <td>412</td> <td>825</td> <td>0</td> <td></td> <td>44869</td> <td></td> <td>62904</td> <td>1271</td> <td>139151</td> <td>9531</td> <td>85142</td>	SELF EMP	940	1040	46800	2080	1040		304721	706	619	1856	412	825	0		44869		62904	1271	139151	9531	85142
87         245         5702         441         129         208         50554         17         146         264         87         102         94         102         94         102         364         102         103	BPRIM.	165	245	14491	1140	748	1716	223680	33	146	575	226	593	0		22938	865	19478	697 1	100058	7865	62499
64         61         6414         271         87         102         185         14         36         254         54         69         0         13         9658         150         180         16         180	PRIM.	87	245	5702	4	129	208	50554	11	146	226	83	102	0	34	12072	865	7663		17219	955	14125
43         12         13541         190         56         44         964         86         73         537         38         44         0         7         60362         299         18201         116           130         122         3563         27         14         6         73         141         5         11         0         1         8109         299         4790         17           61         184         2851         2         156         12         109         113         1         6         0         0         8451         449         382         2           114         114         214         2         156         12         109         113         1         6         0         0         8451         449         382         2           114         114         214         2         13         36         9         1         0         0         0         0         1142         138         4         4         1         43         1         4         1         4         1         4         1         0         0         0         0         0         0 <t< td=""><td>MSEC.</td><td>69</td><td>61</td><td>414</td><td>271</td><td>87</td><td>102</td><td>19599</td><td>14</td><td>36</td><td>254</td><td>54</td><td>69</td><td>0</td><td>13</td><td>8596</td><td>150</td><td>8621</td><td>166</td><td>11635</td><td>468</td><td>5476</td></t<>	MSEC.	69	61	414	271	87	102	19599	14	36	254	54	69	0	13	8596	150	8621	166	11635	468	5476
130         122         363         27         14         6         108         26         73         141         5         11         10         1         18109         299         4790         17           61         184         281         3         7         15         15         12         109         113         1         6         0         6451         449         382         2           95         61         238         7         1         2         156         12         109         113         1         6         0         6         445         449         382         2           114         114         214         227         3374         0         0         0         0         0         0         1384         49         1384         49           18         14         23         3520         0         0         0         0         0         0         1442         136         136         14         14         14         14         14         14         14         14         14         14         14         14         14         14         14         14	HSEC.	433	122	13541	190	26	4	9644	98	73	537	38	4	0	7	60362	299	18201	116	7446	201	2695
61         184         2851         3         7         2         156         12         109         113         1         6         0         0         8451         449         3832         2           95         61         238         7         1         0         1         6         0         0         13280         150         319         49         3832         4           114         114         510         2         1         0         0         0         0         0         13280         139         44           18         24         2445         0         0         0         0         0         0         14412         108         351         158         459         138         45         45         148         45         148         2445         0	INTE.	130	122	3563	27	14	9	1089	56	73	141	\$	=	0	-	18109	536	4790	17	1862	27	304
95         61         238         7         0         1         0         1         36         9         1         0         0         13280         150         150         151         151         151         152         3374         0 <td>DEGR</td> <td>61</td> <td>184</td> <td>2851</td> <td>9</td> <td>7</td> <td>7</td> <td>156</td> <td>12</td> <td>109</td> <td>113</td> <td>1</td> <td>9</td> <td>0</td> <td>0</td> <td>8451</td> <td>449</td> <td>3832</td> <td>7</td> <td>931</td> <td>6</td> <td>43</td>	DEGR	61	184	2851	9	7	7	156	12	109	113	1	9	0	0	8451	449	3832	7	931	6	43
114         114         5110         277         114         277         33774         0         0         0         0         0         0         615         459         1138         227           18         27         1582         154         82         187         24425         0         0         0         0         0         4142         108         351         17           8         7         700         30         9         1         1240         0         0         0         0         0         1744         21         187         49         187         49         187         49         187         49         187         49         187         49         187         49         187         49         188         49         188	POST	95	61	238	7	0	-	0	119	36	6	-	0	0	0	13280	150	319	4	0	9	0
18         27         1582         124         82         187         24425         0         0         0         0         0         0         0         0         10         10         10         10         10         10         10         10         0         0         0         0         0         11	FAMILY WK	114	114	\$110	227	114	227	33274	0	0	0	0	0	0	0	26157	429	11358	229	25124	1721	15373
9         27         623         48         14         23         5520         0         0         0         0         0         0         0         0         1384         49         184         49           8         7         700         30         9         11         2140         0         0         0         0         0         1744         27         1557         30           47         13         149         21         6         5         1053         0         0         0         0         0         0         1744         27         1374         30           14         13         389         3         2         1         119         0         0         0         0         0         0         2370         54         865         3           7         20         311         0         1         0 <td>BPRIM.</td> <td>18</td> <td>27</td> <td>1582</td> <td>124</td> <td>82</td> <td>187</td> <td>24425</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>4142</td> <td>108</td> <td>3517</td> <td>126</td> <td>18066</td> <td>1420</td> <td>11284</td>	BPRIM.	18	27	1582	124	82	187	24425	0	0	0	0	0	0	0	4142	108	3517	126	18066	1420	11284
8         7         700         30         9         11         2140         0         0         0         0         0         1744         27         1557         30           47         13         1499         21         6         5         1053         0         0         0         0         0         0         10899         54         3286         21           14         13         389         3         2         1         119         0         0         0         0         0         3770         54         865         3           7         20         311         0         1         0 <th< td=""><td>PRIM.</td><td>6</td><td>27</td><td>623</td><td>48</td><td>14</td><td>23</td><td>5520</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>2180</td><td>108</td><td>1384</td><td>49</td><td>3109</td><td>172</td><td>2550</td></th<>	PRIM.	6	27	623	48	14	23	5520	0	0	0	0	0	0	0	2180	108	1384	49	3109	172	2550
47     13     1479     21     6     5     1053     0     0     0     0     0     0     10     0     10     0     0     0     0     0     0     3270     54     865       14     13     389     3     2     1     119     0     0     0     0     0     0     3270     54     865       7     20     311     0     1     0     17     0     0     0     0     0     0     0     0     1526     81     692       10     7     26     1     0     0     0     0     0     0     0     0     0     2398     27     58	MSEC.	<b>∞</b>	7	700	30	6	==	2140	0	0	0	0	0	0	0	1744	27	1557	30	2101	85	686
14     13     389     3     2     1     119     0     0     0     0     0     0     3270     54     865       7     20     311     0     1     0     17     0     0     0     0     0     0     0     0     1526     81     692       10     7     26     1     0     0     0     0     0     0     0     0     2398     27     58	HSEC.	41	13	1479	21	9	2	1053	0	0	0	0	0	0	0	10899	54	3286	71	1344	36	487
7 20 311 0 1 0 17 0 0 0 0 0 0 1526 81 10 7 26 1 0 0 0 0 0 0 0 0 0 0 2398 27	INTE	7	13	389	3	7	-	119	0	0	0	0	0	0	0	3270	54	865	က	336	2	55
10 7 26 1 0 0 0 0 0 0 0 0 0 0 2398 27	DEGR.	7	20	311	0	-	0	11	0	0	0	0	0	0	0	1526	81	692	0	168	7	•
	POST	2	7	76	-	0	•	0	0	0	0	0	•	0	0	2398	23	28		0	-	0

ontimed-

I able I — (Conninued)	mea)																				
EMPLOYEE	897	897	40345	1793	897	1793	262691	1856	5568	16703	3712	7423	0	1856	298457	5236 1	129593	2618 286676	92998	19635	175409
BPRIM.	142	211	12493	983	645	1480	192828	294	1310	5172	2034	5338	0	1362	47256	1232	40128	1435 2	206138	16202	128759
PRIM	75	211	4915	380	===	180	43581	155	1310	2035	787	616	0	% %	24871	1232	15788	555	35475	1968	29101
MSEC.	9	53	5530	234	75	88	16896	124	328	2289	484	621	0	119	19897	308	17762	342	23970	88	11282
HSEC.	374	50	11673	<u>₹</u>	48	38	8314	773	655	4833	339	397	0	8	124357	919	37497	239	15341	415	5551
INTE.	112	105	3072	23	12	8	939	232	655	1272	<b>4</b>	8	0	7	37307	919	8986	8	3835	98	627
DEGR.	52	158	2458	3	9	2	134	108	983	1017	9	80	0		17410	924	7894	4	1918	18	8
POST	83	53	205	9	0	1	0	170	328	88	12	0	0	0	27359	308	658	6	0	12	0
UNEMP.	4569	0	8422	0	0	•	56917	0	0	716	3468	0	0	0	29559	0	9138	5284	15523	0	38697
BPRIM.	2654	0	4892	0	0	0	33063	0	0	416	2014	0	0	0	17171	0	5308	3070	9017	0	22479
PRIM.	542	0	666	0	0	0	6750	0	0	88	411	0	0	0	3506	0	1084	627	<u>28</u>	0	4589
MSEC.	683	0	1260	0	0	0	8515	0	0	101	519	0	0	0	4422	0	1367	<u>2</u>	2322	0	5789
HSEC.	496	•	915	0	0	•	6181	0	0	78	377	Ö	0	0	3210	0	992	574	1686	0	4202
INTE.	148	0	272	0	0	0	1838	0	0	23	112	0	0	0	955	0	295	171	50	0	1250
DEGR	33	0	61	0	0	•	415	0	0	S	22	0	0	0	216	•	42	33	113	0	282
POST	12	0	23	0	0	٥	154	0	٥	2	٥	۰	۰	۰	8	0	25	7	\$	•	힐

able 1 - (Continued)

groups i.e., of professionals, administrative personnel, clerical workers, sales workers, service workers, agricultural and production workers.

In this form the LFM is a flexible tool which can be aggregated to various classifications reflecting the heterogeneity that exists in labour markets, and also to analyse the segmentation in labour markets around status categories. For example, Table 2 presents the aggregated form of the LFM in percentage form for the year 1987-88 with a division of the labour force into wage and non-wage labour. A subdivision into protected wage labour and unprotected wage labour can identify the vulnerable segments of the labour force. Table 3 presents a projected LFM for the year 1992-93 in percentage form which has been estimated on the basis of labour force trends during the period 1982-83 to 1987-88.

# 3. CHANGES IN THE COMPOSITION OF THE LABOUR FORCE (1982-83 – 1987-88)

A comparison of the labour force matrices for 1982-83 and 1987-88 shows that changes in the sectoral distribution of the labour force during the Eighties are characterized by increased mobility of the labour force, a decline in the proportion of the total number of people employed in the agricultural sector, growth of employment in the non-commodity producing sectors and increasing importance of rural non-agricultural activities. The rate of labour absorption in the agriculture sector has not been high though non-agricultural employment in the rural areas has expanded significantly. This expansion and the relatively fast pace of growth of employment in the non-commodity producing sectors have played an important role in determining the trends in the country's labour market. In the urban areas employment growth is largely determined by changes in the non-commodity producing sectors. The increases in the labour force during the Eighties have been absorbed, primarily by the construction, transport and service sectors where a large majority of workers are not protected by labour legislation, which therefore, reflects the growth of the unprotected vulnerable segment of the labour force.

The proportion of the labour employed in the agriculture sector has declined from 51.7 percent in 1982-83 to 48.7 percent in 1987-88 though there has been a small increase in the number of agricultural workers. In this period the rate of labour absorption in the agriculture sector remained low which is reflected in the growth rate of agricultural employment of only 1.5 percent per annum as compared with the growth rate of the labour force of 2.7 percent per annum. Almost 34 percent of rural workers are employed in non-agricultural activities as compared with 30.8 in 1982-83, which represents an increase of 24 percent during the five years. Given a tightening of rural labour markets and rising real wages of agricultural workers the increase in the proportion of rural workers employed in non-agricultural activities is

Table 2
Aggregated Labour Force Matrix (1987-88)
(Percentage Distribution)

								-0-	,								
		Agriculture	lture			Minn/Man/Ele/Gas/W	'Ele/Gas/	*		Construction	ction			Trade/Tran/Fin/Serv	Fin/Serv		
	Prof	Adm/Cle	Sal/Ser	Agr/Pro	Prof	Adm/Cle	Sal/Ser	Agr/Pro	Prof	Adm/Cle	Sal/Ser	Agr/Pro	Prof	Adm/Cle	Sal/Ser	Agr/Pro	
WAGE																	
BPRIM.	0.00	0.00	0.00	4.21	0.01	90.0	0.10	3.63	0.00	0.01	0.02	1.53	0.28	0.38	2.47	2.59	15.30
PRIM.	0.00	0.00	0.00	0.52	0.00	0.03	0.02	0.92	0.00	0.01	0.00	0.37	0.12	0.18	0.62	0.64	3.43
MSEC.	0.00	0.00	0.00	0.27	0.01	9.0	0.02	0.58	0.00	0.01	0.00	0.19	0.14	0.23	0.48	0.39	2.36
HSEC.	0.00	0.01	0.00	0.12	0.03	0.12	0.02	0.46	0.01	0.02	0.00	0.13	92.0	29.0	0.49	0.30	3.15
INTE.	0.00	0.00	0.00	0.02	0.02	0.07	0.01	0.08	0.00	0.01	0.00	0.02	0.36	0.38	0.13	0.05	1.16
DEGR.	0.00	0.00	0.00	0.01	0.02	0.09	0.00	0.04	0.00	0.02	0.00	0.01	0.36	0.42	0.09	0.02	1.09
POST	0.00	0.00	0.00	0.01	0.02	0.03	0.00	0.01	0.01	0.01	0.00	0.00	0.40	0.11	0.03	0.01	0.62
NON-WAGE																	
BPRIM.	0.00	0.03	0.03	35.20	0.01	9.0	0.09	4.37	0.00	0.02	0.03	2.49	0.14	0.22	5.34	2.07	50.08
PRIM.	0.00	0.01	0.01	4.31	0.00	0.02	0.02	1.06	0.00	0.01	0.01	0.59	90.0	01.0	1.76	0.50	8.46
MSEC.	0.00	0.01	0.01	2.16	0.00	0.02	0.01	0.56	0.00	0.01	0.00	0.29	0.07	0.12	1.35	0.28	4.90
HSEC.	0.01	0.03	0.00	0.94	0.02	0.07	0.01	0.40	0.01	0.03	0.00	0.19	0.38	0.34	1.36	0.20	3.99
INTE.	0.00	0.01	0.00	0.13	0.01	0.04	0.00	0.07	0.01	0.02	0.00	0.03	0.16	0.17	0.39	0.03	1.08
DEGR.	0.00	0.01	0.00	0.05	0.01	0.05	0.00	0.03	0.01	0.03	0.00	0.01	0.15	0.18	0.26	0.01	0.80
POST	0.00	0.00	0.00	0.03	0.01	0.02	0.00	0.01	0.01	0.01	0.00	0.00	0.17	0.04	0.08	0.00	0.39
UNEMP.	0.00	0.01	0.00	0.48	0.01	0.00	0.02	0.61	0.00	0.00	0.00	89.0	0.20	0.11	0.47	0.58	3.18
Total 0.02	0.02	0.15	0.05	48.45	0.19	0.70	0.32	12.81	90.0	0.21	90.0	6.53	3.76	3.65	15.31	7.68	100.00
																	İ

Table 3

Projected Labour Force Matrix (Aggregated) 1982-83
(Percentage Distribution)

									100000								
		Agriculture	lture			Minn/Man/Ele/Gas/W	Ele/Gas/V	*		Construction	ction		I	Frade/Tran/Fin/Serv	/Fin/Serv		Total
;	Prof	Adm/Cle Sal/Ser	Sal/Ser	Agr/Pro	Prof	Adm/Cle	Sal/Ser	Agr/Pro	Prof	Adm/Cle	Sal/Ser	Agr/Pro	Prof	Adm/Cle	Sal/Ser	Agr/Pro	
WAGE																	
BPRIM.	0.00	0.01	0.01	2.32	0.00	0.05	0.05	2.68	0.00	0.00	0.01	08.0	0.25	0.51	2.12	1.91	10.73
PRIM.	0.00	0.00	0.00	0.31	0.00	0.01	0.01	69.0	0.00	0.00	0.00	0.20	0.10	0.14	0.50	0.47	2.43
MSEC.	0.00	0.00	0.00	0.15	0.00	0.02	0.01	0.41	0.00	0.00	0.00	80.0	0.07	0.19	0.37	0.27	1.58
HSEC.	0.00	0.00	0.00	90.0	0.01	0.03	0.02	0.36	0.00	0.01	0.00	0.07	0.62	0.30	0.57	0.23	2.28
INTE.	0.00	0.00	0.00	0.01	0.00	0.03	0.01	0.03	0.00	0.00	0.00	0.00	0.32	0.20	0.18	0.02	0.81
DEGR.	0.00	0.01	0.00	0.00	0.00	90.0	0.01	0.02	0.0	0.01	0.00	0.00	0.25	0.37	0.15	0.01	0.89
POST	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.32	0.09	0.05	0.00	0.50
NON-WAGE																	
BPRIM.	0.00	4.50	0.15	25.71	0.05	0.18	0.08	3.02	0.02	0.07	0.17	7.05	0.27	2.50	3.72	1.68	49.15
PRIM.	0.00	1.20	0.04	3.44	0.01	0.08	0.02	0.74	0.01	0.04	0.03	1.64	0.12	98.0	1.23	0.40	9.84
MSEC.	0.00	0.88	0.02	1.54	0.01	0.09	0.01	0.33	0.01	0.03	0.02	0.63	0.07	0.99	0.89	0.19	5.70
HSEC.	0.01	0.97	0.01	0.57	9.0	0.23	0.03	0.26	0.05	0.08	0.02	0.42	9.65	1.99	1.21	0.14	89.9
INTE	0.00	0.45	0.00	0.07	0.03	0.15	0.02	0.01	0.03	0.07	0.00	0.02	0.29	1.00	0.35	0.01	2.50
DEGR	0.00	0.97	0.00	0.02	0.02	0.14	0.01	0.01	0.02	0.07	0.00	0.01	0.18	0.80	0.34	0.01	2.61
POST	0.00	0.28	0.00	0.01	0.03	0.02	0.01	0.00	0.02	0.01	0.00	0.00	0.25	0.07	0.07	0.00	0.78
UNEMP.	0.00	0.03	0.00	0.10	0.01	0.00	0.02	0.45	0.00	0.00	0.01	1.60	0.24	90.0	0.25	0.75	3.50
Total	0.02	9.32	0.23	34.33	0.18	1.10	0:30	9.02	0.17	0.40	0.27	12.53	4.02	10.01	11.98	6.07	100.00

partly a reflection of an increasing diversification of the rural economy associated with higher levels of per capita income and consumption.

In industry, the rate of growth of labour absorption has increased by a little less than 5 percent per annum. But there has been a slight increase in the proportion of non-wage industrial labour, which shows the increasing importance of the small-scale non-wage sector. A similar conclusion can be drawn from the evidence of a slight decline in the proportion of urban industrial labour in the total and the rise of non-wage employment. The fastest growth of employment (6.2 percent) has been in the non-commodity producing sectors, especially in the construction and transport sectors, which have absorbed most of the increase in the employment during the Eighties.

Employment in the services sector, which is employment mainly in the public sector, has grown at a rate of almost 9 percent per annum since 1982, largely due to the rapid expansion of public expenditure and has led to a shift in the composition of the labour force in favour of salary earners. The number of urban employees in the service sectors has grown by 42 percent and almost half of the employees have higher secondary or above education. In the trade sector with a high proportion of self-employed and unprotected wage earners constituting a vulnerable section of the labour force having a very low educational achievement, there has been a modest increase in total employment of 3.1 percent per annum.

## 4. EDUCATIONAL CHARACTERISTICS OF THE LABOUR FORCE

A number of significant changes have occurred in the educational attainments of the labour force during the period from 1982-83 to 1987-88, reflecting a high degree of market flexibility and sectoral mobility of educated workers. First, workers with little or no education have increased at a rate which is more than the average rate of growth of the labour force. As a result, such workers now make up 65.4 percent of the total labour force in the country as compared with 65.1 percent in Second, there has been a substantial decline in the number of highly educated workers in the agricultural, industrial and construction sectors. Third, the service sectors have increased rapidly, and within this sector the number of highly educated workers has increased at an even faster rate. The service sectors now account for the largest concentration of highly qualified persons in the economy. And fourth, employment in the service sectors has increased, in general, at a growth rate higher than the average leading to a high rate of absorption of even the poorly educated workers. This is in marked contrast to the changes that have occurred in the industrial labour force. Employment absorption has declined in the industrial sector for all categories of workers though the percentage decline is largest for

workers with intermediate and higher degrees.1

However, during the Eighties the problem of educated unemployment has become a cause for much concern. The proportion of unemployed educated labour in the total number of unemployed persons has increased from less than 43 percent in 1982-83 to almost 47.1 percent in 1987-88 while the rate of unemployment has declined from 3.9 percent to 3.2 percent during the same period. There is a positive relationship between educational attainment and the rate of unemployment. The lowest rate of unemployment of 2.6 percent is for workers with less than primary education. The rate of unemployment for workers with middle or higher secondary education is 6 percent, which is the same as the rate of unemployment for workers with intermediate education. Beyond this level of education the rate of unemployment declines to 3.8 percent for workers with degree education and to 1.9 percent for workers with post-degree education. The higher rate of unemployment for secondary and intermediate education suggests that market adjustment in response to the pressure of the educated job-seekers is slow, which is partly due to the dominance of a large informal sector.

### 6. SUMMARY AND CONCLUSIONS

In this paper a LFM has been constructed for the year 1987-88 and estimates a projected LFM for the year 1992-93. A comparison of the LFM 1987-88 with the LFM 1982-83 shows that there has been a decline in the proportion of the workers employed in the agricultural sector, while non-agricultural activities in the rural areas have increased in importance. In the urban areas the contours of labour market growth are increasingly determined by the service sectors, which have absorbed most of the increases in the labour force. But this has been accompanied by the growth of the unprotected vulnerable segment of the labour force.

The educational composition of the labour force leaves much to be desired. Even more disturbing is the rise in the percentage of the educated unemployed and

Developing countries including Pakistan have demonstrated a remarkable capacity for labour absorption, even when modern sector employment growth is only a fraction of total labour force growth. The urban and rural traditional or informal sectors are large with flexible wage rates and high elasticities of substitution between factors. These sectors have absorbed an increasing proportion of the additions to the labour force and have kept the open unemployment rate quite low. The full intensity of the unemployment problem in developing countries cannot be captured from the aggregate trends of labour supply and demand because in developing countries employment cannot be treated as a 'discrete' and 'homogenous' category, while the measure of labour market imbalance involves the division of the total population into three distinct categories of those not in the labour force, the employed and the unemployed. Thus, for an explanation of the observed rates of unemployment it may be necessary to focus on the microdynamics of labour market behaviour rather than on aggregate trends of labour supply and demand.

there is a positive relationship between educational attainment and the rate of unemployment. Part of the problem of educated unemployment is due to a mismatch between educational attainment of the new entrants to the labour force and the pattern of labour demand, which suggests that improvements are needed in the education and training system to enhance the employability of educated job-seekers.

#### REFERENCES

Cohen, S. I. (1985) The Labour Force Matrix of Pakistan: Selected Applications. The Pakistan Development Review 24: 3 & 4 565-585.

Pakistan, Government of (1989) Labour Force Survey 1987-88. Islamabad: Federal Bureau of Statistics, Statistics Division.

# Comments on "Labour Force Matrix of Pakistan 1987-88"

Given the title of the paper, one would expect a formal treatment of the compilation of the Labour Force Matrix (LFM) for Pakistan including the theoretical merits and demerits. However, the LFM for the year 1987-88 is simply presented with a reference stating that the table is "compiled using the cross-tabulations... reported in the Labour Force Survey for 1987-88". Therefore, this lack of reference to methodological issues renders it impossible to gauge the quality of the matrix and its forecast for 1992-93. Consequently, I will turn to the main objective of this paper, which concentrates on the use of the LFM as a tool for analyzing labour market trends in the economy.

First of all, I would like to observe that in the discussion on labour market trends, the authors tend to utilize data which do not appear in the tables or are presented in a format which is not clear. Besides, it has been shown elsewhere [OECD (1971)] that the coefficients derived from the LFM for the purpose of manpower planning are inappropriate given the high level of aggregation of the data used.

Having said this, I would like to turn to some of the arguments which are brought forward by the authors to explain the trends observed from the LFM. However, the arguments are not supported by data or literature references. On the other hand, my comments are based on a study of the labour force by Andel and Havinga (1989) using data from the Census of Manufacturing Industries (CMI), the Survey on Small and Household Manufacturing Industries (SHMI) and the Distributive Trade Survey (DTS). For each of the three surveys, 2 data sets have been used for the manufacturing sector for the years 1976-77 and 1983-84 and for distributive trade for the years 1975-76 and 1984-85. As the sectors covered by these surveys provide employment to a substantial proportion of the population working in non-agricultural activities, some inferences have been drawn on the employment absorption capacity and trends and issues regarding productive and gainful employment and income distribution.

For instance, the authors conjecture that "the tightening of rural labour markets and the increase in the proportion of rural workers employed in non-agricultural activities...", lead to higher levels of per capita income. However, we have observed sharply declining labour productivity in rural non-farm employment

from 1975-76 to 1984-85 which, in turn, is significantly lower than that in urban informal employment. This result is contrary to their statement.

Secondly, their observation that labour absorption in the manufacturing sector increased by 5 percent per annum seems to be on the high side. The survey results indicate an increase of 3 percent per annum. More importantly, but not mentioned in the paper, is that the bulk of the absorption has taken place in the small-scale manufacturing sector where 40 percent of the employment is in sectors with declining productivity.

Thirdly, although we can confirm the growth rate of 3.1 percent per annum in the distributive trade sector, their related statement on vulnerability of employment in this sector is not in conformity with our findings. In contrast, an 8 to 9 percent annual increase in labour productivity is observed in this sector. Still, one prefers to see similar trends in other sectors of the economy, since the nature of this sector does prevent the creation of resource mobilization capacity and technological innovation.

Fourthly, their statement that educated job-seekers are unemployed due to search time and at the same time participate in economic activities cannot be correct. By definition, a person of 10 years of age and above, is considered employed if he/she works 15 hours or more during the last week for pay or family gain.

At this stage I would like to conclude, that the list of comments is not exhaustive. The labour market analysis presented in this paper lacks rigor and depth. Moreover, the level of aggregation of the LFM they use shows that the present format of LFM is an inappropriate tool to undertake detailed labour market analysis. Nonetheless, the LFM might prove an appropriate tool at a more disaggregated level, especially when used in conjuction with specific purpose surveys to explain the observed trends.

Ivo C. Havinga

Erasmus University, Rotterdam

#### REFERENCES

Andel van den, W. A., and I. C. Havinga (1989) The Role of Informal Sector for Employment Promotion, Project on Improvement of National Accounts Statistics. Islamabad: Federal Bureau of Statistics/Hague: Institute of Social Studies.

OECD (1971) Manpower and Educational Planning, Paris.