

International Conference on Business, Education, Economics and Social Sciences (ICBEES)

Wage Return on Worker's Labour Market Experience, Education and Skill: A Case from Bangladesh's RMG sector



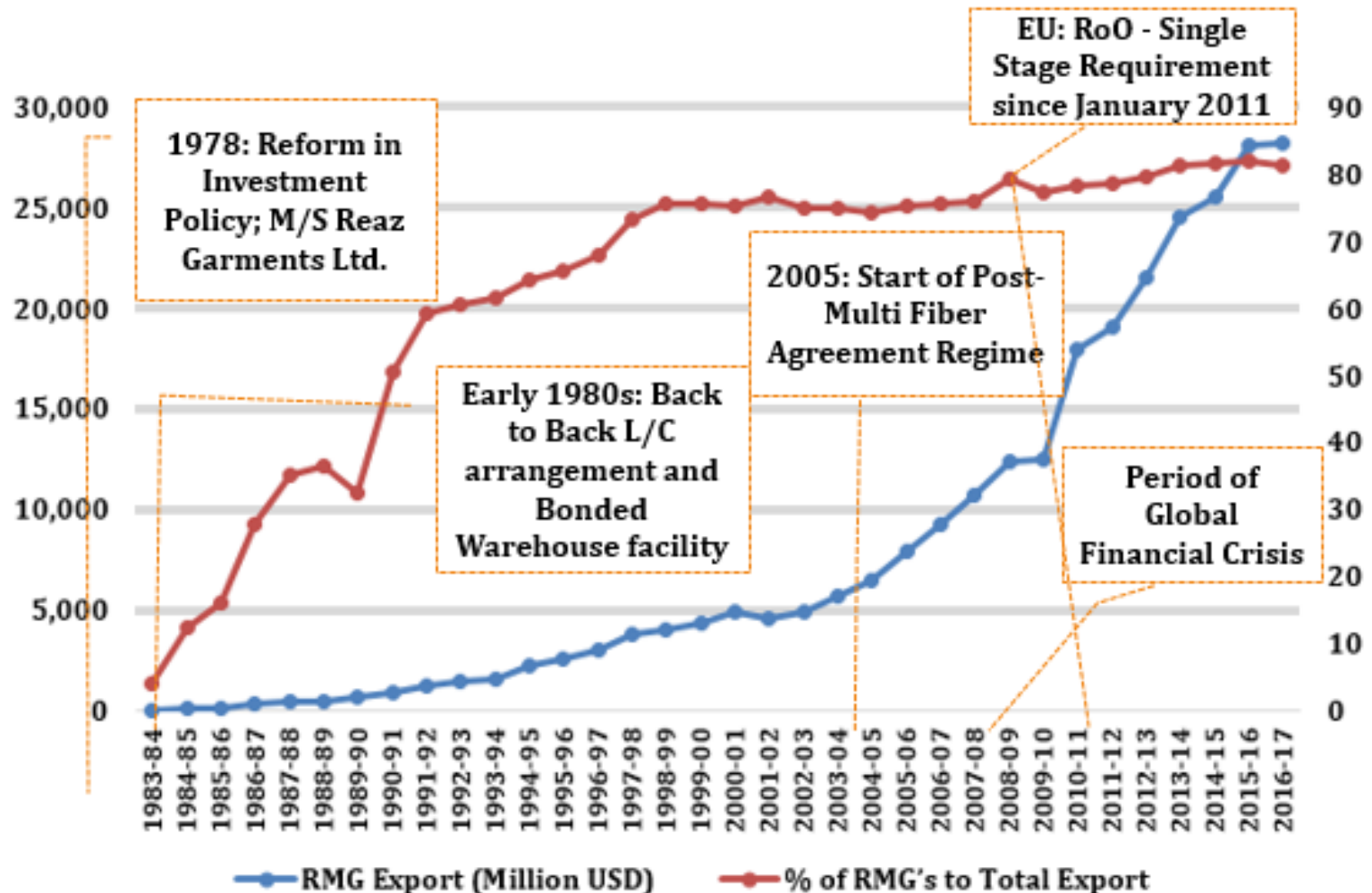
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Background of Bangladesh's RMG Sector

Figure 1: Export share and RMG export from Bangladesh



Source: Author's calculation based on Export Promotion Bureau (EPB) data

Estiaque Bari (2018): *Wage Return on Workers Labour Market Experience, Education and Skill*

Sample Size

Table 1: The worker sample by grade and by type of industry

Type of Industry	Salary scale of workers							Total
	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	
Knitwear factories	4	8	71	74	68	51	60	336
Woven factories	2	6	27	29	33	26	31	154
Sweater factories	6	12	111	135	109	86	129	588
Others factories	1	0	27	26	27	21	24	126
Total	13	26	236	264	237	184	244	1,204

Source: Field Survey 2014 by ACD

Source: Haque and Bari, (2015)

- Two Stage Stratification: (a) Workers grade wise and (b) Factory type wise
- 173 factories were selected from 4,225 active BGMEA members (in 2014): 7 workers from each factories
- Dhaka: 144 factories and Chittagong: 29 factories

Summary Statistics (Table 2)

Variables	All (N=1204)	Female (724)	Male (480)
Wage	Average Monthly Wage (in taka)		
	6,707.65	6,245.20	7,405.17
Age	In Years		
	24.40	24.17	24.76
Grade 1	32.23	30.00	32.42
Grade 2	28.66	29.67	28.48
Grade 3	26.31	26.01	26.65
Grade 4	24.80	24.37	25.43
Grade 5	24.11	24.14	24.05
Grade 6	23.17	23.16	23.21
Grade 7	22.48	23.12	22.48
Labour Market Experience	Years involved in RMG Sector		
	6.18	6.20	6.16
Grade 1	12.24	11.00	12.35
Grade 2	9.06	10.25	8.84
Grade 3	8.64	8.37	8.95
Grade 4	6.50	6.74	6.14
Grade 5	6.22	6.68	5.33
Grade 6	5.51	5.50	5.57
Grade 7	3.29	3.67	2.52

Summary Statistics (cont.)

Variables	All (N=1204)	Female (724)	Male (480)
Education Status (N=1198)	Percentage (%)		
Illiterate	12.69	9.52	3.17
Primary (Class I-V)	32.55	21.54	11.02
Secondary (Class VI-X)	44.16	25.38	18.78
Higher Secondary (Class XI-XII)	8.93	3.01	5.93
Enrolled in Bachelor/Higher Degree	1.67	0.67	1.00
Size of Workforce	Number of Workers (person)		
	944.13	611.41	338.62
<i>Factory: Knit</i>	<i>1105.90</i>	<i>643.87</i>	<i>472.20</i>
<i>Factory: Sweater</i>	<i>749.32</i>	<i>401.14</i>	<i>364.76</i>
<i>Factory: Woven</i>	<i>981.41</i>	<i>693.82</i>	<i>293.30</i>
<i>Factory: Mixed/Others</i>	<i>576.89</i>	<i>403.67</i>	<i>173.22</i>
Overtime	Number of Hours		
	0.35	0.38	0.30

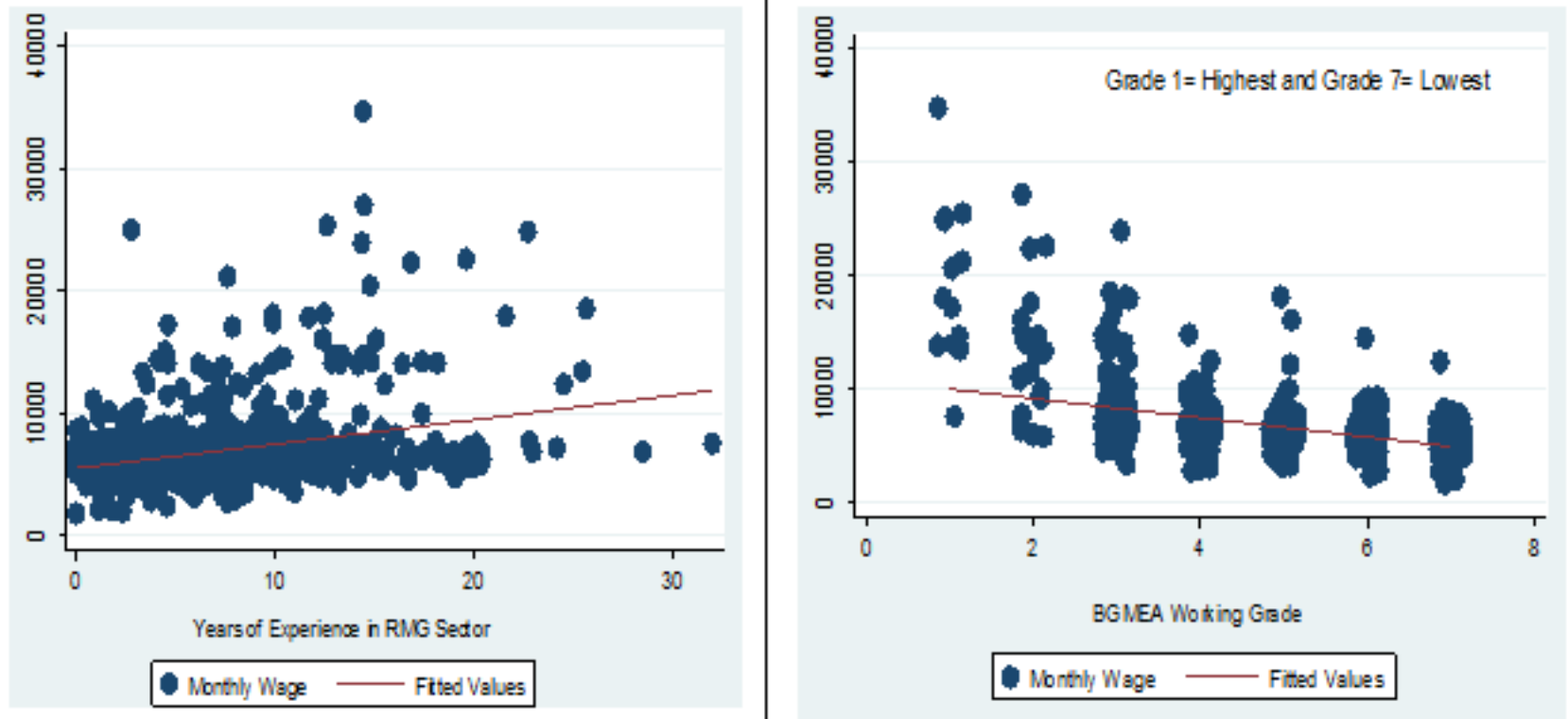
Source: Author's Calculation.

Key Observations:

- Bangladeshi RMG workers are **young**, when they **join** and when they **leave** the sector.
- **Labour composition in terms of gender is changing within the sector**

Descriptive Analysis

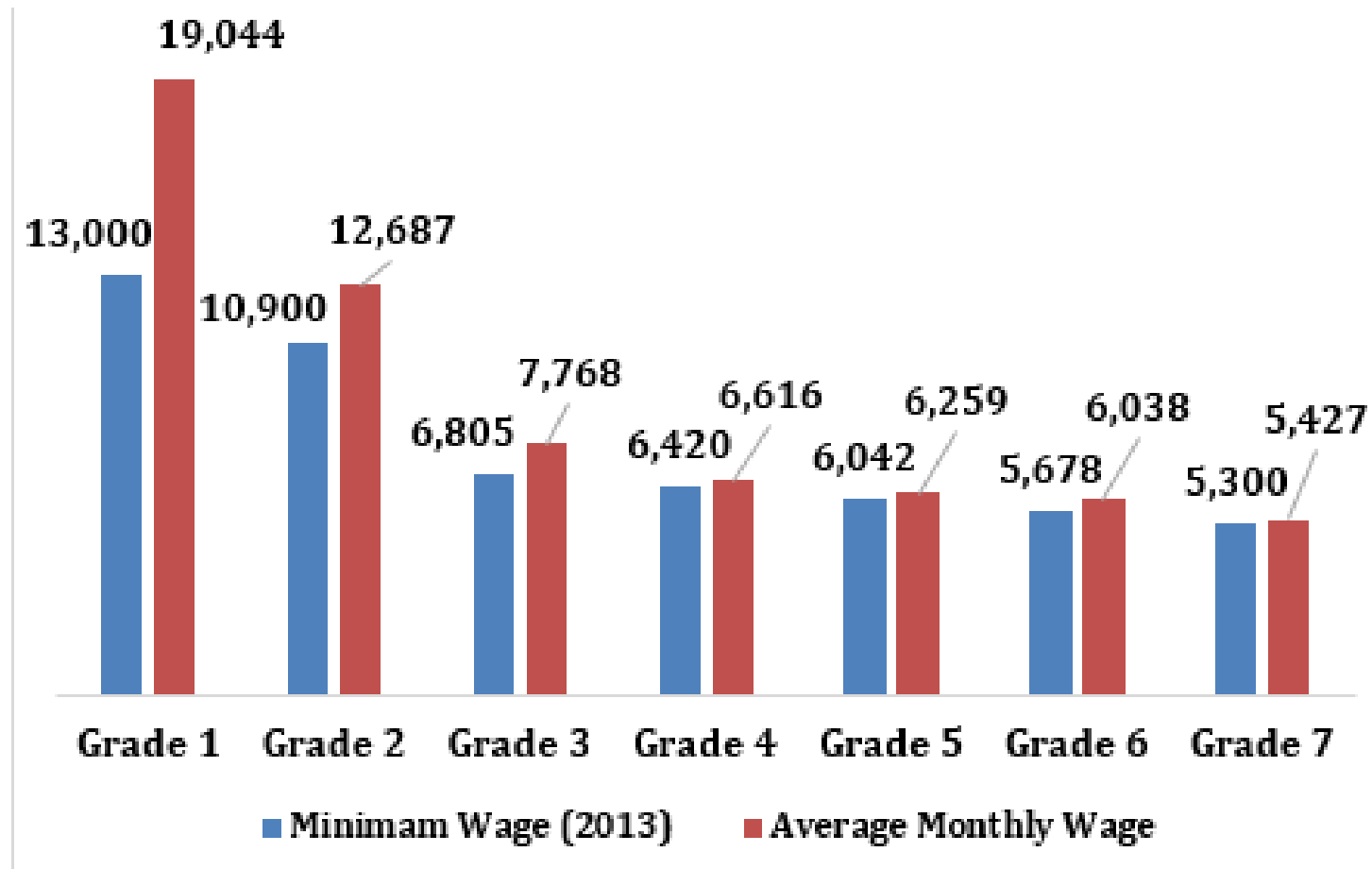
Figure 2: Monthly wage (in taka) by years of labour market experience in RMG sector and by working grade



Source: Author's analysis based on the ACD Garments Survey 2014

Descriptive Analysis

Figure 3: Grade wise monthly average wage (in taka)



Source: Author's Calculation based on ACD-GWS and National Gazette on Minimum Wage Law (2013)

Descriptive Analysis

Table 3: Average monthly wage (in taka) of workers by RMG factory type

RMG factory type	Sample size (N)	Average wage	Standard deviation
Knit	336	6,538.6	1,915.8
Sweater	154	7,540.8	3,132.8
Woven	588	6,618.9	2,621.0
Mixed/Others	126	6,554.3	2,447.6

Source: Author's calculation from ACD Garments Survey 2014

Table 4: Average monthly wage (in taka) by workers educational attainment

Educational attainment	N=1198	Average wage	Standard deviation
Illiterate	152	6,368.6	1,198.2
Primary (Class I-V)	390	6,276.0	1,303.2
Secondary (Class VI-X)	529	6,844.2	2,680.1
Higher Secondary (Class XI-XII)	107	8,057.9	4,922.6
Enrolled in Bachelor/Higher Degree	20	6,970.4	2,262.8

Source: Author's calculation from ACD Garments Survey 2014

Regression Results (Table 5)

Variables	(1)	(2)	(3)
	Model 1	Model 2	Model 3
Gender (Female=0)	475.4*** (96.00)	459.1*** (94.10)	461.2*** (93.14)
Age (in years)	-15.76 (11.80)	-15.14 (11.62)	-14.34 (11.20)
Education: Class I-V (Illiterate=0)	290.6** (140.7)	269.0* (139.2)	238.0* (136.5)
Education: Class VI-X (Illiterate=0)	589.8*** (164.0)	555.1*** (160.0)	541.0*** (155.1)
College Education (Class XI-XII) (Illiterate=0)	1,313*** (359.6)	1,251*** (353.7)	1,158*** (330.6)
Enrolled in Higher Degrees (Illiterate=0)	1,299*** (334.4)	1,237*** (323.3)	1,152*** (314.6)
Work Experience in RMG sector (in years)	121.4*** (22.35)	122.3*** (22.11)	120.8*** (34.83)
Work Position: Grade 1 (Grade 7=0)	12,062*** (1,911)	11,979*** (1,912)	12,551*** (3,331)
Work Position: Grade 2 (Grade 7=0)	6,285*** (917.8)	6,165*** (910.2)	2,194 (1,447)
Work Position: Grade 3 (Grade 7=0)	1,709*** (159.2)	1,699*** (158.2)	1,597*** (331.3)
Work Position: Grade 4 (Grade 7=0)	785.4*** (112.9)	780.7*** (112.8)	838.7*** (169.8)
Work Position: Grade 5 (Grade 7=0)	543.6*** (108.9)	554.8*** (108.8)	852.5*** (167.9)
Work Position: Grade 6 (Grade 7=0)	447.4*** (102.6)	447.4*** (103.2)	810.7*** (170.7)

Regression Results (cont.)

Variables	(1)	(2)	(3)
	Model 1	Model 2	Model 3
Overtime (number of hours)	203.2** (94.09)	285.4*** (109.4)	255.0** (104.1)
Sweater Factory (Knit Factory=0)	938.1*** (193.9)	1,012*** (195.6)	999.9*** (196.5)
Woven Factory (Knit Factory=0)	110.5 (109.5)	144.9 (107.0)	102.0 (104.0)
Others/Mixed Factory (knit Factory=0)	253.1 (173.8)	340.6* (174.1)	309.5* (167.3)
Dhaka (Factory Location; Chittagong=0)		232.4* (137.9)	226.9* (135.4)
Size of the Workforce (person)		0.122*** (0.0386)	0.138*** (0.0409)
Operational Length of the Factory/Business (in years)		-8.117 (5.427)	-5.548 (5.420)
Earning Members in the Household (person)		-68.27 (51.95)	-68.64 (52.89)
Constant	4,440*** (361.4)	4,350*** (405.5)	4,352*** (367.8)
Observations	1,198	1,198	1,198
R-squared	0.550	0.557	0.575
AIC	21,248.07	21,237.11	21,199.91
BIC	21,339.66	21,349.05	21,342.38

Source: Author's estimation.

Note: Robust standard errors in parentheses *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$



Thank You