Development of Wholesale and Retail Trade, Repair of Motor Vehicles and Motorcycles Business in Rangpur Division

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ABSTRACT

Bangladesh has already become a middle-income country. Yet its large number of working people is still jobless. The importance of Wholesale, Retail, Motor-vehicle workshop, and Motorcycle businesses (WRMB) for solving employment problems in a short time is immense. WRMB can pave the way for the employment of these people. There are eighteen types of manufacturing and service activity in the small-scale industry (SSI) sector. Out of this WRMB activity sector holds the height contribution in number. This paper attempts to discover the present situation of the Growth and Development of the Wholesale, Retail, Motor-vehicle workshops, and Motorcycle businesses in the Rangpur Division of Bangladesh during 2013-14 to 2017-18. The study is empirical. Both the primary and secondary data have been used in this study. Primary data is collected from 200 wholesale and retail trade, repair of motor vehicles, and motorcycles activity. The study found a simple correlation between financial conditions of the WRMB with the three dependent variables `net sales 2013-14', `net sales 2017-18', and `average net sales'.

Keywords: Cross-sectional Study, Small Scale Industry, Motor-vehicle Workshop, Motorcycle Business, Growth, Bangladesh

INTRODUCTION

Today's world is full of competition for wealth. The evil competition is constantly making the world sick and inhuman. The rich are getting richer, and the poor are getting poorer. Today, in a capitalist economy, the Vicious Cycle of poverty is the most extreme reality. In this situation, the small scale Industries (SSI) can now play an important role in sustaining the economically backward people of the society. The small scale Industries are taking the economy one step further every day on the path of balanced development. SSIs are

making a significant contribution to the economic progress of the developed countries like Japan and the UK. There are 7818565 establishments in Bangladesh, out of which 3589443 are wholesale and Retail Trade, Repair of Motor Vehicles, and motorcycles business (WRMB), which is 45.90 percent of the total establishment.

The key objective of this study is to find out the present situation of the Growth and Development of Wholesale, Retail, Motor-vehicle Workshops and Motorcycle business in the Rangpur Division of Bangladesh during 2013-14 to 2017-18. The specific objectives of the study are as follows:

- To assess the relationship between demographic information with the growth and development of Wholesale, Retail, Motor-vehicle Workshops, and Motorcycle business.
- To assess the relationship between industry information with the growth and development of Wholesale, Retail, Motor-vehicle Workshops, and Motorcycle business.
- To assess the relationship between financial conditions with the growth and development of Wholesale, Retail, Motor-vehicle Workshops, and Motorcycle business.

STATEMENT OF THE PROBLEM

So, WRMB is a very important business sector in Bangladesh as well as in the Rangpur Division of Bangladesh. The importance of WRMBs for solving employment problems in a short time is immense. Bangladesh has already become a middle-income country. Yet its large number of working people is still jobless. WRMB can pave the way for the employment of these people. Out of eighteen types of manufacturing and service activity, it seems that WRMBs sector is more important as a number and as a contributor to the economy of Bangladesh. In the same way, table 1 shows that there are 111531 establishments in Bangladesh, out of which 55801 are WRMB, which is 50.03 percent of the total establishment.

Table 1: Activity-based total establishments in Rangpur Division, Bangladesh in 2013

		Number of Establishments								
	Service Activity	Rangpur	Lalmonirhat	Gaibandha	Kurigram	Dinajpur	Panchagarh	Nilphamari	Thakurgone	Total
A	Mining and Quarrying	2	19	1	9	1	95	121	0	248
B	Manufacturing	372	51	337	114	524	80	212	258	1948
C	Electricity, Gas, Steam and Air Conditioning Supply	15	11	11	18	21	7	5	6	94
D	Water Supply, Sewerage, Waste Management and Remediation Activities	3	2	0	1	2	0	2	0	10
E	Construction	338	26	2	55	5	12	16	0	454
F	Wholesale and Retail Trade, Repair of Motor Vehicles and Motorcycles	19669	9009	444	273	706	2284	23174	242	55801
G	Transportation and Storage	3811	15670	37	24	94	79	150	34	19899

H	Accommodation and Food Service Activities (Hotel and Restaurant	450	63	35	28	45	101	316	26	1064
I	Information and Communication	211	39	51	38	67	23	75	13	517
J	Financial and Insurance Activities	572	205	366	262	590	165	323	199	2682
K	Real Estate Activities	41	4	4	6	91	1	5	0	152
L	Professional, Scientific and Technical Activities	205	109	16	4	124	33	464	1	956
M	Administrative and Support Service Activities	156	23	15	12	33	34	113	7	393
N	Public Administration and Defense, Compulsory Social Security	170	83	94	130	241	114	120	99	1051
O	Education	1826	805	1603	1301	2150	629	800	742	9856
P	Human Health and Social Work Activities	773	141	74	53	230	105	493	65	1934
Q	Art, Entertainment and Recreation	7	7	3	1	0	3	10	1	32
R	Other Service Activities	5223	1828	136	223	255	331	6385	59	14440
S	Total	33844	28095	3229	2552	5179	4096	32784	1752	111531

Source: Bangladesh Economic Census Report 2013

LITERATURE REVIEW

Hosseini and Baiee (2012) aimed to identify the potential evaluation criteria of the plots proposed to the Mehr Imam Reza Fund. The study tried to create a proper basic framework, based on previous research, to carry out this experiment. The study suggested that one's attitude towards switching behavior, one's perceived control over switching costs, and perception of satisfaction with the service provider were strongly associated with one's intentions to switch additional services provided by producers.

Mtanga and McCamel (2019) examined the end markets and utilization of motorcycles, the status of these markets, and demand for local or regional production processes. The study also considered the main factors affecting the sales of motorcycles and their parts in the region and assesses whether a more coordinated approach between governments and foreign and local firms could lead to assembly and manufacturing value-added activity in the Southern African Development Community region.

Ogechukwu and Latinwo (2010) identifies the orientation of SMEs and entrepreneurial trends in Nigeria, tackles the operational definition and scopes, and describes the role of the Nigerian government as a participant, regulator, and facilitator, both legally and politically, in the growth of SMEs and entrepreneurship. The study also identifies the roles

of SMEs in Nigeria's development and growth. Finally, they discussed the entrepreneurial thoughts, problems, and advance practical marketing solutions and concluded the role of marketing in the survival of SMEs and entrepreneurship in Nigeria.

Oppong et al. (2014) state that the financial constraints and lack of management skill-hampers the efficient performance of micro and the small scale enterprises in Ghana. Finally they recommend that government and other non-governmental organization should regularly organize seminars for potential and actual small and medium enterprise operators on how to plan, organize, direct and control their businesses, and that micro, small and medium enterprises operators' should device effective marketing strategies and good management customers relations at all times.

Osotimehin et al. (2012) examine the challenges and prospects of micro and small scale enterprises development in Nigeria. They conducted the study in Lagos State, South-Western Nigeria, with the use of questionnaires and interviews to gather relevant data that was statistically analyzed. The study finds the phenomenal growth of small and medium enterprise in Nigeria is mainly due to the people's quest to be self-employed and not because it is easy to establish or manage.

Taiwo et al. (2012) investigate Small and Medium Enterprises as a veritable tool in Economic Growth and Development. A survey method was used to gather data from 200 SME/Entrepreneurial officers and Managers from five selected local governments in Nigeria. The study revealed that the most common constraints hindering small and medium scale business growth in Nigeria are lack of financial support, poor management, corruption, lack of training and experience, poor infrastructure, insufficient profits, and low demand for products and services.

Uwitonze and Heshmati (2016) attempted to study in detail the development of the service sector over the years in Rwanda's economy and empirically estimate its determinants using an econometric methodology. The empirical data was collected from 2011 to 2014 on 241 firms and establishments. The results are shown that, the factors that have contributed to the development of the service sector. These factors can be used in forming public policy to use the service sector as a vehicle for speeding up the shift from a low income to a middle-income state.

METHODOLOGY

The study is empirical. The Primary and secondary data have been used in the study. The primary data have been collected for 200 Wholesale, Retail, Motor-vehicle Workshops, and Motorcycle business. A questionnaire is used for collecting the data. The secondary data are collected from some publications, journals, books, and documents. Various statistical tools like Descriptive statistics, Chi-Square Test, Multiple Regression, and Trend Analysis, are used in this study. SPSS 16.0, IBM SSS Statistics and excel are also used to complete the analytical part.

FINDINGS AND DISCUSSION

Gender and Age of the Owner

The frequency of male employees is 196 with a percentage of 98.0%, and female employees is 4 with a percentage of 2.0% which is said that a large number of male works in the small scale industry than a female that explained in Table 2.

Table 2: Gender of the employee of WRMB

Gender	Frequency	Percent
Male	196	98.0
Female	4	2.0
Total	200	100.0

Source: Field survey

On the other hand, in Table 3, total of 200 respondents from this WRMB, highest 67 employees are from the age range 30-35 and then second-highest is 54 employees from the age range 35-40. And then 23, 22, 14, 10 and 4 employee is from the age range 40-45,50-55,55-60,45-50, above 60 respectively.

Table3: Age of the employee of WRMB

Age	**Frequency**	**Percent**
<30 years	6	3.0
30-35	67	33.5
35-40	54	27.0
40-45	23	11.5
45-50	10	5.0
50-55	22	11.0
55-60	14	7.0
>60 year	4	2.0
Total	**200**	**100.0**

Source: Field survey

Age of the Industry

The age of the industry is classified in three ways that are unit age, registration age, and operation age are shown in Table 4. For unit age, the highest frequency lies in 5-10 years and it is 71 with a frequency of 35.5%. Then the second-highest value lies in 10-15 years that is 68, with a frequency of 34.0%. Then respectively we get 31 (15.5%), 13 (6.5%), 7 (3.5%) and 5 (2.5%) for the industry age range 15-20, 20-25, 25-30, 30-35 and above 35.

For registration age, the highest age lies in 10-15 years, and it is 67 with a frequency of 33.5%. Then the second-highest value lies in 5-10 years that is 64 with a frequency of 32.0%. Then the respectively we get 16 (8.0%), 27 (13.5%), 11 (5.5%), 5 (2.5%) and 6 (3.0%), 4 (2.0) for the registration age range below 5, 15-20, 20-25, 25-30, 30-35 and above 35.

Table 4: Industry unit information of the WRMB

		<5 years	5-10 years	10-15 years	15-20 years	20-25 tears	25-30 years	30-35 years	>35 years
Unit Age	Frequency	-	71	68	31	13	7	5	5
	Percent	-	35.5	34.0	15.5	6.5	3.5	2.5	2.5
Registration Age	Frequency	16	64	67	27	11	5	6	4
	Percent	8.0	32.0	33.5	13.5	5.5	2.5	3.0	2.0
Age of Operation	Frequency	-	70	67	34	11	8	5	5
	Percent	-	35.0	33.5	17.0	5.5	4.0	2.5	2.5

Source: Field survey

For age of operation, the highest age lies in 5-10 years and it is 70 with a frequency of 35.0%. Then the second highest value lies in 10-15 years that is 67 with a frequency of 33.5%. Then respectively we get 34 (17.0%), 11 (5.5%), 8 (4.0%) and 5 (2.5%) for the operation age range 15-20, 20-25, 25-30, 30-35 and above 35.

Working Population

Table 5 includes the nature of the working population of the WRMB. The working population is divided into two groups that are management staff and the office staff. The following table shows that the management staff is less than 5 in 196 WRMBs, and 5 to 10 in 2 WRMBs. On the other hand, the number of the office staff is less than 5 in 197 industries with a percentage of 98.5% and 5 to 10 in 3 industries with a percentage of 1.5%. No industry holds more than 10 either management or the office staff.

Table 5: Working population of the WRMB

		<5	5-10	10-15
Number of Management Staff	Frequency	198	2	-
	Percent	99.0	1.0	-
Number of Office Staff	Frequency	197	3	-
	Percent	98.5	1.5	-

Source: Field survey

The survey also finds that out of 200 workers, 187 industries hold below 16 numbers of workers. On the other hand, 93.0% industry holds less than 16 skilled workers.

THE FINANCIAL CONDITIONS OF RETAIL AND WHOLESALE, MOTORCYCLE BUSINESSES AND MOTOR-VEHICLE WORKSHOP

In the following table, it is observed that the changing percent of all variables that included in growth and development studies. For assets, 2.58% improvement occurs from 2013-14 to 2014-15, 7.03% improvement is occurs from 2014-15 to 2015-16, 2.88% improvement is occurs from 2015-16 to 2016-17, 3.20% improvement is occurs from 2016-17 to 2017-18 and 16.57% improvement is occurs from 2013-14 to 2017-18. For fixed asset, 2.08% improvement is occurs from 2013-14 to 2014-15 and 1.50% decreasing is occurs from 2016-17 to 2017-18

For Liability and Owner's equity, 1.79% decreasing is occurs from 2013-14 to 2014-15, 5.31% improvement is occurs from 2014-15 to 2015-16, 5.38% improvement is occurs from 2015-16 to 2016-17, 2.76% decreasing is occurs from 2016-17 to 2017-18 and 12.04% improvement is occurs from 2013-14 to 2017-18.

For Owner's equity, 3.59% decreasing is occurs from 2013-14 to 2014-15, 4.70% improvement is occurs from 2014-15 to 2015-16, 6.10% improvement is occurs from 2015-16 to 2016-17 , 2.27% decreasing is occurs from 2016-17 to 2017-18 and 9.53% improvement is occurs from 2013-14 to 2017-18. For short-term liability, 1.98% improvements is occurs from 2013-14 to 2014-15, and 0.60% improvement is occurs from 2016-17 to 2017-18. For long-term liability, 3.44% improvement is occurs from 2013-14 to 2014-15, 8.27% improvement is occurs from 2016-17 to 2017-18 and 28.18% improvement is occurs from 2013-14 to 2017-18

For net sales/ total revenue 0.10% improvement is occurs from 2013-14 to 2017-18. The total profit, -3.93% decreases is occurs from 2013-14 to 2014-15, 0.15% improvement is occurs from 2016-17 to 2017-18 and 2.84% improvement is occurs from 2013-14 to 2017-18. For net profit, 0.37% improvement is occurs from 2013-14 to 2014-15, 0.11% improvement is occurs from 2016-17 to 2017-18 and 2.84% improvement is occurs from 2013-14 to 2017-18.

Table 6: Financial conditions of the WRMB

Clause	Amount															
	2013-14	2014-15	Frequency	Delta	2015-16	Frequency	Delta	2016-17	Frequency	Delta	2017-18	Frequency	Delta	Frequency	Delta	Average of the average
A. Assets	87.46	89.72	2.26	2.58	96.03	6.31	7.03	99.10	3.07	3.20	101.95	2.85	2.88	14.49	16.57	94.85
a) Fixed Assets	35.58	36.32	0.74	2.08	38.43	2.11	5.80	38.42	-0.01	-0.03	38.99	0.58	1.50	3.41	9.58	37.55
b) Current Assets	51.88	53.40	1.52	2.92	57.60	4.20	7.87	60.68	3.08	5.35	62.96	2.28	3.76	11.08	21.36	57.31
B. Liability and Owner's equity	102.45	100.66	-1.79	-1.74	106.01	5.35	5.31	111.71	5.70	5.38	114.79	3.08	2.76	12.34	12.04	107.12
a) Owner's equity	71.71	69.13	-2.58	-3.59	72.39	3.25	4.70	76.80	4.41	6.10	78.55	1.75	2.27	6.83	9.53	73.72
b) Short-term Liability	18.36	18.72	0.36	1.98	19.14	0.41	2.21	20.25	1.11	5.82	20.37	0.12	0.60	2.01	10.97	19.37
C) Long-term liability	12.38	12.81	0.43	3.44	14.49	1.68	13.12	14.66	0.17	1.17	15.87	1.21	8.27	3.49	28.18	14.04
a) Net sales/ total revenue	174.27	176.36	2.10	1.20	169.19	-7.17	-4.06	173.09	3.90	2.31	174.44	1.35	0.78	0.18	0.10	173.47
b) Total profit	94.28	90.57	-3.71	-3.93	91.58	1.01	1.12	91.86	0.29	0.31	92.00	0.13	0.15	-2.28	-2.42	92.06
c) Net profit	19.54	19.61	0.07	0.37	20.03	0.42	2.12	20.07	0.04	0.22	20.09	0.02	0.11	0.55	2.84	19.87
Capacity unit	583.72	585.29	1.57	0.27	582.89	-2.40	-0.41	580.98	-1.91	-0.33	589.11	8.13	1.40	5.39	0.92	584.40
Capacity Taka	203.00	175.71	-27.29	-13.44	178.90	3.19	1.81	180.74	1.85	1.03	191.15	10.40	5.76	-11.85	-5.84	185.90
Achievement unit	333.80	340.47	6.67	2.00	328.18	-12.29	-3.61	332.91	4.73	1.44	334.69	1.78	0.54	0.89	0.27	334.01
Achievement Taka	105.69	103.95	-1.75	-1.65	106.68	2.73	2.63	105.87	-0.81	-0.76	106.39	0.52	0.49	0.69	0.66	105.72
E. VAT Payment	0.03	0.03	0.00	15.84	0.03	0.00	-11.54	0.03	0.00	2.42	0.03	0.00	5.90	0.00	11.14	0.03
F. Income Tax Payment	0.07	0.07	0.00	0.00	0.07	0.00	0.98	0.07	0.00	0.97	0.07	0.00	0.00	0.00	1.96	0.07
G. Interest Payment	3.73	3.82	0.09	2.45	3.91	0.08	2.22	4.15	0.24	6.06	4.19	0.04	1.02	0.46	12.21	3.96
H. Number of Employees	5.57	5.57	-0.01	-0.09	5.66	0.09	1.57	5.64	-0.02	-0.36	5.63	-0.01	-0.09	0.06	1.01	5.61
I. Number of product/ service/ program	3.60	3.60	0.00	0.00	3.60	0.00	0.00	3.60	0.00	0.00	3.60	0.00	0.00	0.00	0.00	3.60

Source: Field survey

RELATIONSHIP BETWEEN GROWTH AND DEVELOPMENT WITH THE OWNER'S INFORMATION, INDUSTRIAL UNIT INFORMATION AND ORGANIZATION'S FINANCIAL CONDITION

Chi-square test for owners' information

The Chi-square test (Pearson Chi-square test) is conducted for five independent variables with three dependent variable `net sales 2013-14', `net sales 2017-18' and `average net sales'. From Table 7, all variables give insignificant results at p-value > 0.005. So those variables are not important with the output of WRMB.

Table 7: Pearson Chi-square test (P-value)

Variables	Pearson Chi-square test (P-value)		
	Net sales 2013-14	Net sales 2017-18	Average
Gender	No value	No value	No value
Age	0.220	0.150	0,391
Educational qualification	0.492	0.584	0.851
Experience	0.024	0.119	0.303
Parental background	0,620	0.763	0.981

Source: Field survey

Chi-square Test for Industry Unit Information

Chi-square test (Pearson Chi-square test) is conducted by 23 independent variables with six dependent variables `net sales 2013-14', `net sales 2014-15' , `net sales 2015-16', `net sales 2016-17', `net sales 2017-18' and `average net sales'. From table 8, the working population (office staff) is significant at p-value< .005 that indicated education qualification has a great impact on the small scale industry. Similarly, for total workers, workers (full-time), workers (male) also contains a significant result with a p-value <.005 and these variables also has a great impact on WRMB when `net sales 2013-14' is dependent variables. But the skilled workers, semi-skilled workers, unskilled workers, part-time workers and hired workers do not have a significant result that means these variables are insignificant about the output of WRMB. For the net sales 2014-15, the office staff and skilled workers contain a significant result and those variables also impact WRMB when `net sales 2014-15' is dependent variables. But the total workers, semi-skilled workers, unskilled workers, part-time workers, full-time workers, male workers and hired workers do not have a significant result that means these variables are insignificant. For `net sales 2015-16' the office staff, total workers, skilled workers, unskilled workers, part-time workers, full-time workers, male workers, hired workers holds a significant result with a p-value <.005 and these variables also impact this business when `net sales 2015-16' is dependent variables. But the semi-skilled workers do not give a significant result that means this variable is insignificant. For the `net sales 2017-18'the office staff, total workers, skilled workers, unskilled workers, part-time workers, full-time workers, male workers, hired workers holds a significant relationship with a p-value <.005 and these variables also impact this industry when `net sales 2017-18' is dependent variables. But the semi-skilled workers give no significant result that means this variable is insignificance. For `net sales average', the office staff, skilled workers holds a significant result with p-value <.005 and these variables also have a great impact on this industry when `net sales average' is dependent variables. But the total number of workers, semi-skilled workers, unskilled workers, part-time workers, full-time workers, male workers, female workers, and hired workers does not give a significant result that means these variables are insignificant to the net sales.

Table 8: Pearson Chi-square test (P-value)

Variables	Pearson Chi-square test (P-value)					
	Net sales 2013-14	Net sales 2014-15	Net sales 2015-16	Net sales 2016-17	Net sales 2017-18	Average
Working population (office staff)	0.000	0.000	0.000	0.000	0.000	0.003
Workers (total numbers)	0.004	0.015	0.000	0.000	0.000	0.016
Workers (skilled)	0.016	0.001	0.000	0.000	0.000	0.005
Workers (semi-skilled)	0.543	0.604	0.466	0.332	0.015	0.722
Workers (Unskilled)	0.014	0.018	0.002	0.000	0.000	0.083
Workers(Full-time)	0.003	0.012	0.000	0.000	0.000	0.012
Workers(Part-time)	0.014	0.018	0.002	0.000	0.000	0.084
Workers (male)	0.003	0.012	0.000	0.000	0.000	0.012
Workers (Hired)	0.037	0.108	0.004	0.000	0.000	0.087

Source: Field survey

Chi-square Test for Financial Condition

In table 9, Chi-square test is conducted for the independent variable growth and development with three dependent variables. All variables show a significant relationship except VAT payment, Income Tax Payment, Number of products/ services/ programs. These three variables are not important for WRMB.

Table 9: Pearson Chi-square test (P-value) for growth and development

Clause	Amount		
	2013-14	2017-18	Average
A. Assets	0.000	0.000	0.000
a) Fixed Assets	0.000	0.000	0.000
b) Current Assets	0.000	0.000	0.000
B. Liability and Owner's equity	0.000	0.000	0.000
a) Owner's equity	0.000	0.000	0.000
b) Short-term Liability	0.000	0.000	0.000
c) Long-term liability	0.000	0.000	0.000
C) Profit			
a) Net sales/ total revenue	0.000	0.000	0.000
b) Total profit	0.000	0.000	0.000
c) Net profit	0.000	0.000	0.000
D. production/ service/ trainee capacity			
a) Capacity	0.000	0.000	0.000
Unit	0.000	0.000	0.000
Taka	0.000	0.000	0.000
b) Achievement	0.000	0.000	0.000
Unit	0.000	0.000	0.000
Taka	0.000	0.000	0.000
E) VAT Payment	0.175	0.046	0.116
F) Income Tax Payment	0.070	0.129	0.065
G. Interest Payment	0.000	0.000	0.000
H) Number of Employees	0.000	0.000	0.000
I) Number of product/ service/ program	0.663	0.305	0.445

Source: Field survey

Regression Analysis of WRMB for Owners Information with Net Sales 2013-14

In table 10, the simple correlation is represented by R-value which indicates a weak positive correlation. The total variations of 3.0% in the dependent variables are indicated by R square. The R square value is also known as a goodness of fit test. So the R square of 3.0% is revealed that 3.0% of the data fit the regression of the WRMM Business model and the model is not so good by the result of R square.

Table 10: Regression analysis of WRMB for Owners Information with Net sales 2013-14

R	R Square	Adjusted R Square	Std. Error of the Estimate
.173[a]	.030	.010	104.07548

Source: Field survey

The following ANOVA table (Table 11) shows the p-value = 0.201 which is greater than 0.005 that concluded as, overall the regression WRMB model statistically insignificantly predicts the independent variables.

Table 11: ANOVA table for Owners Information with Net sales 2013-14

ANOVA[b]					
Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	65374.276	4	16343.569	1.509	.201[a]
Residual	2112182.671	195	10831.706		
Total	2177556.947	199			

Source: Field survey

Regression analysis of WRMB for Owners Information with Net sales 2017-18

Table 12 shows the simple correlation which indicates a weak positive correlation. The total variation is 2.3% in the dependent variables is indicated by the R square. The R square value is also known as a goodness of fit test. So the R squared of 2.3% is revealed that 2.3% of the data fit the regression WRMB model and the model is not so good by the result of R square.

Table 12: Regression analysis of WRMB for Owners Information with Net sales 2017-18

R	R Square	Adjusted R Square	Std. Error of the Estimate
.151[a]	.023	.003	104.47890

Source: Field survey

The following ANOVA table (Table 13) shows the p-value = 0. 340 which is greater than 0.005 that concluded as overall the regression WRMB model statistically insignificantly predicts the independent variables.

Table 13: ANOVA table for Owners Information with Net sales 2017-18

ANOVA[b]					
Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	49685.667	4	12421.417	1.138	.340[a]
Residual	2128588.734	195	10915.840		
Total	2178274.402	199			

Source: Field survey

Regression Analysis of WRMB for Owners Information with Average Net Sales

The following table shows the simple correlation. Here the R-value indicates a weak positive correlation. The total variation 3.6% is indicated by R square. The R square value is also known as a goodness of fit test. The R squared of 3.6% reveals that 3.6% of the data fit the regression WRMB model and the model is not so good by the result of R square.

Table 14: Regression analysis of WRMB for Owners Information with Average Net sales

R	R Square	Adjusted R Square	Std. Error of the Estimate
.191[a]	.036	.017	105.67745

Source: Field survey

The following ANOVA table (Table 15) shows *p-value = 0.122* which is greater than 0.005 that is concluded as the overall regression WRMB model statistically insignificantly predicts the independent variables.

Table 15: ANOVA table for Owners Information with Average Net sales

ANOVA[b]					
Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	82357.706	4	20589.427	1.844	.122[a]
Residual	2177706.079	195	11167.723		
Total	2260063.786	199			

Source: Field survey

Regression analysis of WRMB for Industry Unit Information with Net sales 2013-14

Simple correlation is represented in table 16 that shows the R-value which indicates a positive correlation. The total variation is 30.01% and the dependent variables are indicated by R square. The R square value is also known as a goodness of fit test. So the R square value reveals that 30.01% of the data fit the regression WRMB model and the model is not so good by R square.

Table 16: Regression analysis of WRMB for Industry Unit Information with Net sales 2013-14

R	R Square	Adjusted R Square	Std. Error of the Estimate
.549[a]	.301	.162	91.91138

Source: Field survey

The following ANOVA table shows the *p-value = 0.001* which is less than 0.005 that is concluded as overall the WRMB regression model statistically which is significantly predicts the independent variables.

Table 17: ANOVA table for Industry Unit Information with Average Net sales 2013-14

ANOVA[b]					
Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	604047.705	33	18304.476	2.167	.001[a]
Residual	1402318.559	166	8447.702		
Total	2006366.264	199			

Source: Field survey

Table 18 Coefficient analysis shows the relationship between dependent and all independent variables.

The relationship: $Y= \alpha + \beta_1X_1+ \beta_2X_2 + \beta_3X_3 + \ldots\ldots\ldots\ldots\ldots\ldots + \beta nXn + \varepsilon$

$Y = 138.774 + 27.690X_1 + 118.301X_2 + (-6.067)X_3 + (-81.821)X_4 + 132.280X_5 + (-55.478)X_6 + 66.563X_7 + (-76.047)X_8 + \varepsilon$

The above table shows that β_1 the office staff is 27.690 and the regression function of WRMB is Y = 138.774+ 27.690. It expresses that WRMB can be improved by 27.690 the number of office staff. β_2 of efficiency skilled is 118.301 which implies WRMB can be improved 118.301 by efficiency skilled. β_3 of efficiency semi-Skilled is (-6.067) which implies WRMB can be

decreased 6.067 by efficiency semi-skilled workers. β_4 of full-time workers is (-81.821) which implies WRMB can be decreased by 81.821 by the full-time workers. β_5 of male workers is 132.280 which implies WRMB can be improved by 132.280 by the male workers. β_6 of female workers is (-55.478) which implies WRMB can be decreased 55.478 by female workers. β_7 of family members workers is 66.563 which implies WRMB can be improved 66.563 by family member workers. β_8 of hired family member workers is (-76.047) which implies WRMB can be decreased 76.047 by hired family member workers.

Table 18: Coefficient table for Industry Unit Information with Average Net sales 2013-14

Coefficients[a]					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	138.774	179.279		.774	.440
Working population Number of office staff	27.690	76.071	.034	.364	.716
Efficiency Skilled	118.301	99.750	.257	1.186	.237
Efficiency semi-Skilled	-6.067	12.374	-.036	-.490	.625
Workers Fulltime	-81.821	100.534	-.160	-.814	.417
Workers male	132.280	148.249	.243	.892	.374
Workers Female	-55.478	53.454	-.132	-1.038	.301
Workers family members	66.563	64.439	.170	1.033	.303
Workers hired family members	-76.047	142.934	-.157	-.532	.595

Source: Field survey

Regression analysis of WRMB for Industry Unit Information with Net sales 2017-18

Simple correlation is represented by R-value in table 19, which indicates a weak positive correlation. The total variation is 13.5% in the dependent variables is indicated by R square. The R square value is also known as a goodness of fit test. So the R squared of 13.5% reveals that 13.5% of the data fit the regression model and the model is not so good by the result of R square.

Table 19: Regression analysis of WRMB for Industry Unit Information with Net sales 2017-18

R	R Square	Adjusted R Square	Std. Error of the Estimate
.368[a]	.135	.059	101.48181

Source: Field survey

Table 20 shows the ANOVA, gives *p-value* = 0. 036 which are greater than 0.005 that is concluded as, overall, the regression model statistically insignificantly predicts the independent variables.

Table 20: ANOVA table for Industry Unit Information with Average Net sales 2017-18

ANOVA[b]					
Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	293706.090	16	18356.631	1.782	.036[a]
Residual	1874337.660	182	10298.559		
Total	2168043.750	198			

Source: Field survey

Regression analysis of WRMB for Industry Unit Information with Average Net Sales

In table 21, simple correlation is represented by R-value which indicated a weak positive correlation. The total variation of 15.7% in the dependent variables are indicated by R square. The R square value is also known as a goodness of fit test. So the R square of 15.7% is revealed that 15.7% of the data fit the regression model and the model is not so good by the result of R squared.

Table 21: Regression analysis of WRMB for Industry Unit Information with Average Net sales

R	R Square	Adjusted R Square	Std. Error of the Estimate
.396[a]	.157	.082	102.16848

Source: Field survey

The ANOVA table (Table 22) give *p-value* = 0. 010 which is greater than 0.005 concluded that overall, the regression model statistically insignificantly predicts the independent variables.

Table 22: ANOVA table for Industry Unit Information with Average Net sales 2017-18

ANOVA[b]					
Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	352828.320	16	22051.770	2.113	.010[a]
Residual	1899788.425	182	10438.398		
Total	2252616.744	198			

Source: Field survey

Regression analysis of WRMB for financial condition with Net sales 2013-14

In table 23, the simple correlation is represented by R-value which indicates a strong positive correlation. The total variation of 96.0% in the dependent variables are indicated by R square. The R square value is also known as a goodness of fit test. So the R square of 96.0% reveals that 96.0% of the data fit the WRMB regression model and the model is not so good by the result of R square.

Table 23: Regression analysis of WRMB for financial conditions with Net sales 2013-14

R	R Square	Adjusted R Square	Std. Error of the Estimate
.983[a]	.960	.941	33.47143

Source: Field survey

The following ANOVA table gives p-value = 0. 000 which is less than 0.005 that concludes as, overall, the WRMB regression model statistically significantly predicts the independent variables.

Table 24: ANOVA table for financial conditions with Average Net sales 2013-14

ANOVA[b]					
Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	515559.840	12	42963.320	38.349	.000[a]
Residual	17925.389	16	1120.337		
Total	533485.230	28			

Source: Field survey

In table 25, the coefficient analysis shows the relationship between dependent and all independent variables. The relationship:

$Y= \alpha + \beta_1X_1+ \beta_2X_2 + \beta_3X_3 + \ldots\ldots\ldots\ldots\ldots\ldots + \beta_nX_n + \varepsilon$

Y (Net sales 2013-14) $= -28.821 + 0.589\ X_1 + .176\ X_2 + (-0.183)\ X_3 + 3.475X_4 + (-1.433)\ X_5 + 1.232X_6 + (-2.157)\ X_7 + 0.123X_8 + 0.143X_9 + (-0.111)\ X_{10} + .215X_{11} + 0.004\ X_{12} + \varepsilon$

Table below shows that β_1 of fixed assets 2013-14 is 0.589 and the regression function of WRMB is Y (Net sales 2013-14) = -28.821 +0.589. It expresses WRMB can be improved by 0.589 fixed assets 2013-14. β_2 of current assets 2013-14 is (0. 176) which implies WRMB can be improved 0.176 by current assets 2013-14. β_3 of equity 2013-14 is (-.183) which implies WRMB can be decreased .183 by equity 2013-14. β_4 of short-term liabilities 13 is (3.475) which implies WRMB can be improved by 3.475 by the short-term liabilities 2013-14. β_5 of long-term liabilities 2013-14 is (-1.433) which implies WRMB can be decreased 1.433 by long-term liabilities. β_6 of total profit 2013-14 is 1.232 which implies WRMB can be improved 1.232 by total profit 2013-14. β_7 of net profit 2013-14 is (-2.157) which implies WRMB can be decreased 2.157 by net profit 2013-14. β_8 of capacity quantity 2013-14 is 0.123 which implies WRMB can be improved 0.123 by capacity quantity 2013-14. β_9 of capacity taka 2013-14 is 0.143 which implies WRMB can be improved 0.143 by capacity quantity 2013-14.

β_{10} of achievement 2013-14 is (-.111) which implies WRMB can be decreased .111 by achievement 2013-14. β_{11} of interest 2013-14 is .215 which implies WRMB can be improved .215 by interest 2013-14. β_{12} of workers 2013-14 is 0. 004 which implies WRMB can be improved 0.004 by workers 2013-14.

Table 25: Coefficient table for financial conditions with Average Net sales 2013-14

Coefficients[a]					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-28.821	21.751		-1.325	.204
Fixed assets	.589	.359	.242	1.644	.120
Current assets	.176	.403	.059	.438	.668
Equity	-.183	.129	-.136	-1.414	.177
Short-term liabilities	3.475	1.134	.266	3.063	.007
Long-term liabilities	-1.433	.928	-.099	-1.545	.142
Total profit	1.232	.252	.751	4.887	.000
Net profit	-2.157	1.143	-.261	-1.887	.077
Capacity quantity	.123	.059	.317	2.070	.055
Capacity taka	.143	.256	.133	.561	.583
Achievement	-.111	.090	-.196	-1.234	.235
Interest	.215	.115	.160	1.867	.080
Workers	-.004	3.859	.000	-.001	.999

Source: Field survey

Regression analysis of WRMB for the financial condition with Net sales 2017-18

In the following table the simple correlation is represented by R-value which indicated a strong positive correlation. The total variation 98.4% in the dependent variables is indicated by R square. The R square value is also known as a goodness of fit test. So the R square of 98.4% reveals that 98.4% of the data fit the WRMB regression model and the model is not so good by the result of R square.

Table 26: Regression analysis of WRMB for financial conditions with Net sales 2017-18

R	R Square	Adjusted R Square	Std. Error of the Estimate
.990[a]	.984	.962	27.01039

Source: Field survey

The following ANOVA table gives p-value = 0. 000 which is less than 0.005 that is concluded as, Overall, the WRMB regression model statistically significantly predicts the independent variables.

Table 27: ANOVA table for financial conditions with Average Net sales 2017-18

ANOVA[b]					
Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	533078.434	13	41006.033	56.206	.000[a]
Residual	10943.420	15	729.561		
Total	544021.853	28			

Source: Field survey

Table 28 shows the coefficient relationship between dependent and all independent variables. The relationship:

$Y= \alpha + \beta_1X_1+ \beta_2X_2 + \beta_3X_3 + \ldots\ldots\ldots\ldots\ldots\ldots + \beta nXn + \varepsilon$

Y (Net sales 2017-18) = -18.459+2.109 X_1+1.989X_2+ (-1.364) X_3+ (-.965) X_4+ (-1.898) X_5 + .731X_6+ (.076)X_7 + 0.182 X_8+ 0. .079X_9+ (-0. 229)X_{10}+ 3.474X_{11}+ (-1.338) X_{12}+ ε

The following table shows that β_1 of fixed assets 2017-18 is 2.109 and regression function of WRMB is Y (Net sales 2017-18) = -18.459+2.109. It expresses that WRMB can be improved by 2.109 fixed assets 2017-18. β_2 of current assets 2017-18 is 1.989 which implies WRMB can be improved 1.989 by current assets 2017-18. β_3 of equity 2017-18 is (-1.364) which implies WRMB can be decreased (-1.364) by equity 2017-18. β_4 of short-term liabilities 17 is (-.965) which implies WRMB can be decreased (-.965) by short-term liabilities 2017-18. β_5 of long-term liabilities 2017-18 is (-1.898) which implies WRMB can be decreased (-1.898) by long-term liabilities 2017-18. β_6 of total profit 2017-18 is .731 which implies WRMB can be improved .731 by total profit 2017-18. β_7 of net profit 2017-18 is (.076) which implies WRMB can be improved (.076) by net profit 2017-18. β_8 of capacity quantity 2017-18 is 0.182 which implies WRMB can be improved 0.182 by capacity quantity 2017-18 .β_9 of capacity taka 2017-18 is 0.079 which implies WRMB can be improved 0.079 by capacity quantity 2017-18. β_{10} of Achievement 2017-18 is (-0.229) which implies WRMB can be decreased 0.229 by achievement 2017-18. β_{11} of interest 2017-18 is 3.474 which implies WRMB can be improved 3.474 by interest 2017-18. β_{12} of workers 2017-18 is (-1.338) which implies WRMB can be decreased (1.338) by workers 2017-18.

Table 28: Coefficient table for financial conditions with Net sales 2017-18

Coefficients[a]					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-18.459	15.021		-1.229	.238
Fixed assets	2.109	1.481	.894	1.424	.175
Current assets	1.989	1.566	.679	1.270	.223
Equity	-1.364	1.366	-.669	-.998	.334
Short-term liabilities	-.965	2.811	-.077	-.343	.736
Long-term liabilities	-1.898	2.028	-.187	-.936	.364
Total profit	.731	.221	.443	3.310	.005
Net profit	.076	1.255	.009	.060	.953
Capacity quantity	.182	.039	.478	4.666	.000
Capacity taka	.079	.080	.094	.996	.335
Achievement	-.229	.083	-.348	-2.757	.015
Interest	3.474	7.904	.068	.440	.667
Workers	-1.338	2.667	-.030	-.502	.623

Source: Field survey

Regression analysis of WRMB for financial condition with Average Net Sales

Table 29 shows the simple correlation presented by R-value (Table 18), which indicates a strong positive correlation. The total variation is 84.0% in the dependent variables is indicated by R square. The R square value is also known as a goodness of fit test. So the R square of 84.0% reveals that 84.0% of the data fit the regression model and the model is not so good by the result of R square.

Table 29: Regression analysis of WRMB for financial conditions with Average Net sales

R	R Square	Adjusted R Square	Std. Error of the Estimate
.917[a]	.840	.701	86.04087

Source: Field survey

The following ANOVA table give *p-value = 0. 001* which is less than 0.005 that is concluded as, overall, the regression model statistically significantly predicts the independent variables.

Table 30: ANOVA table for financial conditions with Average Net sales

ANOVA[b]					
Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	583271.515	13	44867.040	6.061	.001[a]
Residual	111045.462	15	7403.031		
Total	694316.977	28			

Source: Field survey

Table 31 shows the coefficient relationship between dependent and all independent variables. The relationship: $Y= \alpha + \beta_1X_1+ \beta_2X_2 + \beta_3X_3 + \ldots\ldots\ldots\ldots\ldots\ldots + \beta nXn + \varepsilon$

Y (Net sales Average) = 16.651 + (-3.045) X_1 + (-4.305)X_2 + 3.169X_3+ 9.430X_4+ 1.739X_5 + 1.642X_6 + (-2.596) X_7 + 0. 245X_8+ 0.439X_9+ (-0. 413) X_{10} + (-8.331) X_{11} + 1.834X_{12}+ ε

The following table shows that β_1 of average fixed assets is (-3.045) and regression function of WRMB is Y (Net sales Average) = 16.651 + (-3.045). It is expressed that WRMB can be decreased by 3.045 fixed assets. β_2 of current assets is (-4.305) which implies WRMB can be decreased 4.305 by current assets. β_3 of equity is 3.169 which implies WRMB can be improved 3.169 by equity. β_4 of short-term liabilities is 9.430 which implies WRMB can be improved 9.430 by short-term liabilities. β_5 of long-term liabilities is 1.739 which implies WRMB can be improved 1.739 by long-term liabilities. β_6 of total profit is 1.642 which implies WRMB can be improved 1.642 by total profit. β_7 of net profit is (-2.596) which implies WRMB can be decreased by 2.596 by net profit. β_8 of capacity quantity is 0. 245 which implies WRMB can be improved 0.245 by capacity quantity. β_9 of capacity taka is 0.439 which implies WRMB can be improved 0.439 by capacity quantity. β_{10} of Achievement is (-0. 413) which implies WRMB can be decreased 0.413 by Achievement. β_{11} of Interest is (-8.331) which implies WRMB can be decreased 8.331 by Interest .β12 of Workers is 1.834 which implies WRMB can be improved 1.834 by Workers.

Table 31: Coefficient table for financial conditions with Average Net sales

Coefficients[a]					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	16.651	47.850		.348	.733
Fixed assets	-3.045	4.718	-1.142	-.645	.528
Current assets	-4.305	4.988	-1.300	-.863	.402
Equity	3.169	4.353	1.377	.728	.478
Short-term liabilities	9.430	8.955	.667	1.053	.309
Long-term liabilities	1.739	6.461	.151	.269	.791
Total profit	1.642	.704	.879	2.333	.034
Net profit	-2.596	3.997	-.282	-.649	.526
Capacity quantity	.245	.124	.571	1.978	.067
Capacity taka	.439	.254	.459	1.732	.104
Achievement	-.413	.265	-.555	-1.557	.140
Interest	-8.331	25.178	-.145	-.331	.745
Workers	1.834	8.495	.036	.216	.832

Source: Field survey

CONCLUSION

This study discussed the growth and development of WRMB, which is the most important part of the small scale industry of Bangladesh. The study attempted to find out the relationship between sales and other variables of this business sector. Finally, it is

observed that the assets of WRMB is increased by 12.04% from 2013-14 to 2017-18. On the other hand, the net sales are increased by 0.10% from 2013-14 to 2017-18, and the total profit is increased by 2.84% at the mentioned period. The study found a simple correlation between financial conditions of the WRMB with the three dependent variables `net sales 2013-14', `net sales 2017-18', and `average net sales'. The result indicates that education qualification has a great impact on WRMB. Similarly, for total workers, full-time workers, male workers also hold a great impact on WRMB's output. Assets, liability, and profit show a significant relationship with the sales volume of the business. A simple correlation between the financial position and sales revenue is found in this study.

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