Prospect, Barriers and Export Performances of Small Medium Enterprise of Bangladesh

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Abstract

SMEs are playing very paramount role for the economic expansion and development of Bangladesh. This research paper has been conveying to estimate the prospects, barriers and export performances of SMEs in Bangladesh. The research paper has established that the expansion of SMEs and export performance in SME sector are elevated than the other sectors in Bangladesh. In this research the author select six SMEs of Bangladesh naming; Reckitt Benckiser (Bangladesh) Ltd, Caritas Bangladesh, Aamara Technologies Limited, ADN Tel, Apex Foods Ltd., Taufika Foods and Agro Industries Limited for data analysis purposes.

***Key Words:** Small and medium enterprise (SME), Export ,Bangladesh, Economic growth, Reckitt Benckiser (Bangladesh) Ltd, Caritas Bangladesh, Aamara Technologies Limited, ADN Tel, Apex Foods Ltd., Taufika Foods and Agro Industries Limited.*

1. INTRODUCTION

Small and medium enterprises (SMEs) specify to self- supporting trade which employ less than a given number of employees. SME designate the business with the large opening. Despite of global economic catastrophe and intrinsic economic confrontation, the gross domestic product (GDP) of Bangladesh ceaselessly get bigger in addition 6 percent in recent years. Bangladesh was graded fourth amongst the top five rapid-growing emanating economies in 2014 (Asian Development Bank 2014). SMEs are playing very influential enact for the economic expansion of Bangladesh. At the same time, the SMEs of Bangladesh are fronting numerous issue/troubles like capital, training, knowledge, skilled labor, foreign trade opportunity etc. The achievement of SMEs do not attain the anticipation of the Bangladesh perhaps owing to the paucity of entrance to institutional financing, lack of training, absence of consumer base market for SMEs products and inadequacy of formal SMEs entrepreneur expansion action, shortage of decent marketing tools and so on. This research has been conveyed to portray a survey of SMEs, Export performance of SMEs, products of SMEs and barriers of SMEs in Bangladesh.

2. OBJECTIVES OF THE RESEARCH

I. Main Objective

The motive of the research is to determine the ongoing circumstances of SMEs in Bangladesh economy and check out the approaches/techniques to amalgamate the SMEs as a charismatic sector in the economy of Bangladesh.

II. Specific Objective

i. To scrutinize the current circumstances of SME subsector such as agriculture, food, daily product, and technologies in Bangladesh.
ii. To investigate the prospects of SMEs in various sectors;
iii. To assess the volume of foreign exchange earnings by dint of export of SME generated products and services of Bangladesh such as food item, cleaning products, technologies etc.
iv. To discover the existing impediment and barriers of SMEs of Bangladesh in different sectors;

3. PROBLEM STATEMENT

Small medium enterprises in our country have numerous problems, some of these problems are mentioned below:

i. SMEs face various crucial from marketing of products to access to finance,
ii. Shortage of capital and skilled manpower,
iii. Substandard training facility,
iv. Backward sales channels and low level of financial inclusion.

4. LITERATURE REVIEW

Small and medium size enterprises (SMEs) are businesses that have incomes, assets, or a specific number of employees beneath a assured threshold. SMEs play a salient part in an economy, employing vast numbers of people and assisting to shape innovation.

Intensifying expansion and diminishing scarcity, earning disparity and territorial discrepancy are the all-embracing objectives of the present development model in Bangladesh. The foremost scheme for attaining these objectives consist of foundation of prolific employment in the manufacturing and structured service zone and removal of labor force out of the poor skilled and inadequate return agronomy sector and unconventional occupation.

Expansion of small and medium enterprises (SMEs) is predicted as a crucial factor in the development policy of Bangladesh. For attaining double digit growth in manufacturing, matching development of SMEs is thinking about pedantic.

Small and medium-sized enterprises (SMEs) are non-tributary, self-reliant firms which employ smaller than a given number of employees. This number differs across countries. The most periodic upper limit designating an SME is 250 employees, as in the European Union. The SME definition in India as per Section 7 of Micro, Small & Medium Enterprises Development Act, 2006 is based on the investment amount as per the sectors these cater to. Most companies with less than 500 employees are considered to be SMEs. However, some industries are allowed up to 12500 employees.

- Health care and social assistance.
- Accommodation and food service.
- Retail trade.
- Construction.
- Professional, scientific and technical services.

Small and medium enterprises (SME) accomplishment set up a very supreme part of the Bangladesh economy. The SME sector is a vital machine which stimulates the extension of jobs and assets formation in the country's economic system. The SME sector has advanced swiftly over these years.

Top qualities of successful SMEs

- Be passionate about own business, and be persistent.
- Be good at dealing with customers, especially when they're being difficult situation
- Be a life-long learner and modernize one's skills.
- Be willing to mal function and learn from own mistakes.
- Strive for uninterrupted advancement.

SMEs have the stunning capacity to fuel economic advancement. They generate numerous new occupation fortuities, drive the campaign of innovation and expand the tax base. SMEs also raise the confrontation amongst the peers and heat up the market scenario.

There is wide deal that small and medium-sized enterprises (SMEs) are essential to obtaining satisfactory and productive employment as they globally account for two-thirds of all employments and also generate the majority of new occupation. Therefore, the advancement of SMEs has been a prime sector of intervention for the ILO. Its advisory services on SME policies are in top demand among ILO member countries. The ILO provides added value because of its

focus on both the quantitative and qualitative aspects of employment creation and the fact that it serves constituents that provide a large potential outreach.

The total number of SMEs in Bangladesh is approximated to be 79,00,000 establishments. Of them, 93.6 percent are small and 6.4 percent are medium. Small and medium-sized enterprises (SMEs) are the foundation of the national economy in Bangladesh. This sector is playing a dominant position to promote the economy of our country. The part of SMEs sector is massive to reduce the poverty from the country as well.

This paper discloses that the growth of SMEs and employment in SME sector are higher than the other sectors in Bangladesh. Exports of SMEs have great an impact on the total export of Bangladesh.

5. RESEARCH METHODOLOGY

In this research the author   select six small and medium size enterprise of Bangladesh for data analysis purposes, naming Reckitt Benckiser (Bangladesh) Ltd, Caritas Bangladesh**,** Aamara Technologies Limited, ADN Tel, Apex Foods Ltd**,** Taufika Foods And Agro Industries Limited. Here the author used quantitative data collected from the annual report of these six companies.

In this study the author use regression analysis, trend analysis, Pearson Correlation Coefficient test, Chi-Square test, Hypothesis testing, T- test for data analysis purpose.

Company Background

Reckitt Benckiser (Bangladesh) Ltd: It creates simple, innovative products that make it easy for individuals, families and communities to live healthier and happier life. Its brands include Finish, Lysol, Veet, Dettol, Air Wick, Durex, Mortein, Strepsils, Woolite, Vanish and Harpic. In Bangladesh, the most popular product of Reckitt Benckiser was soap and Dettol. Reckitt Benckiser Group is a consumer goods company makes health, hygiene and home products around the country.

Caritas Bangladesh: Caritas Bangladesh is located in Dhaka, Bangladesh, and is part of the Social Advocacy Organizations Industry. Caritas Bangladesh has 50 employees at Dhaka. Caritas Bangladesh has it's headquarter in the capital Dhaka and has eight other diocesan offices. It works on integrated development, disaster management and human resource development of Bangladesh. Over 6000 staff and volunteers implement its programs at national and diocesan level. Caritas Bangladesh began in 1967 as Caritas East Pakistan. Following the devastating cyclone of November 1970 of this country, it was re-organized and became known as the Christian Organization for Relief and Rehabilitation (CORR). The name Caritas was re-introduced in 1976.

Aamara Technologies Limited: Aamara Technologies Limited is located in Dhaka, Bangladesh and it is a part of the Professional and Commercial Equipment and Supplies Merchant Wholesalers Industry. Aamara Technologies Limited has 95 total employees across all of its locations and generates $19.01 million in sales (USD). Aamara is a pioneer in the Information and Communication Technology industry of Bangladesh, having launched their computer and network services back in 1987.

ADN Tel: ADN Telecom was begun as a Private Limited Company and consigned as the 'AdvancedData Networks System Ltd. ' till 2012 in Bangladesh. ADN occupy a various entrance network across the whole country through Wireless, Fiber, and Satellite Infrastructure. 'Simplifying Connectivity' has been the fundamental capability of ADN Telecom. ADN Telecom Limited is located in Dhaka, Dhaka, Bangladesh and is part of the Wired and Wireless Telecommunications Carriers Industry.

Apex Foods Ltd: Apex Foods Limited is a 100% export oriented value-added shrimp processing company of Bangladesh .Apex Foods Ltd. engages in the operation of modern shrimps processing plant. It also exports frozen seafood in North America, EU countries, Australia, and Russia.

Taufika Foods And Agro Industries Limited: Taufika Foods And Agro Industries Limited is engaged in manufacturing of an Ice Cream in Bangladesh. The company has a brand name of the TFAIL is LOVELLO. Taufika Foods And Agro Industries Limited was incorporated in 2011 and is based in Dhaka, Bangladesh.

6. DATA ANALYSIS

Trend Analysis of Revenue of Reckitt Benckiser (Bangladesh) Ltd.

Year (x)	Revenue (Y)	Deviation (X = x - 2016.5)	X ^ 2	X * Y	Trend Analysis Y= a + bX
2013	2432087	-3.5	12.25	- 8512304.5	2251865.25
2014	2669969	-2.5	6.25	- 6674922.5	2608639.607
2015	2884380	-1.5	2.25	- 4326570	2965413.964
2016	3326615	-0.5	0.25	- 1663307.5	3322188.321
2017	3669620	0.5	0.25	1834810	3678962.679
2018	3561899	1.5	2.25	5342848.5	4035737.036
2019	4126150	2.5	6.25	10315375	4392511.393
2020	5333884	3.5	12.25	18668594	4749285.75
Total	28004604		42	14984523	

Source: Annual report of Reckitt Benckiser (Bangladesh) Ltd.

The revenue of trend analysis in increasing year by year.

Future Trend analysis of Return on Capital Employed: (Exponential Trend)

Year (x)	Return on Capital Employed (Y)	Deviation X = x - 2018	X ^ 2	Log Y	X * Y
2016	1.47	- 2	4	0.1673	- 0.3346
2017	1.39	- 1	1	0.1430	- 0.1430
2018	1.09	0	0	0.0374	0
2019	1.07	1	1	0.0294	0.0294
2020	0.97	2	4	- 0.0132	- 0.0264
Total		0	10	0.3639	- 0.4746

Now, $Y' = A * B \wedge x$

Now Estimate the Return on Capital employed of year 2021 is,

$Y' = A*B^x$

  $= 1.1824 * (0.8965) \wedge x$

  $= 1.1824 * (0.8965) \wedge 3$ (2021 – 2018 = 3)

  $= 0.851952345$

So the trend analysis of Return on capital employed of year 2021 is 0.85195, so return on ROCE is decreasing.

A company's ROCE should always be compared to the current cost of borrowing of a company. A return any lower than this suggests a company is making poor use of its capital resources.

Trend Analysis of EPS: (Non-linear Trend)

Year (x)	EPS (Taka) Y	Deviation (X) = x - 2018	X ^ 2	X ^ 4	X * Y	X ^ 2 * Y
2016	62.66	-2	4	16	- 125.32	250.64
2017	80.63	-1	1	1	- 80.63	80.63
2018	70.22	0	0	0	0	0
2019	131.06	1	1	1	131.06	131.06
2020	156.38	2	4	16	312.76	625.52
Total	$\sum Y = 500.95$	$\sum X = 0$	$\sum X \wedge 2 = 10$	$\sum X \wedge 2 = 34$	237.87	1087.85

Now, $Y = Na + b * \sum X \wedge 2$

$\sum X * Y = b * \sum X \wedge 2$

$\sum X \wedge 2 * Y = a * \sum X \wedge 2 + C * \sum X \wedge 4$

$500.95 = 5 * a + 10 * C$

$N – b = 10b$

$1087.85 = 10 * a + 34 * c$

$b = (\sum X * \sum Y) / \sum X \wedge 2$

$b = 23.787$

$2 * 500.95 = 2 * (5 * a + 10 * c)$

$c = 6.1393$

$500.95 = 5 * a + 10 * C$

$a = 87.9114$

$Y = a + b X + c X \wedge 2$

  $= 87.9114 + 23.787 * X + 6.1393 * X \wedge 2$

$2016 = 87.9114 + 23.787 (- 2) + 6.1393 * (- 2) \wedge 2 = 64.8946$

2017 = 87.9114 + 23.787 (- 1) + 6.1393 *(- 1) ^ 2 = 70.2637

2018 = 87.9114 + 23.787 (0) + 6.1393 * (0) ^ 2 = 87.9114

2019 = 87.9114 + 23.787 (1) + 6.1393 * (1) ^ 2 = 117.8377

2020 = 87.9114 + 23.787 (2) + 6.1393 * (2) ^ 2 = 160.0426

EPS is increasing year by year.

Business Link-Wise Allocation of Finished Goods

Business Line	Year	Unit of Measure	Quantity Unit (X)	Amount in Taka (Y)
Household and Toiletries	2016 (1)	Metric Ton	556	35548351
	2017 (2)		545	23452700
	2018 (3)		534	74553727
	2019 (4)		671	199125874
	2020 (5)		621	220774982
Total			$\sum X = 2927$	553455634

Here the author use linear regression analysis method to interpret the relationship between the quantity unit of finished goods and amount spend in producing these finished goods.

For regression analysis, Y = a + bX

Now, a = ($\sum$ Y – b $\sum$ X) / n ,   n = 5

And   b = { n $\sum$ (X * Y) - $\sum$ X * $\sum$ Y } / { $\sum$ (X ^ 2) - $\sum$ (X) ^ 2

So the author get, b = 1389340.58,   a = - 702628848.7

Now,

Y2016 = - 702628848.7 + (1389340.58 * 556) = 69844513.78

Y2017 = - 702628848.7 + (1389340.58 * 545) = 54561767.4

Y2018 = - 702628848.7 + (1389340.58 * 534) = 39279021.02

Y2019 = - 702628848.7 + (1389340.58 * 671) = 229618680.5

Y2020 = - 702628848.7 + (1389340.58 * 621) =160151651.5

Business Link-Wise Allocation of Finished Goods

Business Line	Year	Unit of Measure	Quantity Unit (X)	Amount in Taka (Y)
Household and Toiletries	2016 (1)	Kilo Litre	390	24755135
	2017 (2)		378	19702586
	2018 (3)		346	22420304
	2019 (4)		593	41827292
	2020 (5)		483	52373860
Total			$\sum X = 2190$	$\sum Y = 161079177$

Here the author also used   linear regression analysis

For regression analysis, Y = a + bX

Y2016 = - 15541578.3 + (109035.1911 * 390) = 26982146.23

Y2017 = - 15541578.3 + (109035.1911 * 378) = 25673723.94

Y2018 = - 15541578.3 + (109035.1911 * 346) = 22184597.82

Y2019 = - 15541578.3 + (109035.1911 * 593) = 49116290.02

Y2020 = - 15541578.3 + (109035.1911 * 483) = 37122419

Business Link-Wise Allocation of Finished Goods

Business Line	Year	Unit of Measure	Quantity Unit (X)	Amount in Taka (Y)
Pharmaceuticals	2016(1)	K Litre	25	4249333
	2017 (2)		19	4351802
	2018 (3)		50	12490107
	2019 (4)		75	23229027
	2020 (5)		54	15106936
Total			∑ X = 223	∑ Y = 59427205

Here the author also used   linear regression analysis

For regression analysis, Y = a + bX

Y2016 = - 3563858.827 + (346396.8571 * 25) = 5096062.601

Y2017 = - 3563858.827 + (346396.8571 * 19) = 3017681.458

Y2018 = - 3563858.827 + (346396.8571 * 50) = 13755984.03

Y2019 = - 3563858.827 + (346396.8571 * 75) = 22415905.46

Y2020 = - 3563858.827 + (346396.8571 * 54) = 15141571.46

Data Analysis of ADN Tel: (Figure in Million (BDT)

Particulars	2019	2018	2017	2016	2015
Net Revenue	1016.30	920.42	829.45	757.32	617.30
Gross Profit	410.49	405.28	347.57	297.32	241.80
Profit before Tax	161.01	182.31	152.17	125.07	95.80
Net Profit after Tax	127.11	119.63	105.94	87.76	64.67
Paid-Up Capital	448.60	448.60	448.60	209.30	209.30
Earnings Per Share (EPS) in Taka	2.83	2.67	2.52	2.10	1.54

(Source: Annual Report, Official website of ADN Tel)

Here the Author used Trend Analysis Model for Data Analysis Purpose

Particulars	2015 (Base Year)	2016	2017	2018	2019
Net Profit	617.30	122.68%	134.36%	149.10%	164.64%

Gross Profit	241.80	122.96%	143.74%	167.61%	169.76%
Net Profit before Tax	95.80	130.55%	158.84%	190.30%	168.07%
Net Profit after Tax	64.67	135.70%	163.82%	184.99%	196.55%
Paid up Capital	209.30	100%	214.33%	214.33%	214.33%
EPS	1.54	1.36%	1.64%	1.73%	1.83%

Correlation Coefficient Test for Two Years Data Analysis of ADN Tel

Name of Segment (Service)	Year- 2019-2020(X)	Year- 2018-2019(Y)
Local Service	BDT in Million	
Internet Service	126.72	92.37
Data Services-IPVPN- IT Support & services	351.66	362.64
IP Telephone Service	18.92	20.21
Telephone & Hosting	0.61	0.42
Digital Business	26.60	22.34
Project Sales	59.01	47.61
Total	583.52	545.59
Average (Mean)	x = 97.253333	Y = 90.9317

The Pearson Correlation Coefficient

$R = \{ \sum (X - x) * (Y - y) \} / \sqrt{\sum \{ (X - x)^2 * (Y - y)^2 \}}$

Now, $(X - x)^2 = \{ (126.72 - 97.253333)^2 + \ldots + (59.01 - 97.253333)^2 \} = 87521.52753$

$(Y - y)^2 = \{ (92.37 - 90.9317)^2 + \ldots + (47.61 - 90.9317)^2 \} = 93602.98668$

$\sum \{ (X - x) * (Y - y) \} = -1.592428682 * 10^{-04}$

So, R = - 0.0004419342835

So, negative correlation exists among various services (local services sales, Internet services) of year 2019-20 and 2018-19 of ADN Tel Company.

t- test, $t = r * \sqrt{(n - 2) / 1 - r^2}$

t = - 0.000883868653

Export Services

Multiple Label Switching (MPLS) (X)	International Private leased Circuit (IPLC)(Y)	X * Y	X ^ 2	Y ^ 2
505.35	69.98	35364.393	255378.6225	4897.2004
483.48	25.74	12444.7752	233752.9104	662.5746
Total = 988.83	95.72	47809.1682	489131.5329	5559.775

Correlation Coefficient, r = 0.999986204

$$\approx 1$$

So Multiple Label Switching (MPLS) is perfectly positively correlated with the International Private leased Circuit (IPLC).

Data Analysis of Aamara Technologies Limited (Figure in Million (BDT)

Product	2020 (X)	2019 (Y)
Sales of Equipment	224.6577	216.5904
Sales of Services	328.4694	206.4210
Sales of Software	127.6338	129.3884
Sales of Bandwidth	1237.5093	1016.8435
Total	1918.2702	1569.2433
Average (Mean)	479.56755	392.310825

Correlation Coefficient Test for Two Years Data Analysis of Aamara Technologies Limited

Products	X (Year 2020)	Y (Year 2019)	X * Y	X ^ 2	Y ^ 2
Sales of Equipment	224.6577	216.5904	48658.70111	50471.108217	46911.40137
Sales of Services	328.4694	206.4210	67802.98202	107892.1467	42609.62924
Sales of Software	127.6338	129.3884	16514.33317	16290.3869	16741.35805
Sales of Bandwidth	1237.5093	1016.8435	1258353.288	1531429.268	1033970.703
Total	1918.2702	1569.2433	1391329.304	1706082.91	1140233.092

Correlation Coefficient,

$$r = \{ (n * \sum X * Y - \sum X * \sum Y) \} / \sqrt{ \{ n \sum X ^ 2 - (\sum X) ^ 2 \} * \{ n \sum Y ^ 2 - (\sum Y) ^ 2 \} }$$

$$= 0.994671374$$

$$\approx 1$$

So Sales of Equipment, Sales of Services, Sales of Software and Sales of Bandwidth of Aamara Technologies Limited between year 2019 and 2020 are perfectly positively correlated.

Hardware, Equipment and Software Revenue

Product	X (Sale of Year 2020)	Y (Sale of Year 2019)	X*Y	X^2	Y^2
SS sale	1110	354	392.940	1232100	125316
POS sale	4847	6500	31505.500	23493409	42250000
CPS sale	576	545	313920	331776	297025
HSM sale	4	15	60	16	225
CISCO sale	4	9	36	16	81
Oracle sale	9	135	1215	81	18225
Total	6550	7558	347129.44	25057398	42690872

Correlation Coefficient, r = - 0.324297634

So SS sale, POS sale, CPS sale, HSM sale, CISCO sale, Oracle sale of year 2020 and year 2019 are negatively correlated.

Data Analysis Caritas Bangladesh

Serial No.	Description	Number of Beneficiaries (X)	Amount in Taka (Y)
1	Seminars/Training Meetings/Workshop Conference	6729	188320
2	Educational support for Students and Societies	215	111850
3	Sports and Cultural Movement	1751	26000
4	Assistance for Medical Treatment	198	334800
5	House Builders/Repairs	3083	64750
6	Financial Assist for Marriage	1	9000
7	Assistance for Publications	6541	130000
8	Miscellaneous	1843	113260
Total		20361	977980
Mean		2545.125	122247.5

Null Hypothesis: Number of Beneficiaries is not consistently related to the amount of money.

Alternative Hypothesis: Number of Beneficiaries is consistently related to the amount of money.

Here the author used T- test:

T cal = 8586.5949

Here, t (cal)value 8586.5949 is greater than t table value (2.447), at 5% level of significance so reject the Null Hypothesis, Number of Beneficiaries are not consistently related to the amount of money so is not true.

Observed Value Caritas Bangladesh

Trainee	Name of Project			
	RTS	BTS	VTC	Total
Number of Admitted Trainee	9634	1560	324	11518
Number of Passed out Trainee	8016	1110	324	9450
Total	17650	2670	648	20968

Here the author used the Chi-Square Test,

Test of Hypothesis:

Null Hypothesis: Type of project has no impact on the number of admitted and passed out trainee of Caritas Bangladesh.

Alternative Hypothesis: Type of project has an impact on the number of admitted and passed out trainee of Caritas Bangladesh.

Expected Value

Trainee	Name of Project			
	RTS	BTS	VTC	Total
Number of Admitted Trainee	9695.3787	1466.6663	355.9550	11518
Number of Passed Out Trainee	7954.6213	1203.3337	292.0450	9450
Total	17650	2670	648	20968

Now Chi- Square Test = $\lambda^2 = \sum (a_{ij} - e_{ij})^2 / e_{ij}$

= 20.40596031

Degrees of Freedom = (3 – 1) * (2 – 1) = 2

Table value (2, 0.005) = 5.99

Here the calculated value (20.40596031) is greater than the critical value/table value (5.99), so the null hypothesis is rejected. So Type of project has no impact on the number of admitted and passed out trainee is not true.

Correlation between the Number of Instructor/Staff Trainee and the Number of Employed/Self-Employed Graduates

Name of Project	Number of Instructor/ Staff Trainee (X)	Number of Employed / Self - Employed Graduates (Y)
RTS	702	6536
BTS	52	917
VTC	23	252
Total	777	7705
Average (Mean)	259	2568.3333

Now, Correlation Coefficient

r = { (n * $\sum$ X * Y - $\sum$ X * $\sum$ Y) } / $\sqrt{}$ { n $\sum$ X ^ 2 - ($\sum$ X) ^ 2 } * { n $\sum$ Y ^ 2 - ($\sum$ Y) ^ 2 }

Here, $\sum$ X = 777, $\sum$ X ^ 2 = 4 6037, $\sum$ Y = 7705, $\sum$ Y ^ 2 = 43623689, $\sum$ X * Y = 4641752

So, Correlation Coefficient

r = 0.998278273

$\approx$ 1

So, numbers of instructor are perfectly correlated with the number of Employed/Self-employed graduates of Caritas   Bangladesh.

Data analysis of Apex Foods Ltd.

Particulars	2019-20	2018-19	2017-18	2016-17	2015-16
Revenue	2184387	1712670	1922168	1642772	2031947
Gross Profit	189858	197054	209731	195808	191521
Operating Profit/Loss	85399	96071	102415	4470	(20800)
Profit before Tax	36422	38406	33931	27037	9278
Net Profit/Loss after Tax	10738	11781	9660	8920	(13229)
Earnings Per share	1.88	2.07	1.69	1.55	(2.32)
Dividend Per Share	1.50	2.00	2.00	2.00	2.00

Here the Author used Trend Analysis Model for Data Analysis Purpose

Particulars	2015-16 (Base Year)	2016-17	2017-18	2018-19	2019-20
Revenue	2031947	80.85%	94.60%	84.29%	107.50%
Gross Profit	191521	102.24%	109.51%	102.89%	99.13%
Operating Profit/Loss	(20800)	21.49%	492.38%	461.88%	410.57%
Profit before Tax	9278	291.41%	365.71%	413.95%	392.56%
Net Profit/Loss after Tax	(13229)	67.43%	73.02%	89.05%	81.17%
Earnings Per Share	(2.32)	66.81%	72.84%	89.22%	81.03%
Dividend Per Share	2.00	100%	100%	100%	75%

Country Wise Breakup of the Export Income for the Year 2019-20

Name of Country	Quantity in Kg (X)	Export Income (USD)
Belgium	56000	6122825
Canada	39327	959280
Germany	322000	3148850
Netherlands	494170	5354380
New Zealand	8560	89960
Russia	64100	744091.60
Switzerland	17000	571200
Ukraine	72000	614974
UK	715619	3230603.81
USA	401432	5214567
Total	2190208	26050731.41

Particulars	Value
Export Mean	2605073.141
Standard Deviation	2191449.804
Coefficient of Variance	0.84

Financial Performance of Taufika Foods and Lovello Ice-cream PLC in 2020-21

The financial results of the Company for the year 2020-21 with a comparison of 2019-20 are summarized below:

(BDT in Millions except per Share Data)	2020-2021	2019-2020
Revenue	850.8	942.87
Gross Profit	355.89	390.48
Operating Profit	216.2	241.2
Profit before tax	96.92	85.24
Tax	1.91	23.19
Profit after Tax	95.01	62.05
Earning Per Share(EPS)	1.41	1.31

From the above table we see that revenue of Taufika Foods and Lovello Ice-cream PLC is increased from year 2019-2020 to year 2020-2021, similarly gross profit, operating profit also increased. But Tax, Profit after Tax and EPS are decreased.

Income Statement Taufika Foods and Lovello Ice-cream PLC

Million in BDT	2016 A	2017 A	2018 A	2019 A	2020 A
Revenue	65	479	779	923	943
COGS	(45)	(295)	(455)	(538)	(552)
Gross Profit	20	183	324	385	390
Administrative Expenses	(22)	(3)	(9)	(14)	(19)
Marketing Expenses	-	(60)	(107)	(121)	(131)
Operating Expenses	(22)	(63)	(116)	(135)	(149)
Operating Profit	(1)	120	208	251	241
Finance Expenses	(16)	(94)	(126)	(161)	(155)
Non-Operating Income	-	3	5	6	3
Net Profit Before WPPF	(17)	29	87	96	90
WPPF	-	-	(4)	(5)	(4)
Profit Before Tax	(17)	29	83	91	85
Income Tax Expense	(0)	(26)	(40)	(30)	(23)

Profit after tax	(17)	3	43	62	62
EPS	(0.32)	0.05	0.77	1.12	1.13

From the above mention table the author observed that revenue and gross profit of Taufika Foods and Lovello Ice-cream PLC is increased year by year. EPS and profit after tax is also increased year by year.

Ratios of Taufika Foods and Lovello Ice-cream PLC

	2016 A	2017 A	2018 A	2019 A	2020 A
Gross Profit Margin	31.3%	38.2%	41.6%	41.8%	41.4%
Op. Profit Margin	- 1.7%	25.1%	26.7%	27.2%	25.6%
Net Profit Margin	- 26.5%	0.5%	5.5%	6.7%	6.6%
Revenue Growth	NA	633.1%	62.8%	18.5%	2.2%
NPAT Growth	NA	NM	1601.6%	44.9%	0.7%
Receivable Turnover	5.9x	13.2x	8.2x	5.1x	3.9x
Inventory Turnover	1.0x	3.0x	3.2x	2.8x	2.3x
Debt to Asset	79.3%	80.3%	67.9%	60.0%	47.7%
Net Debt to Equity	- 4090.7%	2174.5%	1042.9%	216.2%	113.1%
Return on Asset	- 3.0%	0.3%	3.2%	3.8%	3.5%
Return on Equity	106.1%	6.4%	51.8%	14.5%	8.9%
Effective Tax Rate	2.3% s	91.3%	48.7%	32.5%	27.2%

From the above mention table the author observed tha**t** Taufika Foods and Lovello Ice-cream PLC's gross profit margin, operating profit margin and net profit margin are increased year by year. Revenue growth is decreasing. Receivable turnover is also decreasing, Inventory turnover ratio and Debt to Asset ratio are also decreasing year by year. Net debt to Equity, Return on Asset ratio is also increasing. Return on Equity and Tax rate are decreased continuously.

Total Sectoral Enterprise Export and Exports by SMEs of Bangladesh

Sectoral Distribution of Enterprise	Sectoral Export (USD Million)	Exports by SMEs (USD Millions)	Share of SMEs in Sectoral Export (%)
Woven Garments	3598	450	12.5%
Knitwear	2819	352	12.5%
Leather	221	94	42.5%
Jute Goods	307	12	3.9%
Fertilizer and Chemical products	197	0	0.0
Footwear	88	44	50.0%
Ceramic Production	29	0	0.0%

Engineering Goods	85	20	23.5%
Petroleumby-Products	35	0	0.0
Handicrafts	5	5	100
Others	621	N.A.	N.A.
Total Exports	8652	977	11.3%

Source: Miah (2006)

Null Hypothesis:

H0: b = 0: Export revenue from SME sector has no impact on Total Sectoral Enterprise Export of Bangladesh.

Alternative Hypothesis:

H1: b > 0: Export revenue from SME sector positive impact on Total Sectoral Enterprise Export of Bangladesh, i.e.

Slope coefficient b > 0

The test the null hypothesis using one - tailed t - test

Here the author get from T - test, Tcal = 1.832832575

T, tab at 5% level of significance = 1.812

So, T cal > T tab

Here, t (cal)value 1.832832575 is greater than t table value (1.812), at 5% level of significance so reject the Null Hypothesis, so Export revenue from SME sector has no impact on Total Sectoral Enterprise Export of Bangladesh is not true.

So the alternative hypothesis the Export revenue from SME sector positive impact on Total Sectoral Enterprise Export of Bangladesh, is true.

7. DISCUSSION & ANALYSIS

In this paper the author analysis six top SMEs of Bangladesh and export performance of SME in the field of total sectoral export.

In this paper Reckitt Benckiser (Bangladesh) Ltd, Caritas Bangladesh, Aamara Technologies Limited, ADN Tel,Apex Foods Ltd, Taufika Foods And Agro Industries Limited are selected for data analysis purposes.

For Reckitt Benckister (Bangladesh) which products are mainly soap and Dettol, the author observe that in terms of revenue Reckitt Benckister is performing well, its revenue is increased year by year, which indicate that people of Bangladesh are more concern about cleanliness, they purchase various types of soap and Dettol for keeping a safe and clean life.

Again the Return on capital employed (ROCE) is decreasing of Reckitt Benckister (Bangladesh) , which indicate that this small medium enterprise is not using its capital efficiently and is not

generating a high return on the investment. ROCE is an indicator of a company's efficiency, so in terms of ROCE the Reckitt Benckister (Bangladesh) is loss its efficiency year by year.

The Earning per share of Reckitt Benckister (Bangladesh) is increasing year by year, the EPS is increasing at a non-linear trend, the higher a company's EPS, the more profitable it's likely to be. A higher EPS indicates that greater value because investors will pay more for a company's shares if they think the company has higher profits relative to its share price. So Reckitt Benckister (Bangladesh) is a profitable SME.

For Business link-wise allocation of finished goods in terms of Household and toiletries the Reckitt Benckister (Bangladesh) shows that if the Quantity Unit increased, amount of taka is also increased, which indicate that the SME has produced more products than it has sold.

For Business link-wise allocation of finished goods in terms of Pharmaceuticals products Reckitt Benckister (Bangladesh) shows that if the Quantity Unit increased, amount of taka is also increased, which indicate that the SME produced more products than it's sold.

The amount of finished goods inventory is decreased when items are sold, stolen, broken/damaged, or returned to the supplier, so in terms of finished goods Reckitt Benckister (Bangladesh) face less sold but the products of SMEs are not stolen, damaged or returned to the suppliers it is a good sign of business.

The total of the finished goods inventory is increased when inventory is purchased and new items are received for resale, so in this regards this SME is performing well.

AND Tel is another top SME of Bangladesh. In this research the author found that in terms of Net revenue, Gross profit, Profit after tax, Net profit after tax, Paid-up capital, Earning per share (EPS) of year 2015, 2016, 2017,2018,2019 the ADN Tel is performing well. Revenue, gross profit, net profits are increased year by year. It is an indicator of good economic performance. It's paid up capital is also increased year by year. Increase of Paid-up share capital is also popularly known as further issue of Share Capital.

The name of Service of ADN Tel are Local Service, Internet Service, Data Services-IPVPN- IT Support & services, IP Telephone Service, Telephone & Hosting, Digital Business, Project sales etc. Here the author found that there is a negative correlation exists among various services (local services sales, Internet services, IP -Telephone service and others) of year 2019-20 and 2018-19 of ADN Tel Company. Which indicate that all these services/products are inversely related to each other.

A negative correlation is a relationship between two variables such that as the value of one variable increases, the other decreases. So if the price/ value of one variable/product like Internet Service increase the value of other service like Data Services, IPVPN-IT Support, Digital business are decreased and vice versa.

Again the author also found the t-test value is negative; A negative t-value indicates a reversal in the directionality of the effect, which has no bearing on the significance of the difference between groups. So the service value of ADN Tel of year 2018-19 and 2019-2020 has no significance impact on each other.

In terms of export services ADN Tel has Multiple Level Switching and International Private Leased Circuit (IPLC) are perfectly correlated. The primary function of a switching system is to establish an electrical path between a given inlet-outlet pair. Multi-layer switching combines layer

2, 3 and 4 switching technologies and provides high-speed scalability with low latency. Multi-layer switching can move traffic at wire speed and also provide layer 3 routing.

The international private leased circuit provides businesses access to the internet, data exchange, and video and voice communication capabilities. IPLC dedicated connections provide guaranteed bandwidth, high-quality connection and a high level of security through physical separation of channels. Service Providers use MPLS as the base transport protocol these days.

In MPLS, the switching of traffic is based on the labels assigned to the network packets. While in IP routing, it is based on the destination IP address. In MPLS, a fixed and dedicated path is established for the routing of network packets. An IPLC (international private leased circuit) is a point-to-point private line used by an organization to communicate between offices that are geographically dispersed throughout the world.

Here the Multiple Label Switching (MPLS) is perfectly positively correlated with the International Private leased Circuit (IPLC) of ADN Tel Company. Which means that a perfect positive correlation, or a direct relationship exists between MPLS and IPLC. It is a good sign, ADN Tel provide service both locally and internationally smoothly.

Aamara Technologies Limited is another top SME of Bangladesh**.** Its service/ products are**.** The product/service of this SME's are: Sales of Equipment, Sales of Services, Sales of Software, Sales of Bandwidth. The author used Correlation Test of year 2019 and 2020.Here correlation coefficient is one, So Sales of Equipment, Sales of Services, Sales of Software and Sales of Bandwidth of Aamara Technologies Limited between year 2019 and 2020 are perfectly positively correlated. Which means if sales of equipment is increased than the other product Sales of Services, Sales of Software and Sales of Bandwidth are also increased and vice versa. And the sales of these products of year 2019 and 2020 are interrelated and significant impact on each other.

Othe products of Aamara Technologies Limited are SS sale, POS sale, CPS sale, HSM sale, CISCO sale, Oracle sale. Here the author used Correlation Test, and get result $r = -0.324297634$, So SS sale, POS sale, CPS sale, HSM sale, CISCO sale, Oracle sale of year 2020 and year 2019 are negatively correlated. If SS sale increased than other product sale like CPS, HSM, Oracle sale are decreased and vice versa.

So the SS sale, POS sale, CPS sale, HSM sale, CISCO sale, Oracle sale of Aamara Technologies Limited of year 2019 and 2020 has no significance impact on each other.

Caritas Bangladesh is another top SME of Bangladesh and is part of the Social Advocacy Organizations Industry, It is work for Relief and Rehabilitation. The service of the SME's are Seminars/Training meetings/Workshop Conference, Educational support for students and societies, Sports and cultural movement, Assistance for medical treatment, House builders/repairs, Financial assist for marriage, Assistance for publications, Miscellaneous and etc.

Here the author used T-test and found that Number of Beneficiaries are not consistently related to the amount of money so is not true or it is false so the Number of Beneficiaries are consistently related to the amount of money is true. CARITAS Bangladesh provides money for relief and rehabilitation purpose. Number of Beneficiaries got money for various purposes the amount of money is sufficient and appropriate for a specific purpose. So it is good indicator of Caritas Bangladesh .

Name of the project of Caritas Bangladesh are RTS, BTS and VTC. BTS stands for Boyra Technical School (BTS), RTS stands for Regional Technical Schools (RTS), VTC stands for Voluntarily Counseling and Testing (VCT) services provided to drug addicts, sex workers (person). Here the author used Chi-Square Test, and found that Type of project has an impact on the number of admitted and passed out trainee of Caritas Bangladesh. Here the Regional Technical school has the number of admitted trainee and the number of passed out trainee difference is medium. In terms of Boyra Technical School the difference between number of admitted trainee and the number of passed out trainee is high, in terms of Voluntarily Counseling and Testing (VCT) the number of admitted trainee and the number of passed out trainee is equal.

The author also found the relationship between the number of Instructor/ staff trainee and the number of employed/self-employed graduates, here the author get the number of instructors are perfectly correlated with the number of Employed/Self-employed graduates of Caritas Bangladesh. It is also a good indicator of Caritas Bangladesh.

Apex Foods Ltd is another top SME of Bangladesh. Here the author used trend analysis for data analysis purposes. For year 2015-16,2016-17,2017-18,2018-19,the gross profit ,Operating profit, Profit before Tax, Net Profit/Loss after Tax, Earnings Per share, Dividend Per Share are increased continuously but in terms of year 2019-2020 the rate is slightly decreased , because of COVID-19.

Apex Foods Ltd. also performs foreign export. In this research author found low value of Standard Deviation comparatively to its average mean in terms of export, which means less market volatility in export market of Bangladesh Food. In terms of export high volatility increase export income, the potentiality of make more money quickly is possible if high volatility exists in export market. Again high volatility in export market indicates diversify the economy in various sectors. So in terms of food export less volatility indicate Bangladesh earn comparatively less income but less risk in performing foreign food trade.

The coefficient of variance for food export is 0.84 less than 1, which indicate less risk return trade off, so less riskiness in export market of Bangladesh Food item.

Taufika Foods and Lovello Ice-cream PLC is another known SME of Bangladesh. From the above table we see that revenue of Taufika Foods and Lovello Ice-cream PLC is increased from year 2019-2020 to year 2020-2021, similarly gross profit, operating profit also increased. But Tax, Profit after Tax and EPS are decreased.

The author also observed that revenue and gross profit of Taufika Foods and Lovello Ice-cream PLC is increased year 2016-2020. EPS and profit after tax is also increased year by year. So in this regards this SME is performing well.

From the above mention table the author observed tha**t** Taufika Foods and Lovello Ice-cream PLC's gross profit margin, operating profit margin and net profit margin are increased year by year. A higher gross margin typically indicates that a company is more efficiently run and more financially stable (in operations) than others in the same business. Typically, the gross profit margin of a business is a measure of its efficiency. It indicates how well a company is utilizing its raw materials and direct labor.

A higher operating profit margin means that a company has lower fixed cost and a better gross margin or increasing sales faster than costs, which gives management more flexibility in determining prices.

The net profit margin, also known as net margin, indicates how much net income a company makes with total sales achieved. A higher net profit margin means that a company is more efficient at converting sales into actual profit.

Revenue growth is decreasing of this company. A decrease in revenue is bad for a business. So the revenue is decreasing, Taufika Foods and Lovello Ice-cream PLC is at risk of not breaking even or having very low margins of safety and levels of profit.

Receivable turnover is also decreasing; a low or declining accounts receivable turnover indicates a collection problem from its customer. Also, there is an opportunity cost of holding receivables for a longer period of time. So Taufika Foods and Lovello Ice-cream PLC Company should re-evaluate its credit policies to ensure timely receivable collections from its customers.

Inventory turnover ratio and Debt to Asset ratio are also decreasing year by year of Taufika Foods and Lovello Ice-cream PLC. A decrease in inventory turnover means that stock is moving slower and the company is selling fewer goods are being sold or they 've had to lower the markup rate for some reason. This will lower their margin. Investors are interested in knowing how liquid their company's inventory is and how fast they can turn it into cash.

A low total-debt-to-total-asset ratio isn't necessarily good or bad. It simply means that the company has decided to prioritize raising money by issuing stock to investors instead of taking out loans at a bank.

Net debt to Equity, Return on Asset ratio is also increasing of Taufika Foods and Lovello Ice-cream PLC. A higher debt-to-equity ratio often signifies that a company poses a higher risk to its shareholders, increasing the possibility of bankruptcy if profits slow.

A higher ROA means the company Taufika Foods and Lovello Ice-cream PLC is more efficient and productive at managing its balance sheet to generate profits while a lower ROA indicates there is room for improvement.

Return on Equity and Tax rate are decreased continuously of Taufika Foods and Lovello Ice-cream PLC. Declining ROE suggests the company Taufika Foods and Lovello Ice-cream PLC is becoming less efficient at creating profits and increasing shareholder value. To calculate the ROE, divide a company's net income by its shareholder equity.

A tax rate is a percentage at which an individual or corporation is taxed. A progressive tax rate imposes higher payments as income increases. A regressive tax rate imposes lower payment as income decreased.

The Export revenue from SME sector positive impact on Total Sectoral Enterprise Export of Bangladesh, is true. So SME are play an important role on the Total Sectoral Enterprise Export of Bangladesh.

8. CONCLUSION

Small and medium enterprises (SMEs) have been acting a crucial part in the elaboration of the economy of Bangladesh, and it can be asserted that it is the buttress of industrial enlargement in the country. This paper strives to canvass the magnitude to which the economy has benefited from the amplification of the SME sector and recognize the assistance of the SME Foundation in the undertaking of boosting and thriving SMEs.

The extension of SMEs and the broadening of employment in the SME sector are more advanced than the other sectors in Bangladesh. This sector devotes to expanding the rural sector of Bangladesh.

SMEs are accounting for 25% of the GDP of Bangladesh and 80% of total industrial jobs; and therefore, significantly have been contributing to 6% to 8% of the economic growth rate in the last decade of Bangladesh.

As SMEs have more resilient rendering fortuity compared to giant size enterprises, they conform to the swap in demand in a short time and reach full competition conditions quickly. Thus they bequeath to national income, employment, productivity and entrepreneur training.

SMEs afford jobs and tax revenue, which assists to sustain local businesses and services. SMEs are generally associates in community projects. They also subsidize to the local economy by buying goods and services from local businesses.

The paper disclose that the elaboration of the SME sector played a prime character in bestowing to the economic magnification through providing assist to the existing SMEs, creating non-traditional opportunities, generating employment, making the labor force more proficient and competent through training, intensifying labor productivity, and ameliorating product and services quality.

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