CHAPTER : 3

EXPORT PERFORMANCE OF BANGLADESH

(POST INDEPENDENCE PERIOD : 1972-73 TO 1985-86)

3.1 INTRODUCTION

Bangladesh immediately after independence in 1971 has been endeavouring to boost up her exports with an objective to obtain export led-growth. Export sector has become strategic to cope with the rapidly growing imports and increasing dependence on foreign aid of the economy. The present chapter is planned to analyse the performance of exports along with other related factors during post-independence period from 1972-73 to 1985-86.

3.2 THE CHANGING PATTERN OF AGGREGATE EXPORTS AND IMPORTS IN BANGLADESH

The changing behaviour of exports and imports reflects how they were changing over a period of time and which one was running fast with the development of the country.

Bangladesh is facing a deficit balance of trade since its inception. The export receipts of the country is required to finance the growing needs of developmental imports. To fill up the gap between them the export regime has to run faster than import. The analysis of changing behaviour of exports and imports will tell about their comparative rate of increase over a period of time and help to reach a conclusion whether the export regime of the country is marching faster than import

to achieve surplus or equilibrium in balance of trade.

In general we have limited our analysis during the period from 1972-73 to 1985-86. But whenever data is available the analysis has been extended upto 1986-87.

The aggregate exports and imports of Bangladesh increased during the period under review. The aggregate exports rose from TK 276.85 crore (US $ 376 million) in 1972-73 to TK.2716.60 crore (US $ 909 million in 1985-86 and TK. 3064.3 crore (US $1000 million) in 1986-87.

Table 3.1 shows the changing pattern of exports and imports during 1972-73 to 1986-87 in taka terms and in US dollar terms. The value index of export receipts in TaKa terms increased from 100 in 1972-73 to 1106.84 in 1986-87. That is her exports increased about 11 times in 1986-87 over 1972-73. Similarly her imports value index increased from 100 in 1972-73 to 2118.74 in 1986-87. This means her imports increased about 21 times in 1986-87 over 1972-73. This is the picture in their value in TaKa term.

IF we consider exports and imports in US $ term it could be found that her exports increased about 3 times and imports increased 5 times in 1986-87 over 1972-73.

The value index of export receipts in US dollar was less than 100 in 2 years. In all other years its value index was more than that in base year. In taka term its value index was more than that of the base year in each year. On the other hand value index of her imports in TaKa and in US dollar was more in each year than that of the base year.

Table : 3.1

Changing pattern of exports and imports of Bangladesh in terms of taka and US dollars.

Base year : 1972-73

Year	In taka terms		In US dollar terms		
	Export value index	Import value index	Export value index	Import value index	Change in 1986-87 over 1972-73 %
1972-73	100.00	100.00	100.00	100.00	
1973-74	107.76	193.24	100.00	179	Taka terms
1974-75	113.27	286.22	61	154	Exports
1975-76	200.53	388.14	99	191	: 1006
1976-77	240.93	369.39	114	175	Imports
1977-78	259.28	480.88	126	235	: 2018
1978-79	347.90	582.70	164	274	In dollar
1979-80	397.20	805.81	198	401	Terms
1980-81	414.82	984.33	172	406	Exports
1981-82	447.42	1022.39	193	522	166
1982-83	650.73	1194.92	208	449	Imports
1983-84	727.31	1342.98	219	457	409
1984-85	947.27	1802.03	258	514	
1985-86	981.25	1865.08	242	459	
1986-87	1106.84	2118.74	266	509	

Source : Appendix table : 4

Table 3.2 shows the annual rate of change of exports and imports during 1972-73 to 1986-87. Export receipts increased in each year over previous year in take term during the period under review with average annual rate of increase of 17.72 percent. Against these her import payments increased in almost every year over previous years, during the same period of time. Only in 1976-77 imports decreased by 4.83 percent over 1975-76. On an average imports increased by 23.24 per cent per annum during the said period.

If we look at exports and imports at 1975-76 constant prices which is considered as the normal economic year of the country, it could be seen that exports increased in 8 years and decreased in 5 years over previous year out of a total of 13 years. On the other hand imports increased in 10 years and decreased in 3 years over previous year at constant prices. On an average exports increased by 8.07 percent and imports increased by 10.38 percent per annum at constant prices during 1972-73 to 1985-86.

In US dollar terms exports increased in 9 years and decreased in 3 years and remained unchanged in 1 year over previous year with average annual rate of increase of 6.52 per cent. Against this imports increased in 9 years and decreased in 4 years over previous year with average annual rate of increase of 11.50 percent.

On an average imports increased by 4.98 percentage points more than her exports in dollar terms. In taka term her imports increased by 5.52 percentage points more on average than her exports.

One interesting finding is that if the average growth rates are compared during 1972-73 to 1979-80 and 1980-81 to 1986-87 it

Table : 3.2

Annual change of Exports and Imports

Year	In taka terms		In US dollar terms		At 1975-76 constant price	
	Exports %	Imports %	Exports %	Imports %	Exports %	Imports %
1972-73						
1973-74	7.76	93.24	0	78.83	0.89	8.87
1974-75	75.11	48.11	-39.09	-13.90	-14.09	4.04
1975-76	77.04	35.61	62.01	23.96	104.58	61.50
1976-77	20.04	-4.83	15.63	-8.34	15.50	4.77
1977-78	7.62	30.18	10.95	34.18	-8.85	42.68
1978-79	34.19	19.27	29.41	16.79	7.44	8.29
1979-80	14.17	40.47	20.62	46.10	-8.40	8.66
1980-81	4.43	22.16	-13.19	1.45	14.34	-6.26
1981-82	7.86	3.86	12.40	28.38	12.58	-11.42
1982-83	45.44	16.88	7.86	-13.77	19.24	10.64
1983-84	11.77	12.39	5.11	1.55	-9.75	9.67
1984-85	30.24	34.18	18.13	12.49	-6.72	40.52
1985-86	3.59	3.50	-6.38	-10.69	25.21	-5.48
1986-87	12.80	10.01	13.60	10.83	na	na
Average annual rate of increase						
1972-73 to 1985-86	17.72	23.24	6.52	11.50	8.07	10.38
1972-73 to 1979-80	18.05	29.80	8.87	18.94	7.87	14.62
1980-81 to 1986-87	15.05	11.57	6.46	3.26	5.95[I]	6.10[I]

I : upto 1985-86. Source : Appendix table : 4

Note: Annual growth = $\frac{Vn - Vn - 1}{Vn - 1} \times 100$,

Where Vn - 1 value in (n-1) year and Vn = value in n year.

would be observed that the rate of growth of imports was less than that of exports in the later period.

The growth rate of imports was 18.23 percentage points less in later period than that in former period while the growth rate of exports was only 3 percentage points less.

The average growth is computed by the formula

$$g = \left(\sqrt[t]{\frac{Vn}{Vo}} - 1 \right) \times 100$$ where

Vo = value in initial year, Vn = value in final year and t = number of year in the series. As the formula considers only the beginning year and ending year of a time series the results can not be fully relied upon. With a view to bring full perfection in the results continuous compound rate of growth is computed with continuous compound interest formula: $Y = ce^{gt}$. This formula takes care of the value for each year in time series data. The continuous compound growth again will tell us about the rate of change which has taken place over a period of time. This gives us a constant rate of growth which by definition neither accelerates nor decelerates. To trace whether the growth rate has accelerated or retarded over a period the logarithmic parabola is used. Hence to find out acceleration/retardation in growth rates of exports and imports the function $Y = Ka^{t}b^{t^2/2}$ is used. Here Y stands for total annual exports/imports and t stands for time variable. Acceleration/retardation is defined as (1-b) X 100.

Now the parameter b will serve to determine the existence and degree of acceleration/retardation of growth. This expression

"represents the ratio of changing values of Y between successive discrete intervals of t" (Gould, J.M. 1946, p.184-185).

Table 3.3 shows the continuous compound (i.e. exponential) rate of growth and rate of retardation in growth rates of exports and imports during 1972-73 to 1985-86.

Table : 3.3

The growth rate of Bangladesh exports and imports during 1972-73 to 1985-86.

	In TAKA Term		In US $	At 1975-76 constant price
	Expoential rate of growth (%)	Acceleration/ deceleration in growth rate (%)	Expoential rate of growth (%)	Exponential rate of growth (%)
Exports	18.29	- 1.0	9.31	8.22
	Equation: $Y_c = 204.08\ (1.26)^t\ (0.99)^{t^2/2}$			
Imports	20.21	- 2.0	11.14	10.08
	Equation: $Y_c = 350.85\ (1.4)^t\ (0.98)^{t^2/2}$			

The exponential rate of growth of exports was 18.29 percent per annum with rate of deceleration of 1 percent in taka term. Vis-a-vis the continuous compound rate of growth of her imports was 20.21 percent per annum with rate of deceleration of 2 percent. So imports of the country increased 1.92 percentage points more per annum than her exports in taka term

at continuous compound rate. But the rate of growth of imports was retarding at a higher rate than that of exports. The higher rate of deceleration of imports is supported by the finding that the average annual rate of growth of imports was less during 1980-81 to 1986-87, by 18.23 percentage points, than that during 1972-73 to 1979-80.

In dollar value the expoential rate of growth of exports and imports was 9.31 percent and 11.14 percent per annum during the said period. So in dollar terms imports of the country increased by 1.83 percentage points more per year than her exports at continuous compound rate. The growth rate of exports and imports in take terms was higher due to frequent devaluation of taka. So the growth rate in dollar terms represents more real picture.

If exports and imports are considered at 1975-76 constant prices it could be observed that exports increased by 8.22 percent and imports increased by 10.08 percent per annum at continuous compound rate. In this case the growth rate of imports was 1.85 percentage points higher than that of exports per annum.

The higher rate of deceleration of imports of the country has transmitted some hope for her that in neat future the export sector will be able to exceed the import payment of the country if the present state of export growth is maintained.

At the initial stage, the higher expert growth was a result of devaluation of Bangladesh currency. Besides during the war of independence the total economy was distorted and disrupted. After independence the export production of the country was increasing to reach the normal level. Moreover government

efforts to explore new markets and enlist new export commodities along with more incentives to exporters provided an impetus to export growth. During 1980-81 to 1986-87 the emergence of some new export items like garments, shrimps and prawns etc. accelerated the growth rate of exports.

The growth of imports was accelerated by food deficit, price hike of petroleum and petroleum products and growing demand of the economy for machinery spare parts and transport equipments

3.3 PATTERN OF PER CAPITA EXPORTS AND IMPORTS IN BANGLADESH

Human resource of a country is directly related with the growth of export. It can enhance the production of export commodities by supplying surplus labour, skils, innovation and entrepreneurs to expanding export sector. At the primary stage all the export-led developed and developing countries started advancing from labour intensive primary production line and at the middle stage their export expanded through labour intensive manufacturing production. At the final stage they turned towards the production of capital intensive heavy engineering goods.. Thus human resources work as propelling forces of export-led development.

On the other hand when an economy becomes stagnant the growing population eats up export surplus and pulls back the wheel of export-led growth. Per capita export will tell us what has happened to exports with the increase of population.

Table 3.4 presents the per capita exports and imports of Bangladesh.

Per capita exports of Bangladesh increased from TK.37.26 in 1972-73 to TK.267.19 in 1985-86. In absolute terms per capita exports increased about 7 times in 1985-86 over 1972-73. On the other hand per capita imports increased about 13 times from TK.50.98 in 1972-73 to TK.694.7 in 1985-86.

In US dollar terms per capita exports increased from $5.06 in 1972-73 to $ 8.93 in 1985-86 and per capita imports from $ 6.93 in 1972-73 to $ 23.24 in 1985-86.

The average annual rate of growth of her population was 2.27 percent during 1972-73 to 1985-86. With this high rate of growth of population both per capita export and import of the country increased. But per capita import increased at a faster rate than per capita export.

The growing need of food with increase of population widened the gap between domestic food production and requirements. As a result the food imports increased very fast (16.55% per annum during 1972-73 to 1986-87) which pushed up per capita import.

Table 3.5 shows per capita export of some selected countries in Asia during 1973 to 1985.

Among 12 listed countries Bangladesh's per capita export was the lowest in both the years, i.e. 1973 and 1985. The rate of increase of her per capita export was higher than that of Pakistan and the Philippines during 1973 to 1985.

Republic of Korea has the highest rate of growth of per capita export which was followed by Singapore, HongKong and Japan respectively.

Above analysis suggests that per capita export and its rate or growth is low in Bangladesh.

Table : 3.4

Changing pattern of per capita export and import in Bangladesh during 1972-73 to 1985-86.

Year	IN TAKA		IN US DOLLAR	
	Export	Import	Export	Import
1972-73	37.26	50.98	5.06	6.93
1973-74	39.05	98.81	4.92	12.05
1974-75	40.20	139.00	2.94	10.17
1975-76	69.48	184.02	4.64	12.30
1976-77	81.54	171.06	5.24	11.01
1977-78	85.76	217.64	5.69	14.44
1978-79	112.52	257.87	7.20	16.50
1979-80	125.39	348.06	8.47	23.52
1980-81	128.17	416.16	7.20	23.36
1981-82	134.49	420.51	7.87	29.17
1982-83	190.84	479.50	8.26	24.54
1983-84	208.01	525.55	8.49	24.31
1984-85	264.37	688.13	9.79	26.68
1985-86	267.19	694.70	8.93	23.24
Percentage change in 1985-86 over 1972-73				
	617.09	1262.69	76.48	235.35
Average annual growth in %				
	15.11	20.51	4.14	9.03

Source : Appendix Table : 4

Table : 3.5

Per capita export in some selected Asian countries:1973 to 1985.

Value in US dollars

Countries	Per capita export 1973	1985	Change in 1985 over 1973 ($\frac{Vn-Vo}{Vo} \times 100$)	Absolute change in 1985 over 1973 =($\frac{Vn}{Vo}$) Times	Average Annual growth in per capita exports %
Japan	338.46	1455.78	330.12	4.30	11.88
India	5.27	13.41	154.46	2.54	7.45
Pakistan	14.23	28.48	100.14	2.00	5.48
Indonesia	25.76	134.94	423.83	5.24	13.58
Rep.of Korea	94.54	736.80	679.35	7.79	17.11
Hong Kong	1204.5	5589.60	364.06	4.64	12.53
Malaysia	309.1	979.60	216.92	3.17	9.28
Sri Lanka	31.2	84.37	170.42	2.70	7.95
Thailand	39.38	137.33	248.73	3.49	10.09
The Philip pines	45.79	84.63	84.82	1.85	4.84
Singapore	1673.97	8773.85	424.13	5.24	13.59
Bangladesh	4.38	9.93	126.71	2.27	6.50

Source : Appendix Table : 5

3.4 PATTERN OF EXPORTS AS PERCENTAGE OF IMPORTS

Imports play key role in the economic development of a country by supplying capital goods and industrial raw materials to domestic economy. At the primary stage of economic development, a country's domestic capacity for production of capital

goods like engineering goods, machineries, transport equipments, industrial spares etc. remains very limited. So imports become very instrumental for development. Besides imports bring new technology and technique of production.

Moreover, in time of food deficit imports become essential to meet the basic requirement of food items of people. In a nutshell import is used to attain consumption, production and economic development target.

Exports finance much needed imports of the economy. When a country's exports lag behind her imports its dependence on foreign aid increases and it could not obtain much needed capital goods. As a result it can not reap the benefit of optimum allocation of natural resources.

Bangladesh exports as percentage of her imports decreased from 73.08 percent in 1972-73 to 42.32 percent in 1986-87. Exports as a percentage of imports was the highest 73.08% in 1972-73 and afterwards it was declining upto 1975-76.

At the initial stage after independence in 1971 the country was receiving aid and grants in kind on a massive scale. As a result the import was comparatively less.

If the normal economic year 1975-76 is compared with last year it could be observed that her exports as percentage of imports improved slightly. During 1980-81 to 1986-87 the growth of import had slowed down and that of export was expedited.

Bangladesh import was heavily burdened by food items. Due to deficit in food it has to import food every year. Food

and live animals constitued 36.57% of total imports during 1972-73 to 1979-80 and 16.19% during 1980-81 to 1986-87 on an average. Though the percentage share of food imports has decreased during the later period, total amount of imports of food and live animals has increased.

Table 3.6 presents exports as percentage of imports in Bangladesh during 1972-73 to 1986-87

Table : 3.6

Changing pattern of exports as percentage of imports in Bangladesh during 1972-73 to 1986-87.

Year	Export as % of Import $\left(\frac{X}{M} \times 100\right)$	Annual change	Imports of food & live animals as % of total Imports (%)
1972-73	73.98		26.09
1973-74	40.76	-44.23	46.17
1974-75	28.92	-29.04	44.09
1975-76	37.76	30.57	29.12
1976-77	47.67	26.24	12.01
1977-78	39.41	-17.33	25.96
1978-79	43.63	10.71	11.09
1979-80	36.03	-17.42	20.99
1980-81	30.80	-14.52	11.20
1981-82	31.98	3.83	16.96
1982-83	39.80	24.45	16.89
1983-84	39.58	- 0.55	16.51
1984-85	38.42	- 2.93	22.00
1985-86	38.45	0.09	12.66
1986-87	42.32	10.07	17.12
Change in 1986-87 over 1972-73(%)		- 42.09	
Change in 1986-87 over 1975-76(%)		12.08	
Average annual growth(%) 1972-73 to 1986-87		-3.58	
1975-76 to 1986-87		1.15	

Source: Appendix Table:5

When export as percentage of import is considered in case of some Asian countries it is observed that export as a percentage of import was more than cent percent in Indonesia, Malaysia and the Philippines in 1973 and for all other countries export was less than their respective import. Export as percentage of import was the lowest in Bangladesh among these countries in the same year. In 1984 export exceeded import in Japan, Indonesia and Malaysia.

Export as percentage of import increased in Japan, Indonesia, Republic of Korea, HongKong and Singapore in 1984 over 1973. On the other hand exports as percentage of imports decreased in 1984 over 1973 in all other countries. The average annual rate of decrease was the highest in Pakistan which was respectively followed by India, Sri Lanka and the Philippines. The avexage rate of decrease of export as percentage of imports was 0.74 percent per annum in Bangladesh during 1972 to 1984. Also in 1984 her export as percentage of her import was the lowest among the listed countries. Table 3.7 presents changing pattern of exports as percentage of imports in 12 Asian countries during 1973 to 1984.

The import elasticity of export shows by how much one unit increase in export induces import. That is how much increase in import is accompanied by one unit increase in export. We have computed the import elasticity of export in 12 selected Asian countries by formual : $Ex = \frac{dM}{M} X \frac{X}{dX}$ where dM stands for change in imports, M for original imports, dX for change in exports and X for original exports. The result furnished in the last column of the table shows that import increases by less

than one unit with one unit increase of export in country like Japan, Indonesia, Republic of Korea, HongKong and Singapore. In all other countries of the group import elasticity of export is more than unity. That is import increases by more than one percent with one percent increase in export. In Bangladesh import increases by 1.14 percent with one percent increase in her export. The import elasticity of export is the highest in India among the selected countries which is respectively followed by Pakistan, Sri Lanka and the Philippines, (table 3.7).

In Bangladesh import elasticity of export is high because the production of some items like garments, leather etc. are highly dependent on imported inputs. To reduce import elasticity of her export she will have to encourage backward integration through export policty.

Though the contribution of export to import financing in Bangladesh has improved very slightly during 1975-76 to 1986-87, her export as percentage of import was the lowest among the selected countries. That is still her export is lagging far behind her import. To overcome the gap her export has to run faster than her import.

3.5 BANGLADESH'S SHARE IN WORLD EXPORTS

A country's share in the world aggregate exports reflects its position in world export market as well as its competitive position and possibilities for futher expansion. Bangladesh's share and its changes in the world aggregate exports will present its competitive position and further possibilities for expansion.

Table : 3.7

Changing pattern of export as percentage of imports in 12 Asian countries during 1973 to 1984.

Countries	Export as % of import 1973	1984	Average annual growth %	Import elasticity with respect to export
Japan	96.39	124.60	2.16	0.71
India	94.19	63.02	-3.29	1.74
Pakistan	98.14	44.51	-6.37	1.36
Indonesia	117.66	157.67	2.47	0.70
Rep.of Korea	76.06	98.86	2.21	0.74
Hong Kong	89.69	99.12	0.89	0.88
Malaysia	124.48	115.01	-0.65	1.09
Sri Lanka	96.92	78.81	-1.71	1.32
Thailand	76.28	71.29	-0.56	1.09
The Philippines	102.63	86.76	-1.39	1.28
Singapore	71.23	83.96	1.38	0.82
Bangladesh	50.00	45.74	-0.74	1.14

Source : Appendix table : 5

Table 3.8 shows changing pattern of Bangladesh's share in world exports during 1973 to 1984.

Bangladesh's share in world exports (market economy) decreased from 0.057% in 1973 to 0.049% in 1984. This was 14.03% decrease in 1984 over 1973. Her share in aggregate export of the world declined at an average annual rate of 1.25% per annum.

However, it has an improving trend after 1980s.

When Bangladesh position is compared with the developing market economy it can be noticed that her share increased from 0.147% in 1973 to 0.198% in 1984. That is her share increased by 34.69% in 1984 over 1973. On an average its share increased by 2.51% per annum.

Similarly her export share increased from 12.24% in 1973 to 14.08% in 1984 in aggregate exports of the least developed countries. In this case her share increased by 15.03% in 1984 over 1973. The average rate of increase was 1.73% per annum.

Above findings reflect that the exports of the developed countries was increasing at higher rate than developing and least developed countries. Bangladesh's competitiveness improved among developing and least developed countries. But she could not improve her position in the whole world market economy.

Her share in aggregate exports of the world is very insignificant. So she possesses a better prospect to expand her export as well as share in the world economy without facing sharp competition.

3.6 EXPORT'S CONTRIBUTION TO GDP

Exports directly contribute to GDP. Indirectly exports help growth of GDP through multiplier expansion. Moreover export has a good number of indirect impact by bringing new techniques, transformation, capital imports etc. on the growth of GDP. Contribution of exports to GDP is reflected by its share in it. With better performance of exports its contribution to

Table : 3.8

Bangladesh share in the world exports

Year	Bangladesh share in(%) World Exports	Developing Country's Export	LDC's Exports
1973	0.057	0.147	12.24
1974	0.045	0.169	12.17
1975	0.035	0.144	9.59
1976	0.044	0.170	10.55
1977	0.040	0.156	9.27
1978	0.042	0.183	11.86
1979	0.039	0.153	10.39
1980	0.037	0.133	10.41
1981	0.035	0.125	9.91
1982	0.038	0.146	10.12
1983	0.034	0.134	9.57
1984	0.049	0.198	14.08
Average rate of growth (%)			
	-1.25	2.51	1.73

Source : Appendix Table : 5

GDP has increased in export-led countries. This happens so because in export leading countries the growth of export sector usually becomes higher than other sectors and it gives impatus to other sectors of the economy.

Table 3.9 presents the changes of exports' share in GDP in Bangladesh during 1972-73 to 1985-86.

Her exports as percentage of GDP decreased from 6.14% in 1972-73 to 5.19% in 1985-86. This was 3.75% decrease in 1985-86 over 1972-73. During the whole period exports as percentage of GDP varied within the range of 2.49% and 6.26% per year. Its share to GDP has an increasing trend during 1975-76 to 1985-86. During this period its share increased by 1.22% per annum on an average. When the whole period from 1972-73 to 1985-86 is considered exports as percentage of GDP decreased by 0.27% per annum on an average. As 1975-76 is considered as the normal economic year of Bangladesh it might be right to say that her exports' contribution to GDP was increasing during the reviewed period. Moreover that is supported by Bangladesh Bank Annual Report, 1986-87 (pp. 129 & 204) which has shown that export's share to GDP has risen to 6.98% in 1986-87.

In comparision with selected Asian countries Bangladesh export contribution to GDP was very low.

Table 3.10 presents contribution of export to GDP in 12 Asian countries during 1974 to 1985.

In 1974 export's share to NMP (Net Material Product) was more than 50% in HongKong and Singapore. This was higher then 20% in Indonesia, Republic of Korea and Malaysia and countries that remained between 10% and 19% were Japan, Sri Lanka, Thailand and the Philippines. This percentage was less than 10% in India, Pakistan and Bangladesh. Bangladesh export share to NMP was the lowest.

Table : 3.9

Export's contribution to GDP in Bangladesh during 1972-73 to 1985-86

Year	Export as % of GDP	Annual change %
1972-73	6.14	
1973-74	4.16	-32.25
1974-75	2.49	40.14
1975-76	5.17	107.63
1976-77	6.33	22.44
1977-78	4.90	-22.59
1978-79	5.57	13.67
1979-80	5.55	- 0.36
1980-81	4.92	-11.35
1981-82	4.67	- 5.08
1982-83	6.25	33.83
1983-84	5.75	- 8.00
1984-85	6.26	8.86
1985-86	5.91	- 5.59
Average annual growth (%) 1972-73 to 1985-86	-0.27	
1975-76 to 1985-86	1.22	
Change in 1985-86 over 1972-73 (%)	-3.75	

Source : Appendix Table : 4

Table : 3.10

Contribution of export to NMP in 12 Asian countries during 1974 to 1985

Countries	Export as % of NMP 1974	1985	Average growth %
Japan	12.09	13.24	0.76
India	4.57	5.84	2.06
Pakistan	9.67	9.70	0.03
Indonesia	28.76	21.5[1]	-2.62
Rep.of Korea	27.50	36.36	2.35
HongKong	74.68	98.22	2.31
Malaysia	44.62	48.87	0.76
Sri Lanka	14.19	24.24	4.56
Thailand	18.51	18.57	0.03
ThePhilippines	18.51	14.20	-2.21
Singapore	112.86	153.47	2.59
Bangladesh[2]	4.16	6.26	3.46

1 Figure for 1984
2 Taken from table 3.9

Source : Appendix Table : 5

This percentage share increased in 1985 over 1973 in all countries of the group except in Indonesia and the Philippines. In 1985 exports as percentage of NMP was more than 20% in Indonesia, Republic of Korea, HongKong, Malaysia, Sri Lanka and Singapore. Japan, Thailand and the Philippines were within the group of 10% to 19%. It was less than 10% in India (5.84%), Pakistan (9.70%) and Bangladesh (6.26%).

The average annual growth of exports there in NMP was the highest in Sri Lanka which was respectively followed by Bangladesh, Singapore, Republic of Korea, HongKong and India.

Its annual average growth was negative in Indonesia and the Philippines.

Though the contribution of export to GDP had an increasing trend during 1975-76 to 1985-86 in Bangladesh her export share to GDP was comparatively lower than that of many Asian countries.

3.7 EXPORT PERFORMANCE : COMPARISION OF PRE AND POST INDEPENDENCE PERIOD

During pre-independence period the discriminating export policy of the then government of Pakistan influenced the export performance of Bangladesh. It was exporting primary commodities and importing manufacturing commodities from West Pakistan mainly. It was used as the market for industrial products of West Pakistan. Industrial development programme was discouraged there by the government. So it is expected that export performance of the country should be better during post-independence period than that in pre-independence period. Table 3.11 presents the continuous compound growth rate of exports and imports during pre and post-independence periods of Bangladesh.

Her export increased at an exponential rate of 18.29% in post-independence period and 5.58% in pre-independence period. So the growth rate of exports was 12.71 percentage points higher in post-independence period. Similarly the growth rate of her

imports was 9.4 percentage points higher in post-independence period than that in pre-independence period.

The growth rate of imports in both the period was more than that of their respective exports. The growth rate of imports was 1.92 percentage points and 5.23 percentage points higher in post and pre-independence period respectively than that of her respective exports. So the gap between the growth rates of exports and imports was higher during pre-independence period. However, in both the period her imports were growing faster than exports.

One of the main resons for higher growth rates of her exports and imports in post-independence period was frequent devaluation of her currency take in terms of dollar of pound. The exchange rate was TK.7.35 per US dollar in 1972-73 and fell to TK.30.27 per US dollar in 1985-86. The growth rate of her exports and imports in dollar terms was 9.31% and 11.14% at continuous compound rate in post-independence period. So the export performance of the country was better during post-independence period than that in pre-independence period even if the growth in dollar terms in post-independence period is compared with that in pre-independence period.

3.8 COMPARISON OF EXPORT AND IMPORT GROWTH : BANGLADESH WITH SOME ASIAN COUNTRIES:

The comparison of export and import growth of Bangladesh with that of some selected Asian countries would reflect the comparative picture of Bangladesh with regards to her export and import growth. Table 3.12 presents the growth of exports and

Table : 3.11

Continuous compound growth rates of exports and import in pre and post-independence period of Bangladesh

(1)	Continuous compound growth rate in % Post-independence period (2)	Pre-independence period (3)	Percentage points (2-3) difference (4)
Exports	(a) 18.29 in US$ 9.31	(c) 5.58	12.71
Imports	(b) 20.21 in US$11.14	(d)10.81	9.40
Percentage points difference between growth rates of imports and exports.	b - a = 1.92	d - c = 5.23	

Source : Previous table

imports of 12 Asian countries during 1972-73 to 1985-86.

During the period 1973 to 1985 the growth rate of export was higher than that of imports in Japan, Republic of Korea, HongKong and Singapore. In all other countries of these 12 countries the growth rate of imports was higher than the growth rate of their respective exports. Bangladesh was no exception to the second group. Among the 12 countries exports growth rate was the highest in the Republic of Korea which was respectively followed by Singapore, HongKong, Indonesia, Malaysia, Thailand and Japan. After these countries Sri Lanka and India come into picture. Bangladesh occupied 11th position in respect to her

export growth. Only Pakistan's export growth was lower than that of Bangladesh.

Her export growth was lower than the world export and was higher than that of developing market economies and least developed countries during, 1973 to 1985.

Import's growth rate was the highest in Republic of Korea which was respectively followed by Pakistan, Malaysia, Singapore, Indonesia, Thailand, HongKong and India. Its growth was the lowest in the Philippines which was followed by Japan and Bangladesh respectively.

The export performance of a country is influenced by trade strategy. World Development Report 1987 (The World Bank : World Development Report 1987, Oxford University Press, pp.79-112) has classified fortyone developing economies by trade orientation during 1963-73 and 1973-85 into four groups : (i) strongly outward oriented, (ii) moderately outward oriented, (iii) moderately inward oriented and (iv) strongly inward oriented. Attempt is made to classify the orientation of a country's trade strategy by combining the quantitative and qualitative indicators : (i) effective rate of protection, (ii) use of direct controls, (iii) use of export incentives, (iv) degree of exchange rate overvaluation. Among our liested 12 countries HongKong, Republic of Korea and Singapore were strongly outward oriented in their trade strategy during 1973-85 as per the World Bank study. Malaysia and Thailand were moderately outward oriented and Indonesia, Pakistan, Philippines and Sri Lanka were moderately inward oriented. Only India and Bangladesh were strongly inward oriented during the same period.

Table : 3.12

The growth of exports and imports in 12 Asian countries during 1973 to 1984

Countries	Average annual growth:	
	Exports %	Imports %
World 1973 to 1984	10.53	10.52
Developing market economy	6.50	na
LDCS	7.89	na
Japan	12.29	11.17
India	10.11	13.31
Pakistan	8.84	16.20
Indonesia	14.46	14.52
Republic of Korea	20.52	17.88
Hong Kong	14.71	14.45
Malaysia	13.71	15.57
Sri Lanka	9.51	13.08
Thailand	12.35	14.49
The Philippines	7.37	10.76
Singapore	16.54	15.40
Bangladesh	9.78	11.78

Note : Growth rates computed by formula : $g = (t\sqrt{\frac{Vn}{Vo}} - 1) \times 100$

Source : Appendix Table : 5

The study shows that between 1973 and 1985 the growth rates of manufacturing export was higher in outward oriented countries than inward oriented countries. Economic performance

of the outward-oriented economies was broadly superior to that of the inward oriented economies in almost all respects. Bengladesh follows strongly inward oriented trade strategy. So her export growth was depressed by the trade strategy. Still the average annual growth of her export was higher than that of Pakistan, Sri Lanka and the Philippines. This indicates that if she moves towards outward oriented trade strategy she would be able to achieve better performance in her export.

3.9 BALANCE OF TRADE IN BANGLADESH

Balance of trade of a country shows, to what extent her exports are able to finance imports. Time series analysis of balance of trade of Bangladesh will show how the export of the country has been able to finance her imports and what changes have taken place in this regard over a period of time. Bangladesh had a surplus balance of trade with foreign countries during pre-independence period. But immediately after independence it has been facing unfavourable balance of trade with increasing rate of deficit.

Table 3.13 presents balance of trade position of Bangladesh during 1972-73 to 1986-87. During this period the total merchandise imports exceeded merchandise exports in each year and consequently the country faced deficit in her balance of trade.

Deficit in her valance of trade increased from TK.102 crores in 1972-73 to TK.4348.5 crores in 1985-86. This was 4163.23 percent (about 41 times) increase in 1985-86 over 1972-73. The average compound growth rate of her deficit was 30.74 percent

Table : 3.13

Balance of trade of Bangladesh during 1972-73 to 1986-87

Value in crore Taka

Year	Balance of Trade	Annual rate of change %
1972-73	-102.0	
1973-74	-433.7	325.20
1974-75	-770.6	77.68
1975-76	-915.1	18.75
1976-77	-732.3	-19.98
1977-78	-1103.8	50.73
1978-79	-1244.2	12.72
1979-80	-1952.8	56.95
1980-81	-2580.4	32.14
1981-82	-2634.2	2.08
1982-83	-2724.9	3.44
1983-84	-3073.8	12.80
1984-85	-4203.8	36.76
1985-86	-3139.0	-25.33
1986-87	-3029.0	- 3.50
Change in 1985-86 over 1972-73%	4163.23	
Average annual growth(%)		
1972-73 to 1985-86	30.74	
1972-73 to 1981-82	38.42	
1981-82 to 1985-86	10.54	

Source : Appendix Table : 4

per annum during 1972-73 to 1985-86. In every year except 1976-77, 1985-86 and 1986-87 the deficit of the country was increasing sharply. Only in 1976-77, 1985-86 and 1986-87 deficit in her

balance of trade decreased by 19.98%, 25.33% and 3.50% respectively. Except these years the deficit in her balance of trade was increasing in each year over previous year during the whole period. The average annual rate of increase of deficit in her balance of trade was lower during 1981-82 to 1985-86 than that during 1972-73 to 1981-82. The average growth rate was 10.54% and 38.42% per annum during former and later period respectively.

Table 3.14 shows the changes in balance of trade at 1975-76 constant prices. The deficit in her balance of trade increased from TK. 490.65 crores in 1972-73 to TK.2276.65 crores in 1985-86 at 1975-76 constant prices. The deficit in her balance of trade increased in 8 years and decreased in 5 years over previous year during 1972-73 to 1985-86. In this case average annual rate of increase of deficit in her balance of trade was 11.59% per annum.

So the balance of trade of Bangladesh was unfavourable during the whole period from 1972-73 to 1986-87 and the amount of deficit was increasing every year at current and constant prices.

But the average growth rate of deficit was 9.15 percentage points lower at 1975-76 constant prices than that at current price.

That is during the whole period her exports were lagging behind her imports. The gap between exports and imports was widening during the period under review. This situation was increasing the dependence of the economy on foreign aid. However it is remarkable to note that the deficit in her balance of trade was increasing at a much slower rate during 1981-82 to 1986-87 than that during 1972-73 to 1980-81. So it may be hoped that in

future her exports would be able to exceed her import and thus reduce the dependence of the economy on external assistance and enhance foreign exchange earnings.

Table : 3.14

The balance of trade of Bangladesh during 1972-73 to 1985-86 at 1975-76 constant prices

Value in crore Taka

Year	Balance of trade	Annual change %
1972-73	- 490.65	
1973-74	- 559.18	13.97
1974-75	- 639.03	14.28
1975-76	- 915.13	43.21
1976-77	- 899.18	- 1.74
1977-78	-1613.40	79.43
1978-79	-1576.30	- 2.3
1979-80	-1821.28	15.54
1980-81	-1588.91	-12.76
1981-82	-1249.94	-21.33
1982-83	-1319.50	- 5.57
1983-84	-1618.10	22.63
1984-85	-2649.36	63.73
1985-86	-2276.46	-14.08

Source : Appendix Table : 4

3.10 TERMS OF TRADE OF BANGLADESH

3.10.1 TERMS OF TRADE : AN INTRODUCTORY ANALYSIS

The products of the third world countries suffered secular deterioration in their terms of trade. Consequently there has been an unjust transfer of income from the poor to the rich countries. The developed countries have managed to improve their terms of trade at the expense of the poor countries.

The terms of trade argument as it has been put forward in much of economic literature has two main strands not necessarily related to each other. One is concerned with the movements of the terms of trade whereas the other involves their position at a given time.

The first version states that the terms of trade have manifested a long-term trend favouring the rich nations in their trade with the poor. This may be based either on statistical investigations of past development and their extrapolation into the future or on a priori reasoning leading to expectation of this nature or both.

The second variety consists of the argument that at any given point of time, the terms of trade is in some sense "unfair" to poor nations. The nature of this unfairness may again vary in different arguments. It may mean that gains from trade and specialisation are appropriated overwhelmingly or at least in an excessively large measure by the rich partners. Some of this is extended to the point where it is argued that not only do the poor nations gain little but they actually lose from international trade. In other versions the unfairness may be based

on something like the double factoral terms of trade concept but in a static sense. Specifically it is argued or implied that a unit labour invested in the rich country's production buys through trade much more than one unit of labour's production of the poor nation. The policy implications from this strand of argument call again primarily for schemes of intervention in market determination of prices and for compensation.

The terms of trade draw considerable attention in the discussion of international economics at least for two reasons: (i) the gains from trade depend upon terms of trade, (ii) the third world countries feel that their products have suffered a secular deterioration in their terms of trade as a result of which there has been an unjust transfer of income to the rich countries from the poor.

Singer (1950) and Prebisch (1959) argued that the industrial countries have much stronger labour organisation than the peripheral countries.

In the absence of labour unions wages can be depressed which leads to falling product prices and deteriorating terms of trade. Werner Baer (1962, p.173) says, "The complications arising from an increase in productivity in the exportisector can now be fully appreciated. If productivity in the domestic sector does not change and hence the general wage level in both sectors remains the same, the fruits of this productivity increase will be transferred to the centre, since prices of exports will drop in about the same proportion as the productivity increases. But the productivity increase and the inelastic international demand will cause employment to shrink in the export sector. The

resulting manpower surplus can only be employed in domestic industries if wages shrink so that industries with lower productivity ratio can exist (i.e. a lower international productivity ratio). This lowering of wages in order to increase employment will cause more international transfers of income through the export industries, it might also stimulate the older domestic industries into the export sector, since wages for them are now lower than productivity, but this will occur at the cost of still more international income transfer".

In the academic sphere there was voluminous discussion on the Prebisch-Singer thesis. On theoretical ground, it was criticized by Haberler (1961), Flander (1964), Johnson (1967), Stalin (1975), Macbean (1976). On statistical ground objections were raised by Viner (1953), Baldwin (1955), Ellsworth (1956), Morgan (1957), Meier (1958), Yates (1959), Haberler (1961), Lipsey (1963), Kuznets (1967) Johnson (1967), Streeten (1974), Bairoch (1975), Frank (1976), Schoas (1977), Findlay (1981).

Inspite of the their severe criticisms against the Prebisch-Singer thesis many authors in 1980s like Bracher and Choudhri (1982), Spraos (1980), Sarkar (1983), Sapsford (1985), Thirlwall and Bergevin (1985) and Sarkar, (1986) supported them.

There are several concepts of terms of trade (Viner 1937, Rostow 1950) and the major ones are:

1. Gross barter terms of trade,
2. Net barter or commodity terms of trade,
3. Income terms of trade,
4. Single factoral terms of trade,
5. Double-factoral terms of trade,

6. Real cost terms of trade.

7. Utility terms of trade.

Usually these concepts of the terms of trade are used to measure the gains from trade.

Gross Barter Terms of Trade:

The distinction between gross and net barter terms of trade was put forward by Taussing in 1927. Symbolically gross barter terms of trade is expressed as $G = \frac{Qm}{Qx} \times 100$ where Qm stands for the import quantity index and Qx for export quantity index and G for gross barter terms of trade. We multiply the whole expression by 100 in order to get rid of the decimal.

Net Barter or Commodity Terms of Trade:

This is the most commonly used expression for the terms of trade changes in the contemporary world. The gross barter terms of trade concept uses quantity index of exports and imports whereas the net barter or commodity terms of trade makes use of price index of imports and exports. Symbolically the net barter terms of trade can be written as : $Tc = \frac{Px}{Pm}$ where Px stands for price index of export, Pm for price index of imports and Tc for commodity terms of trade.

Income terms of Trade:

Since it is important for any country to analyse changes in its volume of exports resulting from export price changes, it is useful to correct the movements in commodity terms for changes in export volume. This is done by the concept of income terms of trade which was first introduced by G.S. Dorrance in 1948-49. Symbolically the Income terms of trade is written as:

$$I = Tc \times Qx \quad \text{or} \quad I = \frac{Px}{Pm} \times Qx$$

where I = income terms of trade,

Tc = commodity terms of trade

Qx = export quantity index.

Single Factoral Terms of Trade:

While income terms of trade adjusted the commodity terms of trade by changes in export volume, there is another attempt to correct commodity terms for changes in productivity in export goods industries. Jacob Viner developed the concept of single and double factoral terms of trade in 1937. Symbolically single factoral terms of trade is expressed as:

$$S = Tc \times Xz \quad \text{or} \quad S = \frac{Px}{Pm} \times Xz \quad \text{where}$$

Tc represents commodity terms of trade, Xz stands for export productivity index and S for single factoral terms of trade.

Double Factoral Terms of Trade:

When the commodity terms of trade Tc is corrected for changes in productivity in producing both exports and imports, the result is the double factoral terms of trade. This is stated as : $D = Tc \times \frac{Xz}{Mz}$ or $D = \frac{Px}{Pm} \times \frac{Xz}{Mz}$ where Tc stands for commodity terms of trade, Xz for productivity index of export industries and Mz for productivity index in import industries.

Real Cost Terms of Trade:

This expression attempts to correct the commodity terms of trade for changes in export productivity index (Xz) and the real cost of producing export goods. The amount of utility lost or sacrificed per unit of resources employed in producing export goods constitute the real cost of producing exports. The real

cost of producing exports is expressed by Xp. Real cost terms of trade is expressed by : $R = Tc \times \frac{Xz}{Xp}$ where Tc stands for commodity terms of trade, Xz for productivity index in export industries and Xp for real cost index of producing export goods.

Utility Terms of Trade:

When real cost terms of trade is corrected for relative desirability of imports and exports whose consumption is sacrificed because of the use of resources in export production (Um). The result is the utility terms of trade. Utility terms of trade concept is associated with the name of D.H. Robertson (1951). Symbolically it is written as : $U = Tc \times \frac{Xz}{Xp} \times Um$ where Tc stands for commodity terms of trade, Xz for productivity index in export industries, Xp for real cost index of producing exports and Um for relative desirability index of imports and exports.

3.10.2 TERMS OF TRADE IN BANGLADESH

As discussed earlier there are several concepts of the terms of trade. Different concepts of the terms of trade analyse the gains from international trade from different angles. It is not possible to calculate all types of terms of trade in case of Bangladesh due to non-availability of required data. Moreover, three types of terms of trade are widely used and accepted by the contemporary world to measure the gains from trade of a country in the regime of international trade. These are: (a) gross barter terms of trade, (b) net barter or commodity terms of trade and (c) Income terms of trade.

The gross bater terms of trade measures the ratio of import quantity index and export quantity index. It shows the quantity

of import received by a country for a unit of export. If the import quantity index increases and export quantity index remains same then the gross barter terms of trade improves (i.e. the purchasing power of export increases). Though, this terms of trade has its own merits, it is not commonly used expression in today's world. The net barter or commodity terms of trade shows the position of a country with respect to the price of her exports and imports. When export price of a country increases but import price remains the same, then her gains from international trade increases.

The income terms of trade indicates the position of a country with regards to her capacity to import based on exports. That is a rise in income terms of trade indicates that the country can obtain a larger volume of imports from the sale of its exports.

To see the position of Bangladesh in the light of the above gains from trade attempts have been made to compute the above mentioned three types of terms of trade.

In computing the terms of trade we have used the data of Bangladesh Bank and considered 1975-76 as the base year because this year is considered as the normal economic year after the war of independence in 1971.

3.10.3 GROSS BARTER TERMS OF TRADE : BANGLADESH:

The gross barter terms of trade makes use of import quantity index and export quantity index. As mentioned earlier the gross barter terms of trade is given by the expression: $g = \frac{Qm}{Qx} \times 100$. The gross barter terms of trade of Bangladesh is

computed by the above formula and is presented in table 3.15. The import quantity index data are not available after 1980-81. So the period covered is from 1972-73 to 1980-81.

Table : 3.15

The gross barter terms of trade of Bangladesh during 1972-73 to 1980-81

Base Year : 1975-76

Year	Gross barter terms of Trade	Change over base year % points	Average annual change %
1972-73	162.30	62.30	
1973-74	109.86	9.86	72-73 to 80-81
1974-75	131.87	31.87	
1975-76	100.00	-	- 4.84
1976-77	89.74	-10.26	75-76 to 80-81
1977-78	113.09	13.09	
1978-79	122.05	22.05	0.63
1979-80	116.67	16.67	
1980-81	103.83	3.83	

Source : Appendix Table : 6

The gross barter terms of trade value exhibits that the country had a favourable position in all the years except in 1976-77. In this year the gross barter terms of trade of the country deteriorated by 10.26 percentage points. That is in this year the country received less quantity of imports for given volume of exports than in base year. In all other years Bangladesh gross barter terms of trade improved over base year. This means

that in these years more quantity of imports were received for a given quantity of exports than in the base year.

The highest improvement in the gross barter terms of trade occured in 1972-73. In this year it improved by 62.30 percentage points over base year. Gross barter terms of trade improved by the lowest percentage points (3.83) in 1980-81. If we compare 1980-81 with base it would be seen that the gross barter terms of trade improved by 0.63 percent per annum on average. Again if 1980-81 is compared with 1972-73 it is found that it deteriorated by 4.84% per annum on average during 1972-73 to 1980-81.

During the period from 1975-76 to 1980-81 the gross barter terms of trade had a slight deteriorating trend with some sorts of fluctuation. However, it might be concluded that the gross barter terms of trade of the country improved during the period under review.

3.10.4 COMMODITY TERMS OF TRADE : BANGLADESH:

This is the most commonly used articulation for the terms of trade changes in the contemporary world. The commodity terms of trade uses import price index and export price index. As mentioned earlier it is symbolically written by the expression: $Tc = \frac{Px}{Pm} \times 100$. The commodity terms of trade improves when the unit price of export commodities either increases more or decreases less than the unit price of import commodities. Table 3.16 presents the commodity terms of trade of Bangladesh during 1972-73 to 1985-86. The commodity terms of trade of the country improves in almost all years over base year 1975-76 except in 1974-75, 1981-82

and 1982-83. Since 1972-73 the unit price index of export and import has been increasing. In the year 1974-75 the price index of import increased more than that of export. As a result the commodity terms of trade deteriorated by 2.96 percentage points. During 1981-82 the economy experienced severe stress and strains due to mainly international recession, volatile exchange rate and higher interest rates in the world market which caused deterioration in the terms of trade of the country. Deterioration in commodity terms of trade means the country either bought her imports at higher price than base year export price remaining some or sold exports at lower price than base year import price remaining same. In 1974-75 both export price index and import price index increased. But import price index increased at a higher rate than export price index. The same thing happened in 1981-82 and 1982-83 which caused deterioration in the terms of trade of the country. Since 1982-83 and onwards the country's commodity terms of trade has been improving again. The average rate of improvement of her commodity terms of trade was 2.60% per annum during 1975-76 to 1985-86. If the whole period is compared then it would be noticed that her commodity terms of trade deteriorated on an average by 2.44% per annum. This was so because the commodity terms of trade improved by 87.61 percentage points in 1972-73 over base year which was the highest improvement during the period under review. The improvement in her commodity terms of trade in 1985-86 was less by 54.89 percentage points than that in 1972-73. The terms of trade in 1985-86 though improved over base year but when compared with 1972-73 it deteriorated.

However it may be concluded that the commodity terms of trade of the country improved during the period under review over

Table : 3. 16

Commodity terms of trade of Bangladesh during 1972-73 to 1985-86

Base Year : 1975-76

Year	Commodity terms of trade	Change over base year	Average annual rate of change %
1972-73	187.61	87.61	
1973-74	112.89	12.89	72-73 to 85-86
1974-75	97.04	-2.96	- 2.44
1975-76	100		
1976-77	114.51	14.51	75-76 to 85-86
1977-78	148.18	48.18	
1978-79	153.18	53.18	2.60
1979-80	150.35	50.35	
1980-81	105.36	5.36	
1981-82	86.09	-13.91	
1982-83	99.42	- 0.58	
1983-84	120.14	20.14	
1984-85	175.67	75.67	
1985-86	132.72	32.72	

Source : Appendix Table : 6

base year. Improvement in the commodity terms of trade would mean that the export of the country was sold at higher price than buying price of import per unit.

There is a consensus that maximisation of commodity terms of trade would mean maximisation of economic welfare. But

Haberler (1968, p.326) has however argued that "instead of being maximised terms of trade should be optimised. Because economic wellbeing will be maximised not when the commodity terms are maximised but when they are optimised."

"What is important to a country, from welfare viewpoint is not how high are the export prices but how high are the export earnings. If we are able to sell out export goods at a very high price, (thereby improving commodity terms) it could meand that foreigners buy less of our export goods. In this case we end up with reduced export earnings and thereby reduced economic welfare. What we cannot afford to ignore, is the elasticity of demand for our export goods. Just as the optimum price for a monopolist - the price which maximises monopoly profits--- is not the highest price which the monopolist would be able to charge, the optimum terms of trade which maximizes welfare is not the highest price of exports which a country could possibly obtain." (Haberler 1968, p.326).

3.10.5 INCOME TERMS OF TRADE : BANGLADESH

The income terms of trade is important to assess the position of a country in foreign trade mechanism. It is specially important for a poor country to take changes in its volume of exports into account. So the movements in commodity terms of trade is required to be corrected for changes in export volume. Symbolically income terms of trade is expressed as:

$$I = Tc \times Q_x \text{ or } I = \frac{Px}{Pm} \times Qx \text{ (as stated before).}$$

A rise in income terms of trade indicates that the country can obtain a larger volume of imports from the sale of its exports.

i.e. its capacity to import based on export has increased. Table 3.17 shows the income terms of trade of Bangladesh during 1972-73 to 1985-86.

Income terms of trade of the country improved by 3.65 percentage points in 1972-73 and by 87.24 percentage points in 1985-86 over base year 1975-76. Income terms of trade hence improved by 80.65 per cent in 1985-86 over 1972-73. Out of 13 years income terms of trade improved in 10 years and deteriorated in 3 years over base year. That is the country had a favourable income terms of trade in the whole period except 3 years under review. It was improving gradually during 1975-76 to 1985-86 with breaks in 1980-81 and 1981-82. During 1981-82 (as mentioned earlier) the country had severe stress and strains due mainly to international recession, volatile exchange rate and higher interest rate in the world market.

The average rate of improvement during this period was 6.47% per annum whereas the average annual rate of its improvement was 4.31% during 1972-73 to 1985-86.

From the above analysis it may be concluded that Bangladesh hnd a favourable income terms of trade in almost all the years. The import capacity of her exports increased during 1972-73 to 1985-86. Improvement of income terms of trade tells us about the export quantity. In 1973-74 Bangladesh had a favourable commodity terms of trade and unfavourable income terms of trade. This means that in this year export price index was higher than import price index but export quantity index was lower than that in base year. Excepting few years the country

had favourable commodity terms of trade and income terms of trade as well in almost all years during 1972-73 to 1985-86.

Table : 3.17

Income terms of trade of Bangladesh during 1972-73 to 1985-86.

Base Year : 1975-76

Year	Income terms of trade	Change over base year % points	Average Annual change %
1972-73	103.65	3.65	
1973-74	62.37	-37.63	72-73 to 85-86
1974-75	46.65	-53.35	
1975-76	100		4.31
1976-77	118.49	18.49	
1977-78	152.07	52.07	75-76 to 85-86
1978-79	151.26	51.26	
1979-80	147.27	47.27	6.47
1980-81	110.53	10.53	
1981-82	99.72	-0.28	
1982-83	130.77	30.77	
1983-84	153.37	53.37	
1984-85	186.58	86.58	
1985-86	187.24	87.24	

Source : Appendix Table : 6

3.11 BANGLADESH TERMS OF TRADE COMPARED WITH DIFFERENT REGIONS

The comparison of Bangladesh terms of trade with other regions will give us a picture of other regions with regards to terms of trade when the terms of trade in Bangladesh was improving.

As discussed before the commodity terms of trade in Bangladesh improved during 1975-76 to 1985-86 except in 1981-82 and 1982-83. During this period her commodity terms of trade improved by 2.6 per cent per annum on an average. The commodity terms of trade deteriorated during 1975 to 1979 in the regions like (i) Developed Market Economies (ii) America, (iii) Europe (iv) EEC (v) EFTA and (vi) Oceania.

During the same period the commodity terms of trade improved over base year 1975 in (i) other Europe and in (ii) Asia. Keeping similarity with these regions the commodity terms of trade improved in Bangladesh during this period.

During 1971 to 1975 the terms of trade improved over base year 1975 in all the above mentioned regions except Oceania and EFTA. During this period Bangladesh commodity terms of trade also improved except in 1974-75 over base year 1975-76.

During the whole period from 1971 to 1979 the commodity terms of trade improved in Asia except in 1976 and 1979. Bangladesh as a member of Asia had resemblance with it and had favourable terms of trade in the same period.

Table 3.18 presents commodity terms of trade of different regions during 1971 to 1979.

Table : 3.18

Commodity terms of trade of different regions during 1971 to 1979

Year	Developed market economies	America	Europe	EEC	EFTA	Other Europe	Asia	Oceanian
1971	110	113	107	109	96	121	135	91
1972	111	109	109	111	97	124	143	93
1973	110	109	106	107	96	126	140	112
1974	97	99	94	95	91	101	105	114
1975	100	100	100	100	100	100	100	100
1976	99	101	99	99	102	101	96	96
1977	98	97	99	99	98	105	100	91
1978	100	94	101	102	99	99	112	91
1979	97	92	98	98	97	na	98	na

Source: Handbook of International Trade and Development Statistics 1980, UNCTAD

World Development Report 1987 has shown that terms of trade has improved in Japan, India, Republic of Korea, HongKong, Singapore and Bangladesh during 1981 to 1985 over base year 1980 among the 12 selected Asian countries (see table 3.19). So our finding that the terms of trade improved in Bangladesh is also supported by the World Bank study.

3.12 TERMS OF TRADE AND ECONOMIC DEVELOPMENT : BANGLADESH

Prebisch and Singer questioned the doctrine of mutual profitability of international division of labour where trade

Table : 3.19

Terms of Trade of some selected Asian countries during 1981 to 1985

Base Year : 1980

Countries	1081	1982	1983	1984	1985
Japan	103	103	106	109	113
India	91	104	111	107	115
Pakistan	99	93	96	88	95
Indonesia	110	105	97	101	97
Republic of Korea	93	100	101	100	105
HongKong	97	110	109	109	110
Malaysia	91	85	88	93	85
Sri Lanka	95	84	101	99	97
Thailand	96	77	84	81	97
The Philippines	112	89	99	101	96
Singpore	na	100	101	101	101
Bangladesh	102	105	102	109	113

Source: World Development Report 1987, 1986 and 1985. The World Bank.

is based on the classical comparative cost doctine. In 1950 Prebisch and Singer not only denied that the primary goods prices would improve, but also stated that prices will tend to decline over the long run.

"According to Prebisch the LDCS have experienced (perhaps will continue to experience) a long run decline in the terms of trade and they should counteract this tendencey by imposing tariff on industrial imports", (Tandon, R and

Hati, N. 1987, p. 16).

Bhagwati in 1958 (pp. 201-205) has put formward "the possibility of growth being immiserized in terms of a general model in which a country is not specialised in either in production or in consumption. An increase in the factor supply or technical progress would raise 'real' income by the amount of output changes at cost and prices. But if factor accumulation is so export-biased that terms of trade worsen, the negative income effect of actual deterioration may be greater than the positive effect of output, expansion". Haberler (1962, p.291) has stated asymmetry between manufactures and primary goods. While primary goods are limited in number and vary little in quality over a period of time manufactured items with new products constantly being added are unlimited in number and even changing in quality. When the statistician treats motor cars, TV sets or drug as if each remained an identical or comparable product he is allowing himself to be deluded by a verbal mirage.

Edgeworth (1894, p.40) stated that "a country could be 'damnified' by productivity increase so that the deterioration of terms of trade worsens its position."

It is alleged, however, that the opposite occurs in respect to manufactured commodities produced in more developed countries. It is contended that the gains from increased productivity have been distributed in the form of higher wages and profits rather than lower prices whereas in case of food and raw material production in the under developed countries the gains in productivity although smaller have been distributed in

the form of price reductions (UN 1950, Lewis 1954).

Before making any comment on the improvement of terms of trade in Bangladesh we should be cautious about the above statements. Also the points raised by R. Tandon and Neelambar Hati (1987, pp. 16 - 17) would be kept in mind which are: (a) The income elasticity of demand for imports from periphery is low in north but is high in the LDCs for imports from centre, (b) Technical progress in the centre tends to reduce the demand for imports from the periphery but technical progress in LDCs tends to occur in export sector and (c) the structure of product and factor markets is much monopolistic in the centre than in the LDCs due to the existence of organised labour unions.

"The prices of primary products have risen sharply in the prosperous period but have subsequently lost in the downswing of trade cycle. In contrast it is asserted that although manufacturing prices have risen less in the upswing they have not fallen as far in depression as they have risen in prosperity. It is, therefore, concluded that over successive cycles of the gap between the prices of two groups of commodities has widened and the primary producing areas have suffered an unfavourable movement in their terms of trade."(Meier 1968, p.58).

In Bangladesh "The real prices of export sector products may be declining so that the real income of the factors can be increasing without there achieving a rise in productivity and with worsening terms of trade." (Baldwin, 1956, pp.259-269).

But in practice there is disguised and open unemployment in Bangladesh. So withdrawal of disguised unemployed labour from

agriculture sector and employment of purely unemployed manpower in export oriented industries has increased total production and hence national income. As well investment has increased due to rise of national income and attraction of more profit in the export oriented industries.

The terms of trade improved in Bangladesh during 1975-76 to 1985-86 due to the following main reasons: (1) The country's export of manufactured goods has been increasing faster than the export of primary goods. For instance the share of garments in aggregate exports of the country rose from 0.08 percent in 1979-80 to 16.34 percent in 1985-86. (2) The exports of food items like fish, prawns and shrimps and tea increased at a rapid rate. The price of these items rose sharply in international market.

Improvement of commodity terms of trade in Bangladesh has increased wage level in the export industries and created more employment facilities. Similarly the profit of investors has been enhanced which again has given impetus to savings and further investment. On the other hand the improvement of income terms of trade has raised the capacity of exports to receive more imports which finally accelerated development.

From the above analysis we may assume that there is a positive association between the improvement of terms of trade of the country and the growth of her national income. With increase of national income the savings level of the country rises which ultimately raises the investment of the country. So we again assume that there may be a positive relation between improvement in the terms of trade and growth of investiment.

With the above hypothesis in mind we try to find the association between terms of trade and per capita income (at current prices) and level of investment through regression analysis. Table 3.20 presents the result of linear regression analysis.

Table : 3.20

Results of Regression Analysis of terms of trade and per capita income and annual investment in Bangladesh (1972-73 to 1985-86).

No.	Form of Regression Equation	R^2	F	D.W. Statistics
1.	Per capita income = Y commodity Terms of Trade = X Y = 2281.13 + 0.113X (3.215)*	0.61534	11.7023	0.6758
2.	Investment (annual) = Y commodity terms of trade = X Y = 25171.94 + 12.754X (4.314)*	0.641415	12.315	0.6957
3.	Per capita income = Y Income terms of Trade =X Y = -219.252 + 19.889X (3.429)*	0.497428	11.703	0.6859
4.	Annual Investment = Y Income Terms of Trade =X Y = 14859.13 + 333.228X (3.615)*	0.521423	13.074	0.6259

Note: Values in parenthesis indicate t - value.
* Significant at 1% level
Source: Table 3.16 and 5.17, Appendix Table 4

Regression equation: 1 shows the relation between commodity terms of trade and per capita income. Here per capita income is considered as dependent variable (Y) and commodity terms of trade as independent variable. The significant value of R^2 and t indicates that there is a positive association between per capita income and commodity terms of trade i.e. both change in the same direction. Regression equation: 2, explains the association between commodity terms of trade and level of investment of the country. Here annual inevestment is considered as dependent variable and commodity terms of trade as independent variable. Here also the significant values of R^2 and t indicate that there is some positive association between the commodity terms of trade and the level of investment in the country. Through equations 3 and 4 we tried to examine the association between income terms of trade and per capita income and annual investment in the country. Here the per capita income and annual investment are considered as dependent variables and income terms of trade as independent variable. The significant R^2 and t values in both the equations tell us that there is a positive association between income terms of trade and per capita income and annual investment i.e. they change in same direction.

However, from the above findings it can be argued that the improvement in terms of trade in Bangladesh may have some positive impact on national income and investment.

3.13 BALANCE OF TRADE AND ECONOMIC DEVELOPMENT OF BANGLADESH

Favourable balance of trade of a country enhances economic development of a country through inflow of foreign

capital. On the other hand unfavourable balance of trade hinders economic development by depressing the earnings of foreign exchange. Further deficit balance of trade increases the dependencey of the country on foreign aid for developmental imports and in absence of sufficient amount of foreign aid it has to curtail developmental imports which ultimately reduces investment. Bangladesh has been facing unfavourable balance of trade since its inception. This unfavourable balance of trade puts the country into foreign exchange crisis which compels her to reduce developmental imports. Reduction of developmental imports effects the growth of national income and investment.

So it may be assumed that the unfavourable balance of trade of the country has some negative impact on national income and investment.

To see whether there is any negative association between deficit balance of trade and national income and investment we have used linear regression equation. By the first regression equation we have regressed per capita income on balance of trade (i.e. per capita income as dependent variable and annual balance of trade as independent variable). The significant values of R^2 and t suggest that the growth of per capita income is explained by balance of trade. It may be concluded from this association of per capita income and deficit balance of trade that the national income of Bangladesh is depressed by the growing deficit in balance of trade of the country.

By regression equation: 2 we have regressed annual level of investment of the country on annual deficit in balance of trade.

Here the significant R^2 value and negative regression coefficient suggest that there is an inverse association between deficit balance of trade and level of investment of the country. From above association it seems that there may exist a negative relation between the annual level of investment and annual deficit in the balance of trade. If the country can reap surplus balance of trade then the national income as well as level of investment may increase.

Table : 3.21

Results of regression analysis of balance of trade and per capita income and annual investment in Bangladesh during 1972-73 to 1985-86

Regression equation	R^2	F	D.W. Statistics
1. Balance of Trade = X Per capita income= Y Y = 117.88 - 1.566 (-5.553)*	0.7198	30.8381	0.9289
2. Balance of Trade = X Annual Investment= Y Y = -8275.78 - 25.5497X (-5.573)*	0.7213	31.054	0.9180

Source : Appendix Table 4 and Table 3.13

* Significant at 1% level

3.14 SUMMARY AND CONCLUSION

Total export receipts and import payments of Bangladesh increased during 1972-73 to 1985-86. Export receipts increased

from TK.276.85 crores in 1972-73 to TK.2716 crores in 1985-86 and import payments increased from TK.378.81 crores in 1972-73 to TK 7065.10 crores in 1985-86.

Exports as percentage of imports was within the range of 28.92% to 73.08%. During the period 1975-76 to 1985-86 this increased slightly. Among 12 selected countries Bangladesh' per capita export was the lowest. The continuous compound growth rates of her exports and imports were 18.29% and 20.21% per annum during the said period respectively. The rate growth of imports was lower than that of exports during 1975-76 to 1985-86. During the whole period under review the rate of deceleration in growth was 1% for exports and 2% for imports per annum. If this position holds good in future her exports may be able to exceed import payments. Bangladesh' share in the aggregate exports of the world decreased from 0.057% in 1973 to 0.049% in 1984. However, during 1980 to 1984 her share in the world exports had a slightly increasing trend.

Her share in the aggregate exports of the developing market economy increased from 0.147% in 1973 to 0.198% in 1984. Similarly her share in total exports of LDCs increased from 12.24% in 1973 to 14.08% in 1984. This means that Bangladesh was doing better among the developing and least developed countries but not in relation to the developed countries. Her share in the world economy is very insignificant. So she may easily increase her share in the aggregate exports of the world through export promotion schemes. Bangladesh' exports share in her GDP was varying between 2.49% and 6.26% during 1972-73 to 1985-86. Her exports share in GDP was increasing during 1975-76 to 1985-86.

On comparison it is observed that Bangladesh export and import increased at higher rate during post-independence period than in pre-independence period. But in both the periods her imports were increasing faster than her exports.

Bangladesh occupied 11th position with regard to average annual growth rate of her exports among the 12 selected countries during 1973 to 1985. Among them average annual growth was the highest in Republic of Korea, which was respectively followed by Singapore, HongKong, Indonesia, Malaysia, Thailand and Japan.

Bangladesh faced an unfavourable balance of trade during 1972-73 to 1985-86. Deficit in her balance of trade rose from TK.102 crores in 1972-73 to TK.4349.5 crores in 1985-86.

The average rate of increase of deficit in her balance of trade was 30.74% per annum. The average rate of increase of deficit in her balance of trade was lower (10.54%) during 1981-82 to 1986-87, than that (38.42%) during 1972-73 to 1981-82.

The gross barter terms of trade of Bangladesh was favourable in almost all the years duging 1972-73 to 1980-81 considering 1975-76 as base year. Similarly her commodity terms of trade improved in almost all years during 1972-73 to 1985-86 over base year. Only in 1974-75, 1981-82 and 1982-83 her commodity terms of trade deteriorated over base year. Her commodity terms of trade improved by 2.6% per annum on average during 1975-76 to 1985-86.

Further her income terms of trade improved in almost all years over base year except in 1973-74, 1974-75 and 1981-82.

Her income terms of trade improved by 4.31% per annum on average during 1972-73 to 1985-86.

It has been observed from regression analysis that the commodity and income terms of trade of Bangladesh change in same direction with per capita income and investment. It seems from these findings that there exists some positive association between terms of trade on the one hand and national income and investment of the country on the other.

Similarly another regression analysis indicates that the deficit balance of trade of the country does have some negative impact on national income and investment of the country.

The export performances of Bangladesh is better. But when compared with the world and export leading countries of Asia her performance seems not to be so satisfactory. Because she is legging behind the export leading countries and she could not increase her share in the world exports.

Bangladesh' share in world export is very insignificant, so she possesses scope to increase her share in the same. The growth of her exports has been retarding gradually over the period of time. If she wants to sustain the growth of her exports more outward-oriented trade strategy may be helpful.