

# Impact Of EU GSP Facilities On Export Growth Of Bangladesh: Especially On Readymade Garments Industry

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**Abstract:** Bangladesh is import oriented country. Balance of payment is always negative. But only readymade garments export balance is positive with trading countries especially with European Union. Bangladesh exports more than 50% RMG exportable product to EU market. There is strong correlation between RMG export under EU GSP and total RMG export to the world as well as with total merchandise export to the world. If there is EU-GSP sustained that will positively affect on the GDP. This positive effect also reducing unemployment, setup new industry and raise income level. On the other hand, if EU-GSP removes, it will create obstacle to export RMG products in EU market and negatively affect on GDP. Recently EU expressed concern about the working condition of Bangladesh because of Rana Plaza collapse and Tazrin fashion fire. They provide condition to retain EU-GSP facility. To retain EU-GSP facilities; Bangladesh should Complaint the condition of EU especially for the Garments sector. To retain RMG product demand in EU market, Bangladesh must be used modern technology to produce exportable product and need to find out the new RMG exportable market. Overall, Bangladesh uses the EU-GSP facilities that tremendously affect on the RMG export growth and total export growth.

**Key Words:** RMG, GSP, GDP, EBA ,Export Growth, EU-GSP, Trend, Unemployment

## Introduction

Bangladesh is a under developed country. But she is going to develop that shows some indicators. Readymade Garments (RMG) export growth is one of them especially to EU countries by using EU GSP facilities under Everything But Arms (EBA) scheme. As growing ratio of export are increasing especially RMG that affects to the Countries Domestic Product (GDP). RMG industry is one of the key drivers in registering growth to the economy of Bangladesh. Nevertheless, it is also necessary to point out that Bangladesh RMG's success is the direct outcome of the two international contributing factors – Multi Fiber Agreement (MFA) quota provided by the USA and Generalized System of Preferences (GSP) scheme offered by the European Union [1]. If EU GSP suspend, RMG product will lose the EU market position and price of RMG will increase in EU market. It is important to note that over the past 15 years, earnings from RMG export have increased by more than 8 times with an exceptional growth rate of 16.5% per annum [2]. The success of Bangladesh's RMG exports in a part attributable to availability of cheap labor, preferential treatment received from the European Union (EU) under the GSP scheme: and substantial quotas available in the USA (as against quota restrictions imposed on its principal competitors, e.g. China, India, Pakistan, Sri Lanka, and Thailand [3]. Bangladesh became a beneficiary of the EU-GSP scheme for LDCs when it was initiated in 1971. The EBA, which provides duty-free and quota-free access exclusively to LDCs, was put in place in 2002 and Bangladesh became a beneficiary of that scheme as well. Under EBA,

all exportable from Bangladesh are eligible for duty-free treatment, subject to compliance with product-specific RoO [4]. In 2013, serious accidents in garment factories in Bangladesh have highlighted the need to ensure that factories across the country comply with international labor standards, including (ILO) conventions. Rana Plaza collapse and Tazrin Fashion fire bears a negative image about the working condition of Bangladesh to the importer. USA has been suspending the GSP facilities of Bangladesh due to international labor standards, including (ILO) conventions. EU may suspend the GSP facilities if Bangladesh failed to comply with the international labor standards, including (ILO) conventions. Here is the concern point to Bangladesh that EU covered the main exportable So it is very much needs to examine that whether the EU GSP facilities has any affect in RMG sector of Bangladesh. This study humble tried to find out the relationship between the total RMG export to the World and RMG export under GSP in EU market. This also tried to show the trend of total RMG export and RMG export under GSP in EU market as well as total export of Bangladesh. By analyzing these trends, it is tried to express the affects of EU GSP on RMG sector of Bangladesh.

## Methodology of the Study

**Sources of Data:** This study is based on secondary survey and information is collected from Export Promotion Bureau Compiled by BGMEA from FY 2008-2009 to FY 2012-2013 through BGMEA B2B Web Portal on 20.10.2013.

**Time series Analysis: Total RMG export Time References:**

The time references of the study is FY 2008-2009 to FY 2012-2013.

## Data Analysis:

The statistical tools that have been used to this study are

- a. **Correlation Analysis:** For establish the relationship between RMG export under EU GSP and total RMG export; Karl Pearson's Coefficient of Correlation method has been used [7].

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b. **Time series Analysis:** For trend analysis, time series analysis has been used [7].

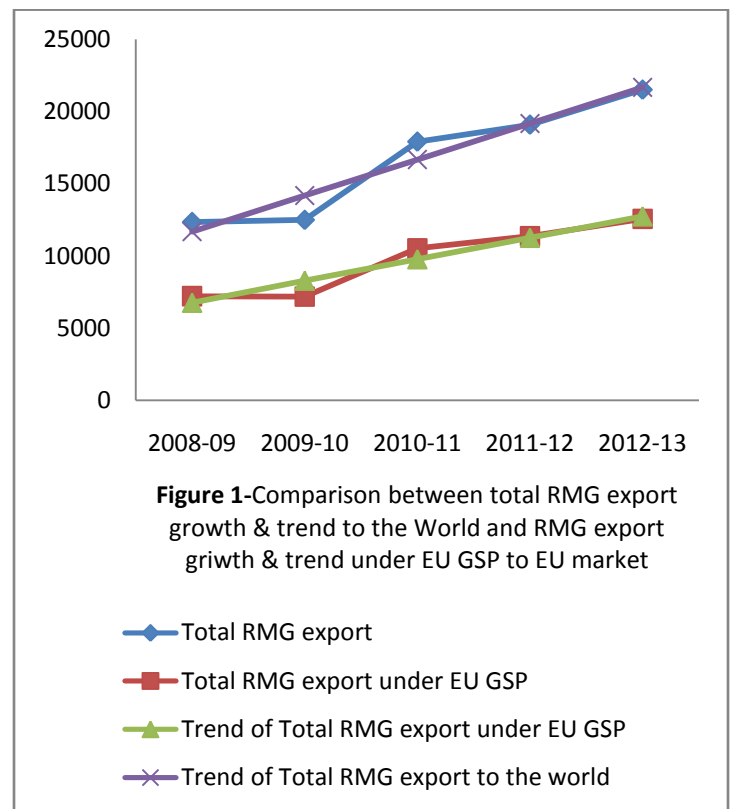
## Results and Discussion:

**Coefficient of Correlation:** Coefficient of Correlation is between **Total RMG export to the world and Total RMG export under EU GSP** to EU from Bangladesh: The value of Coefficient of Correlation +.99 that is approximately +1. So the Total RMG export to the world is perfectly related with Total RMG export under EU GSP to EU. So, +.99 mean that correlation is positive because the sign of  $r$  is positive and the magnitude of correlation is .99. That means Total RMG export under EU GSP to EU goes up, Total RMG export to the world also goes up. (See Appendix 1)

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### Growth and Trend of Total RMG export to the World and total RMG export under EU GSP to EU markets:

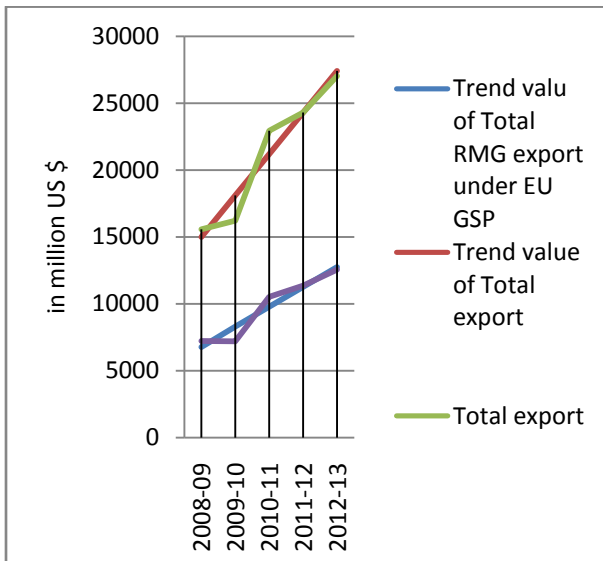
In the figure 1 comprise the total RMG export growth and its trend with the total RMG export growth under EU GSP and its trend to the EU markets. In FY 2008 - 09 the total RMG export to the world was US \$ 12347.77 million where RMG export under EU GSP was US \$ 7218.28 million that was 58.46% of the World RMG export. Year by year total RMG export under EU GSP had increased and reached in FY 2010-11 in US \$ 10519.84 and at the same time total RMG export increased and reached in US \$ 17914.46 million. In FY 2010-11, the value of total RMG export under EU GSP over the total RMG export to the world about 58.72 %. In FY 2012-13, total RMG export to the world reached in US \$ 21515.73 million and total RMG export under EU GSP also reached in US \$ 12564.85 million that was about 58.40% of total RMG export to the world. From FY 2008-09 to 2012-13, the growth rate of total RMG export under EU GSP is about 74.07% as well as growth of total RMG export to the world is about 74.25%. Trend of total RMG export under EU GSP and trend of total RMG export to the world goes same direction. This growth rate and trend prove that total RMG export under EU GSP has been increased because of EU GSP facilities that directly affect on the growth of total RMG export to the world. (see Appendix 3)



**Figure 1-**Comparison between total RMG export growth & trend to the World and RMG export growth & trend under EU GSP to EU market

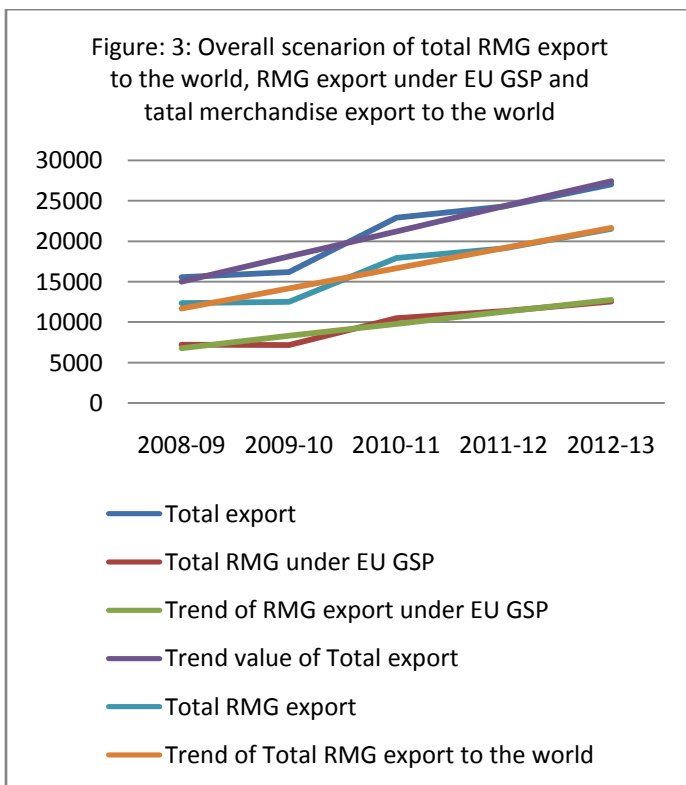
### Total RMG export under EU GSP growth and Trend Vis-à-vis Total export:

In the figure 2 comprise the total export growth and its trend with the RMG export under EU GSP growth and its trend. In FY 2008-09 the total export was US \$ 15565.19 million where RMG export under EU GSP was US \$ 7218.25 million. Year to year total export had increased and reached in FY 2010-11 in US \$ 22924.38 and at the same time RMG export under EU GSP increased and reached in US \$ 10519.84 million. In FY 2010-11 value of RMG export under EU GSP over total export about 45.89%. In FY 2012-13, total export reached in US \$ 27018.26 million and RMG export under EU GSP also reached in US \$ 12564.85 million that was about 46.51% of total export. These prove that growth rate of RMG export by using EBA to EU increased, at the same time total export of Bangladesh growth rate nearly same to RMG export under EU GSP. So growth rate of RMG export by using EBA to EU is positively affect on total export growth rate of Bangladesh.



**Figure 2** Comparison of Growth and Trend between total export and RMG export under EU GSP to EU

In the figure 3 shows that when the RMG export under EU GSP increased at the same time total RMG export to the world and total merchandise export also increased. In FY 2010-11 total exports, RMG export under EU GSP and total RMG export were increased 41.47%, 46.30% and 43.35% respectively than the previous year. In FY 2012-13 it were 11.24%, 10.45% and 12.71%. Total RMG nearly 50% export to EU market by using EBA facilities. So the RMG export under EU GSP directly and tremendously affects on the total export growth of Bangladesh. (See Appendix 4)



**Figure 3:** Overall scenario of total RMG export to the world, RMG export under EU GSP and total merchandise export to the world

It is clear from the analysis that EU GSP facilities affect directly to RMG sector of Bangladesh. If EU GSP sustain, it's affect positively on RMG sector and if EU GSP remove it affect negatively on RMG export growth as well as total export of Bangladesh. Bangladesh is getting favorable to export RMG by using GSP to EU market.

**Conclusion:**

Bangladesh mainly exports RMG products to EU markets and about 90% of all RMG in EU market. Bangladeshi RMG products are taking EBA scheme facilities to export EU market. All garment products are getting EU GSP facilities under the new rules of origin. RMG Export under EU GSP and total RMG export as well as total export are strongly positive correlated. If RMG export under EU GSP growth had increased that time total export growth had also increase and vice versa. EU GSP facilities tremendously affect on Bangladesh RMG sectors that will affect on economic growth because its affect on the export growth of Bangladesh. So, EU GSP facilities should retain at any cost for positive effect on export growth and economic growth of Bangladesh.

**References:**

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**Appendix**

Data – in million US \$

Year	2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 -13
Total RMG export under EU GSP	7218.25	7190.75	10519.84	11375.56	12564.85
Total RMG export	12347.77	12496.72	17914.46	19089.69	21515.73

Data Source: Export Promotion Bureau Compiled by BGMEA collects from BGMEA B2B Web Portal on 20.10.2013[6]

Data – in million US \$

Years	Total RMG export (X)	Total RMG export under EU GSP (Y)	$X-\bar{X}$	$(X-\bar{X})^2$	$Y-\bar{Y}$	$(Y-\bar{Y})^2$	$(X-\bar{X})(Y-\bar{Y})$
2008 - 09	12347.77	7218.25	-4325.104	18706524.61	-2555.6	6531091.36	11053235.78
2009 - 10	12496.72	7190.75	-4176.154	17440262.23	-2583.1	6672405.61	10787423.4
2010 - 11	17914.46	10519.84	1241.586	1541535.795	745.99	556501.0801	926210.7401
2011 - 12	19089.69	11375.56	2416.816	5840999.578	1601.71	2565474.924	3871038.355
2012 - 13	21515.73	12564.85	4842.856	23453254.24	2791	7789681	13516411.1
N=5	$\sum X = 83364.37$	$\sum Y = 48869.25$	$\sum (X-\bar{X}) = 0$	$\sum (X-\bar{X})^2 = 66982576.45$	$\sum (Y-\bar{Y}) = 0$	$\sum (Y-\bar{Y})^2 = 24115153.97$	$\sum (X-\bar{X})(Y-\bar{Y}) = 40154319.37$

Own calculation

Here  $\bar{X}$  and  $\bar{Y}$  are the respective means of Total RMG export (X) and Total RMG export under EU GSP (Y) variables.

$$\bar{X} = \frac{\sum X}{N} = \frac{83364.37}{5} = 16,672.874$$

$$\bar{Y} = \frac{\sum Y}{N} = \frac{48869.25}{5} = 9773.85$$

$$r = \frac{\sum (X-\bar{X})(Y-\bar{Y})}{\sqrt{\sum (X-\bar{X})^2} \sqrt{\sum (Y-\bar{Y})^2}} = \frac{40154319.37}{\sqrt{66982576.45} \sqrt{24115153.97}} = \frac{40154319.37}{8184.28839 * 4910.718274} = \frac{40154319.37}{40190734.56} = +.99$$

**Appendix 2**

Data – in million US \$

Year	2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 -13
Total RMG export under EU GSP	7218.25	7190.75	10519.84	11375.56	12564.85
Total export	15565.19	16204.65	22924.38	24287.66	27018.26

Data Source: Export Promotion Bureau Compiled by BGMEA collects from BGMEA B2B Web Portal on 20.10.2013[6]

Data – in million US \$

Years	Total export (X)	Total RMG export under EU GSP (Y)	$X-\bar{X}$	$(X-\bar{X})^2$	$Y-\bar{Y}$	$(Y-\bar{Y})^2$	$(X-\bar{X})(Y-\bar{Y})$
2008 - 09	15565.19	7218.25	-5634.838	31751399.29	-2555.6	6531091.36	14400391.99
2009 - 10	16204.65	7190.75	-4995.378	24953801.36	-2583.1	6672405.61	12903560.91
2010 - 11	22924.38	10519.84	1724.352	2973389.82	745.99	556501.0801	1286349.348
2011 - 12	24287.66	11375.56	3087.632	9533471.367	1601.71	2565474.924	4945491.051
2012 - 13	27018.26	12564.85	5818.232	33851823.61	2791	7789681	16238685.51
N=5	$\sum X = 106000.14$	$\sum Y = 48869.25$	$\sum (X-\bar{X}) = 0$	$\sum (X-\bar{X})^2 = 103063885.5$	$\sum (Y-\bar{Y}) = 0$	$\sum (Y-\bar{Y})^2 = 24115153.97$	$\sum (X-\bar{X})(Y-\bar{Y}) = 49774478.81$

Own Calculation

Here  $\bar{X}$  and  $\bar{Y}$  are the respective means of Total export (X) and Total RMG export under EU GSP (Y) variables.

$$\bar{X} = \frac{\sum X}{N} = \frac{106000.14}{5} = 21200.028$$

$$\bar{Y} = \frac{\sum Y}{N} = \frac{48869.25}{5} = 9773.85$$

$$r = \frac{\sum (X-\bar{X})(Y-\bar{Y})}{\sqrt{\sum (X-\bar{X})^2} \sqrt{\sum (Y-\bar{Y})^2}} = \frac{49774478.81}{\sqrt{103063885.5} \sqrt{24115153.97}} = \frac{49774478.81}{10152.03849 * 4910.718274} = \frac{49774478.81}{49853800.93} = +.99$$

### Appendix 3

Fitting the Straight line Trend

Data – in million US \$

Year	Total export (Y)	Total RMG export under EU GSP (Y)	Deviation From middle Year, (X)	Total RMG export under EU GSP (XY)	Total RMG export (XY)	$X^2$	Trend Values, $Y_c = a + bX$ Total export under EU GSP	Trend Values, $Y_c = a + bX$ Total RMG Export
2008-09	12347.77	7218.25	-2	-14436.5	-24695.54	4	6758.248	11687.096
2009-10	12496.72	7190.75	-1	-7190.75	-12496.72	1	8286.049	14179.985
2010-11	17914.46	10519.84	0	0	0	0	9773.85	16672.874
2011-12	19089.69	11375.56	1	11375.56	19089.69	1	11261.651	19165.763
2012-13	21515.73	12564.85	2	25129.7	43031.46	4	12749.452	21658.652
N=5	$\sum Y = 83364.37$	$\sum Y = 48869.25$	$\sum X = 0$	$\sum XY = 14878.01$	$\sum XY = 24928.89$	$\sum X^2 = 10$	$\sum Y_c = 48829.249$	$\sum Y_c = 83364.37$

## Own Calculation

$$\text{Here, } a = \bar{y} = \frac{\sum Y}{N} = \frac{83364.37}{5} = 16672.874 \text{ (For Total RMG Export)}$$

$$\text{And } b = \frac{\sum XY}{\sum X^2} = \frac{24928.89}{10} = 2492.889 \text{ (For Total RMG Export)}$$

$$\text{Therefore, } Y_c = a + bX = 16672.874 + 2492.889 X \text{ (For Total RMG Export)}$$

$$\text{Here, } a = \bar{y} = \frac{\sum Y}{N} = \frac{48869.25}{5} = 9773.85 \text{ (Total RMG export under EU GSP)}$$

$$\text{And } b = \frac{\sum XY}{\sum X^2} = \frac{14878.01}{10} = 1487.801 \text{ (Total RMG export under EU GSP)}$$

$$\text{Therefore, } Y_c = a + bX = 9773.85 + 1487.801 X \text{ (Total RMG export under EU GSP)}$$

## Appendix 4

## Fitting the Straight line Trend

Data – in million US \$

Year	Total export (Y)	Total RMG export under EU GSP (Y)	Deviation From middle Year, (X)	Total RMG export under EU GSP (XY)	Total export (XY)	X <sup>2</sup>	Trend Values, Y <sub>c</sub> = a + bX Total RMG export under EU GSP	Trend Values, Y <sub>c</sub> = a + bX Total Export
2008-09	15565.19	7218.25	-2	-14436.5	-31130.38	4	6758.248	15002.198
2009-10	16204.65	7190.75	-1	-7190.75	-16204.65	1	8286.049	18101.113
2010-11	22924.38	10519.84	0	0	0	0	9773.85	21200.028
2011-12	24287.66	11375.56	1	11375.56	24287.66	1	11261.651	24298.943
2012-13	27018.26	12564.85	2	25129.7	54036.52	4	12749.452	27397.858
N=5	$\sum y = 106000.14$	$\sum Y = 48869.25$	$\sum X = 0$	$\sum XY = 14878.01$	$\sum XY = 30989.15$	$\sum X^2 = 10$	$\sum Y_c = 48829.249$	$\sum Y_c = 106000.14$

## Own calculation

$$\text{Here, } a = \bar{y} = \frac{\sum Y}{N} = \frac{106000.14}{5} = 21200.028 \text{ (For Total Export)}$$

$$\text{And } b = \frac{\sum XY}{\sum X^2} = \frac{30989.15}{10} = 3098.915 \text{ (For Total Export)}$$

$$\text{Therefore, } Y_c = a + bX = 21200.028 + 3098.915 X \text{ (For Total Export)}$$

$$\text{Here, } a = \bar{y} = \frac{\sum Y}{N} = \frac{48869.25}{5} = 9773.85 \text{ (Total RMG export under EU GSP)}$$

$$\text{And } b = \frac{\sum XY}{\sum X^2} = \frac{14878.01}{10} = 1487.801 \text{ (Total RMG export under EU GSP)}$$

$$\text{Therefore, } Y_c = a + bX = 9773.85 + 1487.801 X \text{ (Total RMG export under EU GSP)}$$