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Evaluating the Impact of Eliminating Export Subsidies in Bangladesh

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Introduction

- An export subsidy is one of the key policy interventions in developing countries that offer incentives for exporters to export in international markets.
- Elimination of export subsidy may have a differential impact across the different sectors and income groups.
- Impact of subsidies is inconclusive in literature: Both positive and negative impact
- Laborde et al. (2013), Panagariya (2000) , Kang (2019) Girma & Stepanok (2020), Bollman & Ferguson (2018)
- Bangladesh is an emerging economy and will be graduated from LDC to developing countries by 2026. Export subsidies must be eliminated after graduation. Supporting export industries is compelling Bangladesh to spend a large amount, which could be used for various development programs that may bring more significant benefits for the country.
- Impact of removal export subsidies on economy and different household

Fig 1. Selected Sectoral Cash Incentives on Exports (%)

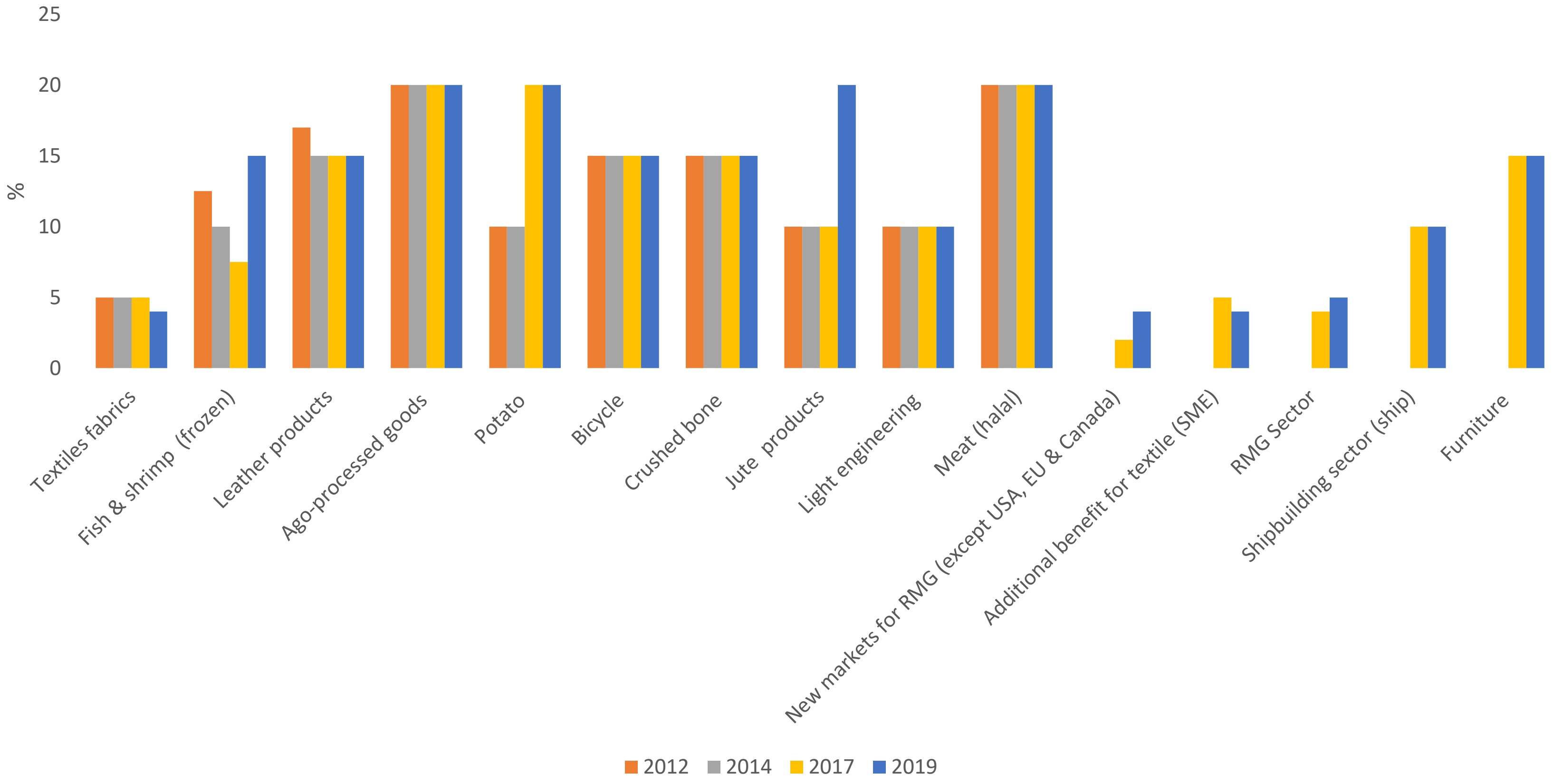


Table 2. Export Subsidies in Comparison to GDP, Revenue and Development Budget (in billion BDT)

Fiscal Year	Tax expenditure for Bonded warehouse	Tax return for Duty drawbacks	Cash Subsidy	Total Support to export	Support as % of GDP	Support % of the revenue budget	Support as % of development Budget
2008	162.3	0.601	12.7	175.6	3.2	29	95.4
2010	152.2	0.884	15	168.1	2.7	24.3	85.8
2012	202.7	1.69	15.8	220.2	3.2	27.7	85
2014	310.5	1.39	17.91	329.8	4.2	34.7	99.9
2016	702.5	12.5	38	753	4.3	33.8	62.5
2018	766.7	20.6	50.5	837.8	3.7	22.6	56.5

We use the MyGTAP program and model developed by Walmsley & Minor, (2013), a customized version of the standard GTAP model.

This new MyGTAP interface allows us to incorporate country-specific data to investigate the impacts on the household level.

In MyGTAP model, we eliminate the single 'regional' household incorporating the multiple private households and a government agent where their expenses are directly related to the income received from endowment factors and taxes.

Methodology

Share for factor use by activity (WTF)

Factor Ownership Share (OWNWGT)

Weight of each commodity in HH consumption (WTC)

Transfer Income from govt to HH (TRNG)

Govt Savings (SGOV)

HH income (IHLD)

Mapping the sectors to MyGTAP

Altertax to update subsidies

Updating Data from SAM and Aggregation to MyGTAP

Structure of Economy

Aggregated Sectors	Value-added	Export on total output	Export share	Import share on Output	Import share
1. Grains and Crops	11.12	0.39	0.86	8.5	8.15
2. Livestock, Fisheries and Meat Products	1.34	0.07	0.31	2.45	0.32
3. Mining and Extraction	6.8	0.16	0.10	1.92	0.68
4. Processed Food	1.45	1.53	1.57	17	9.12
5. Textiles and Clothing	7.16	51.68	87.06	17.6	20.1
6. Light Manufacturing	1.88	2.41	1.84	23.3	9.43
7. Heavy Manufacturing	1.02	1.17	1.26	59.1	41.22
8. Utilities and Construction	17.02	-	-	-	-
9. Transport and Communication service	28.31	2.87	6.3	4.99	4.65
10. Other Services	23.9	0.25	0.7	4.88	6.33
Total	100		100		100

Share of household income from factor of production (%)

	Rural							Urban		
	Landless	Marginal farmer	Small farmer	Large farmer	Day laborer	Self employed	Employee	Day laborer	Self employed	Employee
Land	0.0	4.6	10.5	23.2	4.5	3.0	3.4	2.1	2.1	2.0
Capital	34.0	37.1	29.7	16.9	25.3	71.6	54.8	13.0	48.9	29.9
NatRes	2.8	2.9	1.6	2.6	2.5	0.9	2.0	2.7	1.3	2.0
Lab_ unskilled	53.3	45.5	48.1	48.2	55.7	19.4	27.4	71.8	24.5	27.2
Lab_ skilled	10.0	9.9	10.1	9.2	12.0	5.1	12.5	10.3	23.1	38.9
	100	100	100	100	100	100	100	100	100	100

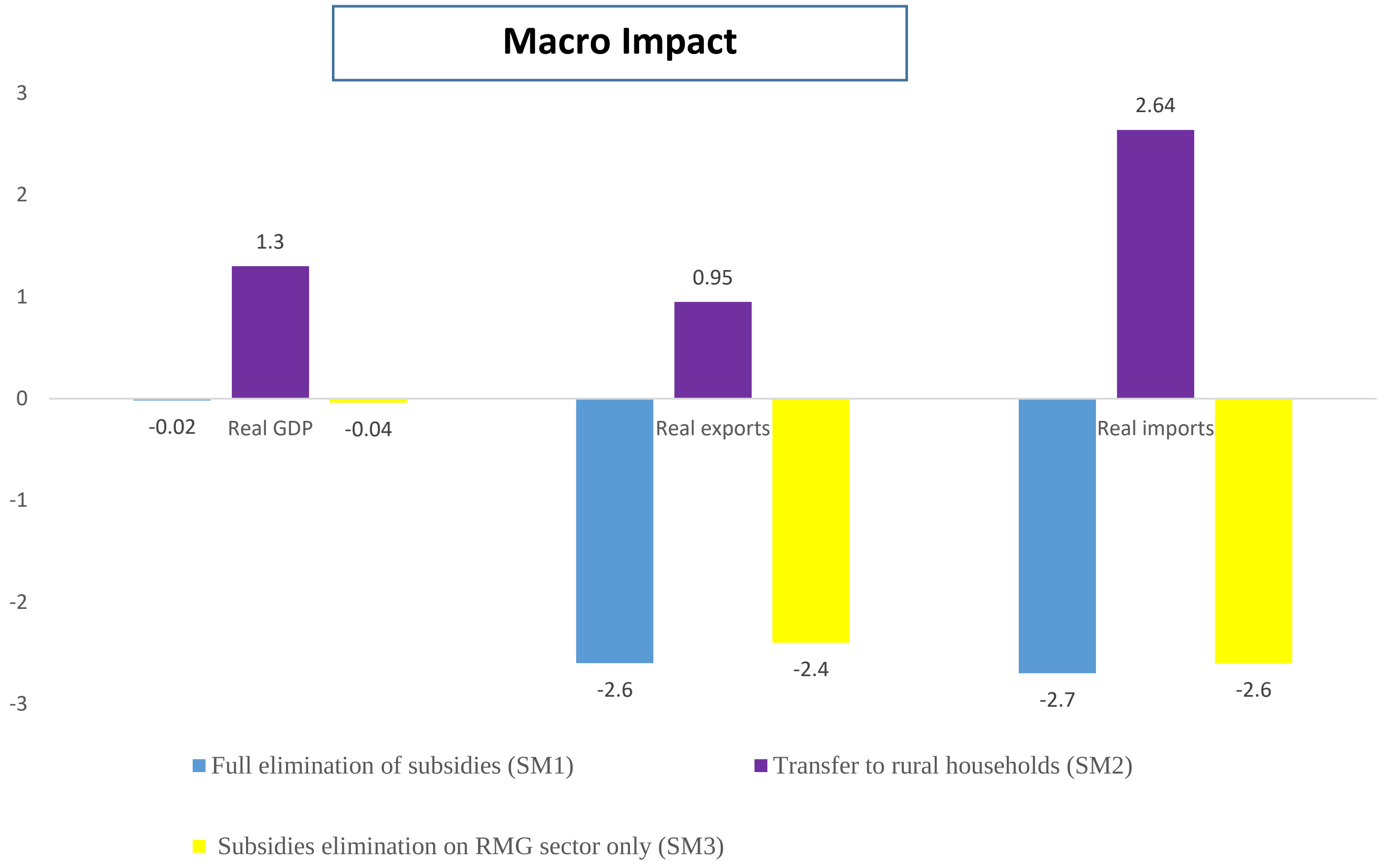
Share of factor of production in sectoral value addition (%)

	Grain & Crops	Meat & Livestock	Extraction & Mining	Process food	Textiles & Clothing	Light Manf	Heavy Industry	Utilities & Construction	Transport & Communications	Other Services Sector
Land	47.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Capital	0.0	34.1	47.6	63.1	40.2	54.9	61.3	84.7	38.7	57.8
NatRes	0.0	0.0	33.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unskilled Lab	48.9	64.9	17.9	26.0	42.2	31.9	27.3	7.8	49.7	9.4
Skilled Lab	3.6	1.0	0.9	10.9	17.6	13.3	11.4	7.5	11.7	32.8
	100	100	100	100	100	100	100	100	100	100

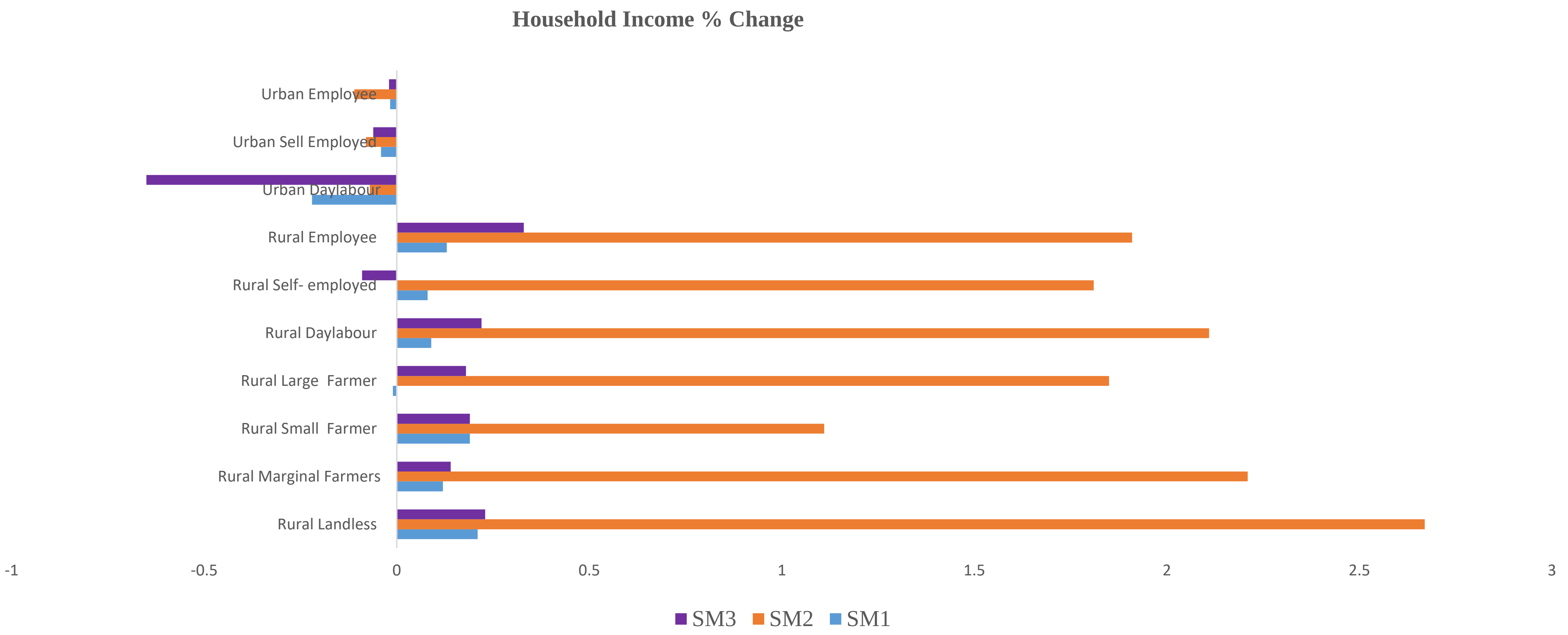
Simulations

- Under scenario one - **a complete elimination of all export subsidies** on all products .
- We then introduce a **partial removal that is a 50 percent reduction** of export subsidies to all sectors and at the same time transfer funds to poor households savings accumulated from the subsidies.
- Elimination of export subsidies **in the apparel sector to analyse sectoral impact** under scenario three.

Macro Impact



Household Impact



Conclusion

- But both exports and imports will drop substantially if we eliminate the export subsidies.
- However, the elimination of export subsidy will affect the RMG sector substantially.
- While if we reduce the export subsidy by 50 percent and transfer this accumulated savings from the government to the targeted seven household groups, the real GDP may increase by about 1.3 percent.
- The removal of export subsidies may drop the real household income for urban households but increase income to rural households. Eliminating export subsidies affects the domestic price fall that helps to increase some households' income.

Conclusion

- Government transfer to poor households leads to increased income to seven targeted households.
- The real income may increase due to a rise in the return of wages and production factor profits. Changes in household income sources show households benefit from a government transfer increase by 2.5 percent for rural households.
- This analysis indicates that there is a huge opportunity cost of export subsidies, and welfare could be increased by redirecting the spending to more productive channels.

- ***Thank you for your patience***

- ***Q & A***

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