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Assessing tariff and exchange rate pass-through in apparel export prices in the European Union: LDC graduation implications for Bangladesh

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- This policy brief examines the extent of tariff and exchange rate pass-through in Bangladesh's apparel exports to the EU and assesses the implications for competitiveness after LDC graduation.
- Using counterfactual tariffs and export prices that replicate the post-graduation trade environment, the analysis estimates how much of the new tariff burden and currency depreciation is absorbed by exporters rather than passed on to EU importers and consumers.
- By jointly analysing tariff incidence and exchange rate pass-through, the brief provides timely evidence on the adjustment pressures facing the apparel sector.
- It identifies policy-relevant insights to support Bangladesh's transition to a more competitive, post-preference trade regime.

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Introduction

Trade policy and exchange rate changes shape export competitiveness by determining who ultimately bears adjustment costs—exporters, importers, or consumers. When tariffs rise, exporters may compress their margins, importers may absorb part of the tariff to preserve market share, or consumers may face higher final prices. Similarly, when a currency depreciates, exporters may lower foreign-currency prices by adjusting margins, passing some of the gains from depreciation on to importers and consumers. The degree to which tariffs and exchange rate movements are reflected in prices—known as pass-through—depends on market structure, the relative pricing power of exporters and importers, the elasticity of supply and demand, competitive conditions, and participation in global value chains. A large body of empirical literature shows that pass-through is often incomplete, with firms adjusting prices strategically rather than mechanically transmitting cost or exchange rate changes to buyers (Feenstra, 1989; Goldberg & Knetter, 1997).

These dynamics are particularly important for Bangladesh as it prepares to graduate from Least Developed Country (LDC) status, scheduled for November 2026. This transition will lead to the withdrawal of long-standing trade preferences in key export markets. The European Union (EU), Bangladesh's largest export destination, currently provides duty-free access under the Everything But Arms (EBA) initiative, which has been central to the expansion of apparel exports. Following Bangladesh's graduation and the expiry of the three-year transition period, EBA preferences in the EU will be replaced by the Standard Generalised Scheme of Preferences (GSP) or GSP+, contingent upon Bangladesh meeting certain criteria.¹ Whether Bangladesh qualifies for the EU GSP+ or gets the standard GSP, its apparel exports would still face Most Favoured Nation (MFN) tariffs due to the safeguards in place under Article 29 of the proposed EU GSP (Razzaque & Rahman, 2022).² As a result, clothing

¹ Also referred to as the Special Incentive Arrangement for Sustainable Development and Good Governance, GSP+ offers much better market access preferences, providing duty-free access to 66% of EU tariff lines, including textile and clothing items, subject to the fulfilment of Article 29 of EU GSP provisions. To be eligible for GSP+ preference, Bangladesh must meet two criteria: vulnerability criteria and sustainable development criteria. The vulnerability criterion requires the eligible country to have a non-diversified economy, where the country's seven largest sections of GSP-covered imports account for more than 75% of its total GSP-covered imports to the European Union over the past three consecutive years. Under the sustainable development criterion, a beneficiary country is required to ratify and effectively implement 32 international agreements and conventions on human rights, labour rights, environmental protection, climate change, and good governance. Bangladesh has already fulfilled the vulnerability criterion, as the seven largest sections of GSP-covered imports account for more than 75% of its total GSP-covered imports to the EU. To qualify for GSP+, it will be necessary for Bangladesh to ratify and effectively implement all 32 conventions.

² The reference to the "proposed" EU GSP scheme is made as the current regime, which was supposed to expire in 2023, has been extended until the end of 2027. What benefits Bangladesh will receive after its graduation and the three-year extension granted by the EU for a graduating country to retain the same LDC benefit will be determined by the upcoming EU GSP regime, which is being negotiated and finalised by the EU Parliament and Council. According to EU provisions on "Safeguards in the Textile, Agriculture, and Fisheries Sectors" (Article 29 of the proposed EU GSP), clothing products from a GSP+ beneficiary will not receive preferential access if the share of the relevant products is above 6% of total EU imports of the same products and exceeds the product graduation threshold during a calendar year. Bangladesh's apparel exports, classified under GSP section S-11b, already exceed the 6% market share threshold in the EU. In such cases, EU rules stipulate that a beneficiary country's share of GSP-covered imports of

exports to the EU will be subject to a 12% tariff, compared to the zero tariff currently available under the EBA scheme.

This shift in the tariff regime raises critical concerns for export competitiveness, particularly given the sector's heavy concentration on low-value, price-sensitive apparel products with thin margins. The extent to which exporters can absorb tariffs or pass them on, and the degree to which exchange rate depreciation can offset rising trade costs, will therefore be critical in shaping Bangladesh's post-graduation performance in the EU market.

Against this backdrop, this policy brief examines the extent of tariff and exchange rate pass-through in Bangladesh's apparel exports to the EU and assesses the implications for competitiveness after LDC graduation. Using counterfactual tariffs and export prices that replicate the post-graduation trade environment, the analysis estimates how much of the new tariff burden and currency depreciation is absorbed by exporters rather than passed on to EU importers and consumers. By jointly analysing tariff incidence and exchange rate pass-through, the brief provides timely evidence on the adjustment pressures facing the apparel sector and identifies policy-relevant insights to support Bangladesh's transition to a more competitive, post-preference trade regime.

Apparel export price competitiveness in the EU

Price is a key indicator of export competitiveness, capturing both product attractiveness and the ability to compete in destination markets. A comparison of unit-value prices across the EU shows that Bangladesh consistently receives significantly lower prices for its apparel exports than its major competitors. The average weighted price of Bangladesh's top ten apparel export items is more than 50% lower than that of China and Vietnam, and even lower than Cambodia, another EBA beneficiary (Figure 1). A similar pattern holds for Bangladesh's top twenty apparel products, all of which record lower unit values in the EU market (Figure 2). Disaggregated product-level evidence at the HS 8-digit level reinforces this concern, showing that Bangladesh receives lower prices for nearly all of its top apparel exports compared with its competitors. While these low prices indicate strong competitiveness in terms of volume, they also point to limited markups and thin profit margins relative to other exporters.

the same products cannot exceed 37% if tariff preferences are to be maintained. Available evidence suggests that Bangladesh's share is significantly higher, accounting for nearly half of all GSP-covered clothing imports into the EU (Razzaque & Rahman, 2022). Consequently, if the proposed GSP rules remain unchanged, Bangladesh could find itself in an anomalous position: while formally qualifying for GSP+, its apparel exports under S-11b would be excluded from preferential treatment and would instead be subject to MFN tariffs.

One could argue that Bangladesh's apparel exports are likely to remain price-competitive following LDC graduation, as its current unit values are substantially below those of major competitors. However, the price gaps also imply limited scope for exporters to absorb new tariff costs. If tariff pass-through is incomplete and margins are further compressed, profitability could decline, weakening firms' ability to sustain competitiveness over time.

Figure 1: Average unit value price of the top 10 apparel export items in the EU: Bangladesh vs major comparators (EUR/kg)

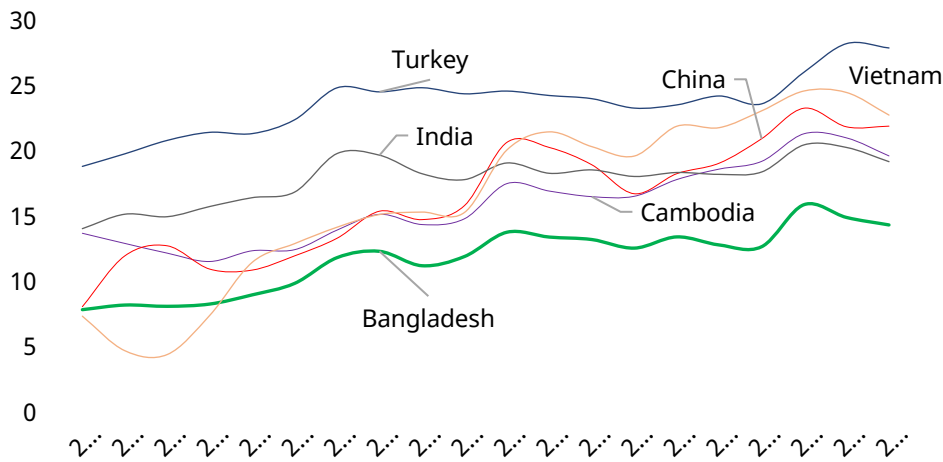
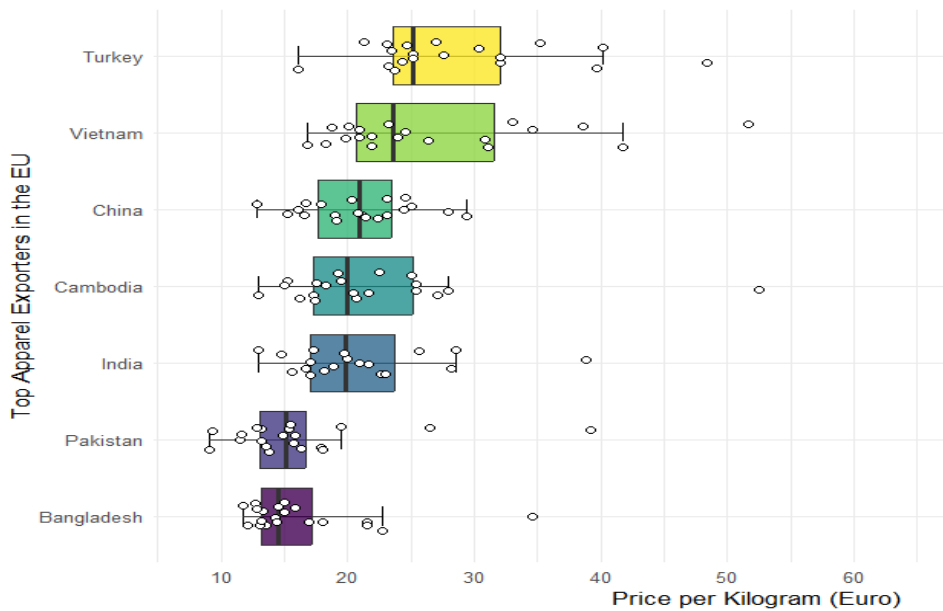


Figure 2: Bangladesh's top 20 apparel products' price distribution against its comparators in the EU market (EUR/kg)



Source: Authors' analysis using the data from the EU Comext.

Developing countries often use exchange rate adjustment to support export competitiveness, particularly when exporters operate with thin margins. Despite a substantial nominal depreciation of the BDT since 2022, Bangladesh's real exchange rate has followed a long-term appreciating path as the limited flexibility in exchange rate management contributed to the real effective

exchange rate appreciating by more than 60% between 2012 and 2021, before easing to 46% in 2023 following the sharp depreciation of the BDT (Government of Bangladesh, 2025). Bilateral real effective exchange rates vis-à-vis China, India, and Viet Nam also appreciated by around 25 to 30% over the period, signalling a loss of competitiveness relative to key apparel-exporting competitors.

Theoretical and empirical framework

Early models of pass-through (for example, Krugman, 1986 and Dornbusch, 1987) assumed perfect competition and constant marginal costs, implying full exchange rate pass-through (ERPT) and tariff rate pass-through (TRPT). Subsequent theoretical and empirical work, however, has shown that pass-through is typically incomplete, as firms adjust markups rather than prices (Feenstra, 1989; Goldberg & Knetter, 1997; Gopinath et al., 2020; Cavallo et al., 2021). Under constant marginal costs and no imported inputs, tariffs and exchange rates are predicted to affect export prices symmetrically, but this symmetry breaks down once firms operate under monopolistic competition, rely on imported intermediates, and behave strategically. In practice, ERPT and TRPT are often asymmetric: ERPT tends to be weaker than TRPT when imported inputs are important, since exchange rate depreciation raises both revenues and input costs, dampening net price adjustment (Amiti et al., 2014). Further asymmetries arise across appreciations and depreciations, across products with varying levels of domestic value-added, and across firms with differing market power and demand elasticity.

In this paper, a panel dataset of Bangladesh's apparel exports to the EU for the period 2014 to 2023 has been constructed. Export values and quantities at the HS-8 level are drawn from Eurostat's Comext database, from which unit values (euros per kilogram) are computed as proxies for export prices. Although unit values may reflect quality heterogeneity, they are standard in the pass-through literature (Feenstra & Romalis, 2014). As Bangladesh has enjoyed a zero tariff under the EU EBA scheme throughout the sample period, direct estimation of TRPT is not feasible. Instead, we construct counterfactual export prices and tariffs by benchmarking Bangladesh against its main competitor countries that face MFN or other non-zero tariffs, following Hsiao et al. (2012). Exchange rate data come from the IMF's International Financial Statistics (IFS), using both nominal (BDT per EUR) and real exchange rates to distinguish pure currency effects from inflation differentials.

We estimate pass-through elasticities using log-linear panel regressions that closely align with the theoretical framework while accommodating key features of Bangladesh's apparel exports. This specification allows direct interpretation

of coefficients as elasticities and ensures comparability with the existing empirical literature. To address unobserved heterogeneity, we include multi-dimensional fixed effects: destination fixed effects control for importer-specific demand conditions within the EU, product fixed effects capture systematic differences across apparel categories, and year fixed effects account for common global shocks affecting all exporters simultaneously.

Findings and discussions

The estimated results provide clear evidence of incomplete tariff and exchange rate pass-through for Bangladesh's apparel exports to the EU. The tariff pass-through coefficients are negative and statistically significant across specifications, indicating that post-graduation tariffs would lead exporters to lower their pre-tariff export prices. The estimated coefficients suggest that a 10% increase in tariffs is associated with a three to 8% decline in pre-tariff prices, implying that Bangladeshi exporters are likely to absorb roughly 30 to 80% of post-graduation tariff burden by lowering their pre-tariff prices. This incomplete pass-through suggests that tariff incidence is shared between exporters and EU importers/consumers, with importers and consumers jointly bearing an estimated 20 to 70% of the burden.

The results also indicate incomplete exchange rate pass-through. Depreciation of the BDT leads to lower export prices. Estimates show that, on average, 40 to 50% of exchange rate depreciation is transmitted to EU importers and consumers in the form of lower export prices, suggesting that exporters retain part of the gains through higher markups. When the real exchange rate is used, the estimated pass-through rises to around 70%, highlighting the role of inflation differentials.

Table 1: Estimated results from the baseline model

	(1)	(2)	(3)	(4)
1 st lag of Log of Counterfactual Price	0.38*** [0.01]	0.24*** [0.01]	0.20*** [0.01]	0.20*** [0.01]
Log of Counterfactual Tariff	-0.27*** [0.03]	-0.77*** [0.08]	-0.43*** [0.06]	-0.43*** [0.06]
Log of NER	-0.52*** [0.03]	-0.55*** [0.03]	-0.60*** [0.04]	
Log of RER				-0.31*** [0.02]
Constant	0.64*** [0.16]	2.23*** [0.28]	1.38*** [0.26]	2.57*** [0.20]
Observations	31,882	31,882	31,882	31,882
R-squared	0.46	0.57	0.58	0.58
Destination FE	Yes	Yes	Yes	Yes
Product FE	No	Yes	Yes	Yes
Year FE	No	No	Yes	Yes

Sources: Authors' estimation using the data from EU Comext, WITS, and IMF.

Note: Dependent variable for all four models is the Log of the Counterfactual price, denominated in EUR. NER represents the nominal bilateral spot exchange rate, expressed as units of the destination market's currency (EUR) per BDT.

The real exchange rate is calculated as NER multiplied by the ratio of CPI of the importing and exporting countries. The CPI is normalised to the base year 2010. Here, an increase in the RER is associated with an appreciation of BDT against the EUR, which is also adjusted for inflation.

Robust Standard errors in brackets (Std. err. adjusted for 7,131 clusters in Reporter*Product)

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

The interaction between the woven dummy, defined as a binary indicator taking the value of one for woven garments and zero for knitted products, and the tariff variable is statistically insignificant across all specifications, indicating no systematic difference in tariff pass-through between the two segments. This implies that post-graduation tariffs are likely to influence pricing behaviour in woven and knitted apparel in broadly similar ways. In contrast, the interaction between woven products and exchange rates is negative and statistically significant, providing clear evidence that exchange rate pass-through is weaker for products with higher imported input content. In practical terms, exporters of woven apparel are less able than their knitted counterparts to translate currency depreciation into lower export prices. By contrast, when the woven dummy is interacted with the exchange rate, the negative and statistically significant coefficient shows that exchange rate pass-through is weaker for woven garments, consistent with their higher reliance on imported inputs.³

Consequently, woven apparel exporters emerge as especially vulnerable in the post-LDC graduation period, facing stronger competitiveness pressures and markedly limited pricing flexibility.

³ Bangladesh's woven garment has a very low level of domestic value addition and continue to rely heavily on imported fabrics, whereas knitwear production has achieved nearly 80% domestic value addition (ERD, 2024).

Table 2: Effects of higher import content supply in apparel export on the tariff and exchange rate pass-through

	(1)	(2)
1 st lag of Log of Counterfactual Price	0.08*** [0.01]	0.08*** [0.01]
Log of Counterfactual Tariff	-0.40*** [0.09]	-0.42*** [0.10]
Woven (=1, if the product is woven garment, =0 otherwise)	0.00	0.00
	[.]	[.]
Woven * Log of Counterfactual Tariff	-0.13 [0.14]	-0.08 [0.14]
Log of NER	-0.67*** [0.05]	
Woven * Log of NER	-0.19*** [0.06]	
Log of RER		-0.33*** [0.02]
Woven * Log of RER		-0.13*** [0.03]
Constant	0.56** [0.28]	2.11*** [0.22]
Observations	32,382	32,382
R-squared	0.08	0.10
Year FE	Yes	Yes

Robust Standard errors in brackets

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Sources: Authors' estimation using the data from EU Comext, WITS, and IMF.

Conclusion and policy implications

Bangladesh is set to enter a more competitive trade environment as its long-standing duty-free access to the EU comes to an end following graduation from LDC status. Its apparel export performance in this market after LDC graduation will depend not only on changes in tariffs and exchange rates but also on firms' ability to adjust to these shocks. The empirical results suggest that such flexibility is limited, implying that adjustment costs are likely to be borne largely by exporters. A coordinated policy response is therefore needed to mitigate adverse effects and sustain the competitiveness of Bangladesh's RMG exports in the EU market after graduation.

First, securing continued preferential market access in the EU should remain a top priority. Given the large and incomplete tariff pass-through, the imposition of MFN tariffs after LDC graduation would be borne substantially by Bangladeshi exporters through margin compression. Bangladesh should therefore intensify its engagement with the EU as the remaining of the current GSP scheme, until the end of 2027, offers a critical window to meet the 32 international conventions required for GSP+ eligibility and to negotiate the removal or relaxation of Article 29, which would otherwise impose MFN tariffs even after receiving GSP+ status. In coordination with other GSP beneficiaries,

Bangladesh should also advocate for a more flexible application of safeguard provisions in the next GSP cycle.

Second, reliance on price-based competitiveness is increasingly fragile and unsustainable for Bangladesh. Persistently low unit values reflect thin margins and limited pricing power, leaving exporters poorly positioned to absorb new trade costs. This underscores the need for a strategic shift toward upgrading product quality and design capabilities, allowing firms to command higher prices rather than competing primarily on cost.

Third, exchange rate policy alone cannot offset post-graduation trade shocks. Although depreciation provides some relief, exchange rate pass-through is incomplete and constrained by imported input dependence, particularly in woven apparel. Maintaining a competitive and flexible real exchange rate remains important, but it should be complemented by structural reforms rather than viewed as a standalone solution.

Fourth, strengthening backward linkages, especially in woven apparel, is essential to improve competitiveness. Heavy reliance on imported fabrics limits price adjustments when the currency depreciates, resulting in lower exchange-rate pass-through for woven exporters and constraining their ability to regain competitiveness in the EU market. As tariffs rise after graduation, this constraint will intensify. Policy efforts should therefore promote investment in domestic woven fabric, dyeing, and finishing; attract foreign partners with advanced technology and production practices; and provide targeted incentives or concessional financing to expand local input production and increase domestic sourcing.

Fifth, targeted support for the most exposed segments is warranted. Woven apparel exporters face stronger competitive pressures due to both tariff exposure and limited exchange rate pass-through. Transitional support measures, including access to affordable finance, technology upgrading, and productivity-enhancing investments, could help mitigate adjustment costs during the post-LDC transition. Measures to ease infrastructure and logistics bottlenecks, and productivity-enhancing programmes focused on automation, process improvements, and skills development can help offset tariff pressures.

Finally, firm-level productivity and cost efficiency need to be strengthened to sustain competitiveness. Since both tariff and exchange rate adjustments are partly absorbed through margins, improving energy efficiency, logistics performance, compliance management, and scale economies becomes critical for maintaining export viability in a less preferential trade environment.

Looking ahead, Bangladesh's LDC graduation represents a critical turning point for the apparel sector as preference erosion, limited pass-through, and stronger competition reshape export dynamics. Although adjustment costs are unavoidable, early and coordinated preparation can significantly soften their impact. The transition will require both price responses and deeper structural changes, supported by strategic trade engagement, targeted policy measures, and firm-level adaptation to strengthen supply capacity, reduce trade costs, and move up the value chain. If pursued in parallel, these efforts can sustain export growth and competitiveness in an evolving policy environment.

References

- Amiti, M., Itskhoki, O., & Konings, J. (2014). Importers, Exporters, and Exchange Rate Disconnect. *American Economic Review*, 104(7), 1942–1978.
- Cavallo, A., Gopinath, G., Neiman, B. & Tang, J. (2021). 'Tariff Pass-Through at the Border and at the Store: Evidence from US Trade Policy', *American Economic Review: Insights*, 3(1), pp. 19–34
- Dornbusch, R. (1987). Exchange Rates and Prices. *American Economic Review*, 77(1), 93–106.
- Economic Relations Division (2024). *Upscaling the RMG Sector. prepared by Research and Policy Integration for Development (RAPID) with support from the Economic Relations Division (ERD)*, Government of the People's Republic of Bangladesh.
https://erd.portal.gov.bd/sites/default/files/files/erd.portal.gov.bd/page/6fc21888_1122_4f28_b548_75c698b5b78e/RAPID_Final%20Report%20%281%29.pdf
- Feenstra, R. C. (1989). Symmetric Pass-Through of Tariffs and Exchange Rates Under Imperfect Competition: An Empirical Test. *Journal of International Economics*, 27(1–2), 25–45. [https://doi.org/10.1016/0022-1996\(89\)90076-7](https://doi.org/10.1016/0022-1996(89)90076-7)
- Feenstra, R. C., & Romalis, J. (2014). International Prices and Endogenous Quality. *Quarterly Journal of Economics*, 129(2), 477–527. <https://doi.org/10.1093/qje/qju001>
- Goldberg, P. K., & Knetter, M. M. (1997). Goods Prices and Exchange Rates: What Have We Learned? *Journal of Economic Literature*, 35(3), 1243–1272.
- Gopinath, G., Boz, E., Casas, C., Díez, F.J., Gourinchas, P.-O. and Plagborg-Møller, M. (2020). 'Dominant Currency Paradigm', *American Economic Review*, 110(3), pp. 677–719
- Government of Bangladesh (2025). *Graduation from the Least Developed Countries (LDCs): Smooth Transition Strategy (STS)*, Economic Relations Division, Ministry of Finance.
- Hsiao, C., Ching, H. S., & Wan, S. K. (2012). A Panel Data Approach for Program Evaluation: Measuring the Benefits of Political and Economic Integration of Hong Kong With Mainland China. *Journal of Applied Econometrics*, 27(5), 705–740. <https://doi.org/10.1002/jae.1230>
- Krugman, P. (1986). *Pricing to Market When the Exchange Rate Changes (Working Paper No. 1926)*. National Bureau of Economic Research. <https://doi.org/10.3386/w1926>
- Razzaque, M. A., & Rahman, J. (2022). *Towards a Transformed and Revitalized Trade and Economic Partnership With the EU. Friedrich-Ebert-Stiftung (FES) Bangladesh*. Available at

https://bangladesh.fes.de/fileadmin/user_upload/pdf-files/Final_Version_Towards_a_Transformed_Report.pdf