



Export pricing in preferential and non-preferential markets

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- Bangladeshi apparel exporters receive lower unit value prices in the U.S. market than in the EU, controlling for product, firm, and market characteristics.
- Exchange-rate pass-through is incomplete in both markets, consistent with pricing-to-market (PTM) behaviour, but the response is 15% to 16% stronger in the U.S.
- Larger firms and those with broader market reach command higher prices; multi-product exporters show greater pricing flexibility across destinations.
- Firm characteristics shape price levels but do not alter PTM responses; the pricing adjustment to exchange-rate movements is broadly shared across all firm types.
- These findings carry direct implications for Bangladesh's export competitiveness as it approaches LDC graduation and the erosion of EU preferential access. Competitiveness in the U.S. market has historically hinged on low prices; however, sustaining such a strategy risks significant profit erosion in the EU market, where pricing conditions and competitive dynamics differ.

Introduction

A significant body of literature found that exporters do not charge a uniform price across their export destinations, even for the same product, indicating destination-specific markup adjustment.¹ However, while this literature has greatly improved the understanding of exporter pricing behaviour, the role of trade policy regimes in generating destination-specific price differences has received much less attention at the firm-product level. In particular, when exporters face different tariff treatment across major destination markets, pricing disparities may emerge through channels that are not reducible to productivity, quality, or demand conditions alone.

Bangladesh is the world's second-largest apparel exporter, with more than 65% of its apparel export earnings concentrated in the European Union (EU) and the United States (U.S.). It sells broadly similar products into two major markets that have long operated under sharply different trade regimes.² The EU grants Bangladesh duty-free access under the Everything But Arms (EBA) initiative, whereas the U.S. applies Most Favoured Nation (MFN) tariffs averaging around 12% to 15% and offers no comparable bilateral preference (Razzaque & Islam, 2024).

This institutional asymmetry matters not only because of its immediate implications for export competitiveness, but also because it provides a revealing context in which to assess whether, and to what extent, exporters adjust their free-on-board (FOB) prices across preferential and non-preferential destinations. Where a destination imposes relatively high tariffs and exporters lack preferential access, firms may absorb part of the tariff burden into their own margins in order to preserve competitiveness, thereby compressing markups independently of underlying productivity advantages (Asprilla et al., 2019; Winters & Chang, 2000).

Conversely, preferential market access does not necessarily translate into a one-for-one improvement in exporters' realised prices. In markets where tariffs are zero, buyers may be able to appropriate part of the preference margin through stronger bargaining power, with the result that some of the rent associated with duty-free access is reflected not in higher supplier prices but in lower landed prices for importers (Crowley et al., 2021; Razzaque & Islam, 2024). These two forces therefore operate simultaneously but in opposite directions, compressing margins in the high-tariff U.S. market while potentially limiting price gains in the preferential EU market, suggesting that the tariff

¹ Such behaviour has been documented for a wide range of countries, including France, Portugal, Hungary, Spain, China, and the United States (Bastos & Silva, 2010; Berman et al., 2012; De Lucio et al., 2018; Görg et al., 2017; Harrigan et al., 2015; Manova & Zhang, 2012).

² More than 90% of the total export to the EU and the U.S. is concentrated in apparel.

regime itself may generate systematic cross-destination price wedges, yet this channel remains underexplored in the pricing-to-market literature.

Much of the policy discussion around Bangladesh's LDC graduation has focused on the direct tariff shock that will arise once preferential access is withdrawn (Raihan et al., 2024; Razzaque, 2022; WTO, 2020). A related study by Razzaque et al. (2026) estimates the extent to which exporters will absorb the new tariff burden in the EU market following graduation. However, neither that study nor the broader literature has documented whether firms already differentiate in their destination-specific pricing behaviour between the two markets where Bangladeshi exporters face fundamentally different trade regimes.

Against this backdrop, this policy brief aims to examine whether Bangladeshi apparel exporters charge systematically different prices in the EU and the U.S., and whether firm-level characteristics shape the degree and form of such destination-specific pricing. The findings of this brief are relevant well beyond the Bangladesh case. As countries graduate from preferential trade regimes and confront a more uncertain external environment, the erosion of tariff preferences is likely to affect competitiveness not only through conventional market-access margins but also through the strategic pricing responses of exporters themselves. Understanding how firms adjust markups across destinations, and which firms possess the capacity to do so, is therefore central to assessing the resilience of export sectors in a post-preference world.

Empirical approach and some salient features of the data

The empirical strategy follows the pricing-to-market (PTM) framework developed by Knetter (1989) and synthesised by Goldberg & Knetter (1996). The objective is to estimate whether exporters adjust markups across destinations in response to exchange-rate movements and whether such behaviour differs systematically between the EU and the U.S. A panel fixed-effects panel specification is employed to separate destination-specific pricing responses from time-invariant differences in firm capabilities, product composition, and quality.

To test for asymmetric pricing behaviour, a binary indicator for the U.S. market is interacted with the exchange rate, allowing the elasticity of export prices to differ between the two destinations. The baseline estimation equation is:

$$\ln P_{ijkt} = \beta_0 + \beta_1 \ln ER_{kt} + \beta_2 D_{U.S.} + \beta_3 (D_{U.S.} \times \ln ER_{kt}) + \beta_4 Z_{it} + \lambda X_{ikt} + \delta_{ijt} + \varepsilon_{ijkt}$$

Where,

- $\ln P_{ijkt}$ is the natural log of the export unit value (denominated in BDT) of product i exported by firm j to destination k in year t .
- $D_{U.S.}$ is the dummy variable that equals 1 if destination k is the U.S. and 0 otherwise (EU countries).
- $\ln ER_{kt}$ is the natural log of the nominal exchange rate in destination k at time t (BDT per unit of foreign currency).
- Z_{it} includes firm-specific characteristics such as technological intensity (proxied by technological and machinery imports by the firm), firm size, number of destination markets served, and number of apparel products exported.
- X_{ikt} is the destination-specific and destination-product-specific control variable, which includes the destination country's GDP (market size), GDP per capita (income level), average product price (intensity of competition), and average product tariff rate.
- δ_{ijt} is the firm-product-year fixed effect, which captures the within-firm price-to-market strategy.

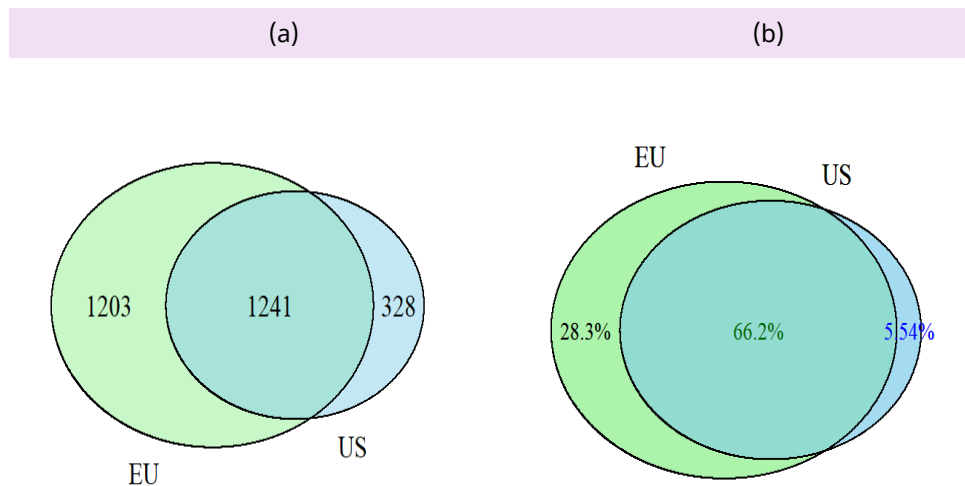
The coefficient β_1 represents the baseline elasticity of export prices with respect to exchange rate movements in the EU market and therefore captures the degree of PTM under the preferential regime. A positive and statistically significant coefficient is consistent with incomplete pass-through and destination-specific markup adjustment. β_2 captures the average price difference between the U.S. and EU markets, conditional on the other covariates. The interaction coefficient β_3 captures whether the response of export prices to exchange rate changes differs in the U.S. relative to the EU. A significant estimate for this term would indicate asymmetric PTM behaviour across preferential and non-preferential markets. β_4 represents whether firm-specific characteristics influence pricing behaviour for apparel exporters.

Salient features of the data

The empirical analysis draws on Bangladesh's customs records covering the universe of merchandise exports from 2010 to 2023, yielding more than 161,000 firm-product-destination-year observations at the eight-digit Harmonised System (HS) level. The analysis is restricted to apparel exports destined for the EU and the U.S. markets. Bangladesh's apparel exports to the EU and the U.S. are characterised by substantial heterogeneity across firms, but not by widespread diversification in either products or markets. Most exporters remain concentrated along one or both dimensions, while a relatively small group combines broader product scope with wider destination coverage.

The structure of firm participation across the two destination groups is particularly informative. A substantial share of firms, 43.4%, exported only to the EU in 2023, whereas only 11.8% served the U.S. market exclusively. However, the distribution of export value tells a starkly different story: firms serving both markets simultaneously accounted for more than 66% of total apparel export value. This contrast indicates that while many firms are active in only one destination, the dominant share of Bangladesh's apparel earnings is generated by firms with simultaneous access to both the EU and the U.S.

Figure 1: Number of firms and their export value serving in the EU and U.S. markets, 2023.



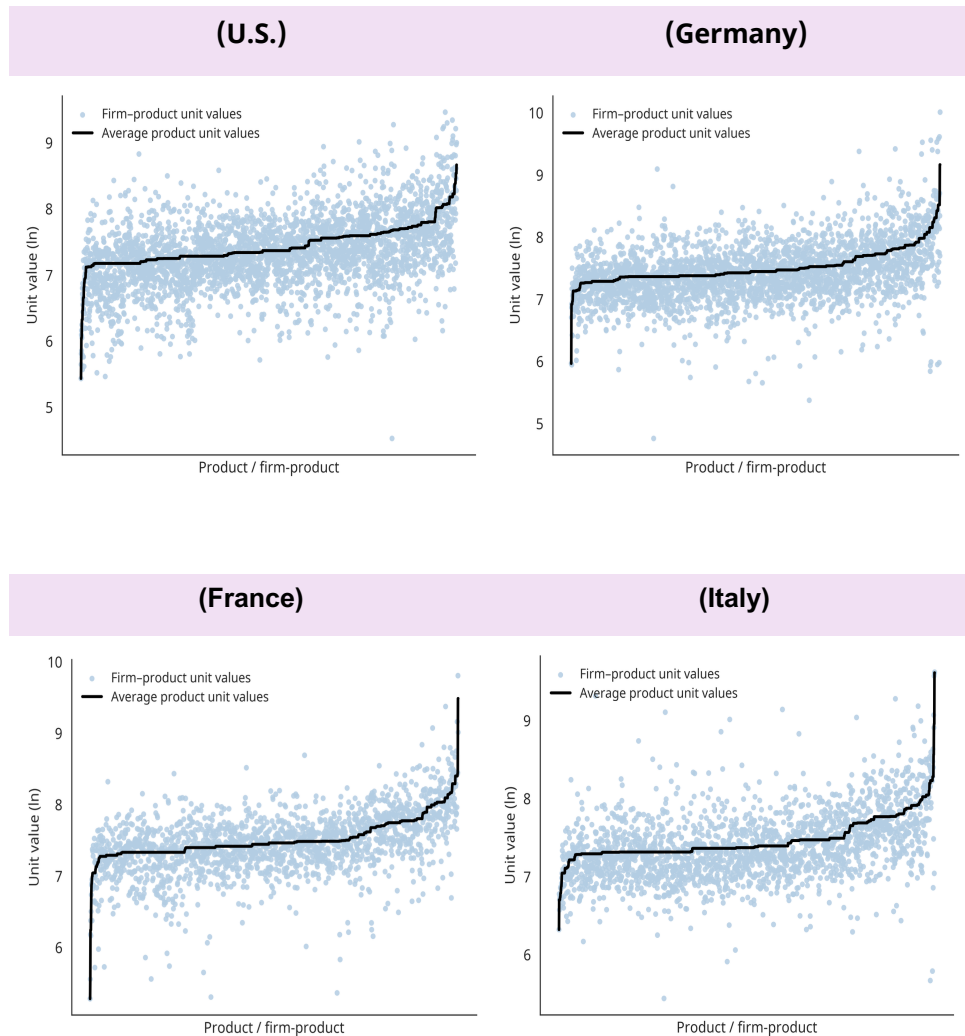
Source: Authors' representation using Bangladesh Customs data. Notes: Panel (a) presents the number of firms serving the EU only, the U.S. only, and both markets. Panel (b) shows the corresponding shares of total export value.

Unit values, the ratio of export value to export quantity, are the proxy measure of export prices. In our dataset, the within-product dispersion is substantial. The average coefficient of variation is approximately 67.7% across eight-digit apparel categories, ranging from 55.8% for knitted products to 78.9% for woven items. A variance decomposition further reveals that around 48% of observed price variation is associated with firm fixed effects, whereas destination fixed effects account for only about 2%. This confirms that differences in pricing outcomes are overwhelmingly a firm-level phenomenon rather than a consequence of geography or transport costs.

Furthermore, in firm-level data within narrowly defined product categories, there is substantial dispersion in unit values. For the same HS eight-digit apparel item, observed unit values differ considerably across firms, often lying well above or below the corresponding product average. Such dispersion is visible in the top four apparel exporting markets in Figure 2, but it appears more pronounced in the United States, where the spread of firm-product observations around the average line is noticeably wider than in the major EU destinations. This suggests that firm-level pricing outcomes are far from uniform even within

highly disaggregated product categories, and that the extent of this heterogeneity differs systematically across destination markets.

Figure 2: Apparel export unit values in the top four markets: product versus firm-product data



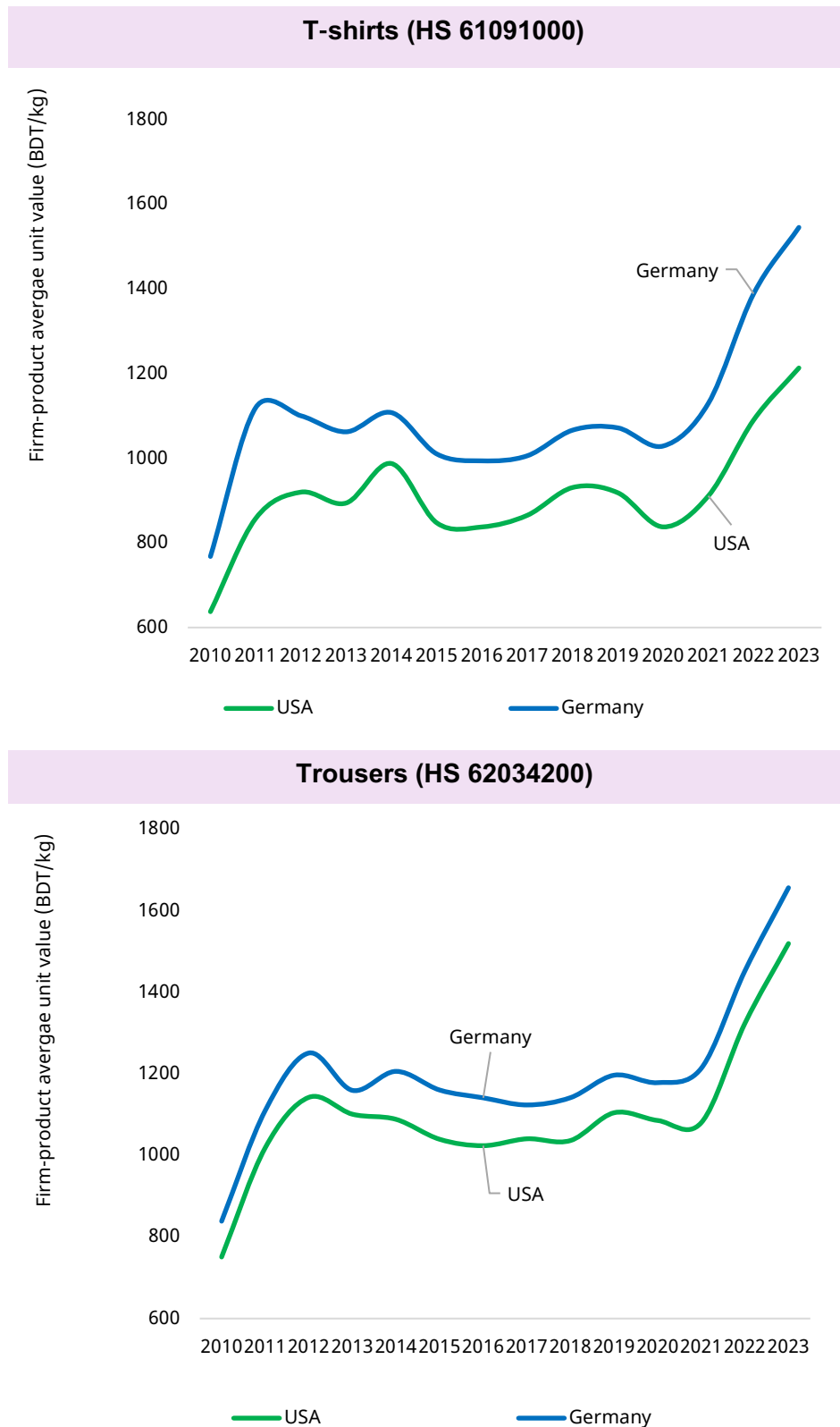
Source: Authors' representation using the data from Bangladesh Customs.

The destination-specific pattern becomes clearer when attention is restricted to individual products. For major apparel exports such as T-shirts (HS 61091000) and trousers (HS 62034200), average pre-tariff export prices are consistently higher in the EU than in the U.S.³ For instance, exporters receive about 20% to 27% higher prices for T-shirts in Germany than in the U.S., while trousers command a 9% to 15% price premium in the German market. For the top ten apparel export products exported by leading firms, exporters receive about 5% to 18% higher prices in the EU than in the U.S. market. These patterns point to

³ In 2023, boys' cotton T-shirts (HS 6109100) made up about 24% of total apparel exports to the EU, while boys' cotton trousers (HS 62034200) accounted for roughly 21% of total apparel exports to the U.S.

a systematic price differential between preferential (EU) and non-preferential (U.S.) markets, consistent with destination-specific pricing behaviour.

Figure 3: Unit price comparison of the top two exporting apparel items



Source: Authors' representation using the data from Bangladesh Customs.

Findings and discussion

Table 1 reports the baseline estimates. Column (1) uses product-year fixed effects, while column (2) replaces these with firm-product-year fixed effects. For comparability, firm-product pairs with fewer than two observations are excluded from the specification in column (1).⁴ Across both models, the main coefficients are stable in sign, magnitude, and significance, suggesting that the principal findings are not driven by the choice of fixed effects alone.

Table 1: Baseline results

	(1)	(2)
Log of exchange	0.45*** (0.11)	0.41*** (0.08)
U.S.	-0.85** (0.34)	-0.76** (0.30)
U.S. × log of exchange	0.16** (0.08)	0.15** (0.07)
Log of imp. price level	0.05*** (0.01)	0.03*** (0.01)
Log of dest. imp tariff	0.93*** (0.13)	0.59*** (0.11)
Log real GDP	0.00 (0.00)	-0.00** (0.00)
Log real GDP p.c.	0.02 (0.01)	-0.01 (0.01)
Constant	4.45*** (0.49)	5.24*** (0.37)
Observations	161826	161825
R-squared	0.27	0.71
HS8 × Year FE	Yes	No
Firm × HS8 × Year FE	No	Yes

Notes:

(i) The dependent variable is the ln unit value of the product.

(ii) One observation is one firm–HS8–destination–year combination for Bangladeshi apparel exports between 2010 and 2023.

⁴ Including these observations or excluding firm–products with less than three or four observations does not materially affect the results.

- (iii) Column (1) includes product–year fixed effects, while the other columns include firm–product–year fixed effects.
- (iv) Standard errors in parentheses are clustered at the destination–year level and are shown in parentheses.
- (v) Asterisks denote significance at 10% (*), 5% (**), 1% (***).

Finding 1: A large and persistent price wedge between the EU and the US market

The coefficient on the U.S. dummy in Table 1 is negative and statistically significant in both specifications, indicating that Bangladeshi apparel exporters receive systematically lower FOB prices in the U.S. market than in the EU. The implied price gap is large, with export prices to the U.S. lower by approximately 53% to 57% relative to those obtained in the EU. This result persists even after controlling for observable destination characteristics and for increasingly fine-grained forms of product and firm heterogeneity. This finding is consistent with Curran & Nadvi (2015) and Razzaque & Islam (2024), both of whom report lower Bangladeshi apparel unit values in the U.S. than in the EU. In the latter study, this pattern is interpreted as being consistent with partial retention of preference rents in the EU market.

Finding 2: Pricing-to-market is incomplete and higher in the U.S. market than in the EU market

In the EU benchmark, the coefficient on the log exchange rate is 0.45 (product-year specification) and 0.41 (firm-product-year specification), implying incomplete pass-through of exchange-rate changes and confirming destination-specific markup adjustment. The interaction between the U.S. dummy and the exchange rate is positive and statistically significant in both columns, indicating that the response of FOB prices to exchange-rate movements is 15% to 16% higher in the U.S. than in the EU. One possible interpretation is that exporters to the U.S., facing a non-preferential tariff regime, may have greater incentives to retain exchange-rate gains in local-currency terms rather than to fully transmit them into lower border prices. This pattern is also consistent with the Dominant Currency Paradigm (DCP), under which USD invoicing weakens the responsiveness of U.S. import prices to bilateral exchange-rate changes (Gopinath et al., 2020). The estimates should not, however, be read as a definitive test of the invoicing mechanism itself; rather, they indicate differential exchange-rate responses across the two destination markets.

Finding 3: Firm characteristics shape price levels, not pricing behaviour

When examining heterogeneity across firms, we found that firms serving a larger number of destinations and large firms obtain substantially higher prices than smaller firms, with the premium estimated at roughly 30% to 35%. This is consistent with evidence linking larger firms to higher-quality production and stronger access to more lucrative markets (Amiti & Khandelwal, 2013; Hallak &

Sivadasan, 2013; Verhoogen, 2008). Moreover, we also found evidence that market reach and scale are more strongly associated with price-setting advantages in the U.S. than in the EU.

Firms specialising in knitted items receive lower prices, on average, than firms with a stronger orientation toward woven products, a discount of around 10% to 13%, and this effect is more pronounced in the U.S. market. This is plausible in light of the generally lower complexity of knitted production relative to woven garments (Sytsma, 2022). By contrast, a high share of technology imports does not yield pricing power, consistent with Cirera et al. (2022), who found that in Bangladesh, technology is utilised for cost-efficiency and high-volume sewing rather than for product differentiation or value addition.

Beyond price levels, we also examine whether these firm-level characteristics influence a firm's PTM behaviour. Across nearly all specifications, the interaction terms between the exchange rate and firm-level characteristics are statistically insignificant, confirming that these characteristics operate as level effects rather than PTM effects. They suggest differences in the prices firms receive across destination markets, but they have not yet established that such firms respond differently to exchange-rate movements.

Key statistics: Firm heterogeneity and price levels

Large firms (top 5% of exporters): ~30% to 35% price premium over smaller firms.

Broader market reach: each additional destination served is associated with significantly higher FOB prices.

Knitted-product-specialised firms: ~10% to 13% price discount relative to woven-oriented exporters.

A high share of technology imports has no statistically significant impact on pricing power.

None of the firm-level characteristics alters the firm's PTM response to exchange-rate movements.

Findings 4: Product scope and market reach shape pricing behaviour across firms.

In our robustness analysis, we found consistent evidence supporting our core findings; however, some notable heterogeneity also arises across firm types. Firms with more limited destination reach display sharper differences in pricing behaviour, while more diversified exporters have greater flexibility to smooth markups across destinations (Berman et al., 2012). The distinction between single-product and multi-product firms is particularly informative: single-product

exporters show no statistically significant difference in pricing behaviour between the U.S. and the EU, whereas multi-product exporters do, consistent with the literature emphasising product scope as a source of pricing flexibility (Manova & Zhang, 2012).

Policy recommendations

This paper shows that Bangladeshi apparel exporters face lower FOB prices in the United States than in the EU, reflecting differences in trade regimes, while exhibiting incomplete exchange-rate pass-through in both markets—evidence of pricing-to-market behaviour. Although firm characteristics such as scale, market reach, and product orientation influence price levels, they do not systematically affect pricing responses. These findings highlight important implications for trade policy, export strategy, and industrial upgrading as Bangladesh prepares for its post-LDC transition.

The findings suggest that the impact of LDC graduation extends beyond direct tariff increases. Duty-free access in the EU is associated with higher realised export prices, implying that preference erosion may affect both market access and price realisation through reduced margins and bargaining advantages. As a result, the loss of preferences could compress firms' adjustment space, highlighting that post-graduation challenges should be viewed as a broader competitiveness issue rather than a narrow tariff concern.

The persistent price gap between the EU and the U.S. underscores the importance of securing preferential access in major markets. This supports Bangladesh's efforts to obtain durable post-LDC trade arrangements, including successful transition into the EU's GSP+ regime and the preservation or negotiation of favourable access in other key markets. The present evidence suggests an additional rationale: more favourable trade regimes may also support better price realisation at the firm level. That is especially important in a sector where thin margins, buyer power, and intense international competition already constrain profitability.

The results show that exchange-rate pass-through is incomplete and varies across markets, with firms adjusting markups strategically. While depreciation may temporarily boost local-currency earnings, especially in tariff-disadvantaged markets like the U.S., it cannot fully restore competitiveness. Since firms absorb part of exchange-rate gains, the impact on prices and demand is limited, underscoring the need for a broader competitiveness strategy beyond reliance on exchange-rate policy.

Firms with greater scale, wider market reach, and a focus on woven products achieve higher prices, but do not exhibit different pricing-to-market responses. This implies that stronger capabilities improve price levels without

fundamentally changing pricing behaviour. Policies should therefore prioritise broad-based upgrading—technology, skills, compliance, design, logistics, and market intelligence—to enhance price realisation rather than expecting firms to adopt fundamentally different pricing strategies.

The results highlight the importance of product diversification, as multi-product exporters are better able to differentiate prices across markets. This suggests that moving into higher-value, design-intensive segments and expanding product scope can improve firms' ability to manage demand and pricing conditions. More broadly, reducing reliance on standardised, low-margin products is essential to strengthen export resilience and reduce vulnerability.

The findings suggest that export competitiveness also depends on firms' ability to realise prices across markets under different institutional conditions. Export success, therefore, is not only about increasing volumes but about securing terms that allow firms to retain a viable share of the value generated in international trade. For Bangladesh, this implies that the post-LDC policy agenda must focus on the interplay between market access, buyer power, product upgrading, and firm-level pricing capacity. A strategy that focuses only on preserving volumes, without addressing the conditions under which exporters price and compete, may prove inadequate in a post-preference environment.

Overall, the above findings suggest that Bangladesh's response to changing external trade conditions must extend well beyond the pursuit of marginal cost competitiveness. The evidence points instead toward a more comprehensive agenda, one that combines market-access diplomacy, exchange-rate realism, firm-level upgrading, and export diversification, while recognising that the erosion of preferential treatment may alter not only how much exporters sell, but also the prices they are able to command.

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