Shifting Trade Preferences and Value Chain Impacts in the Bangladesh Textiles and Garment Industry

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Abstract

This paper contributes to the debate on the key factors shaping global value chains in the garment sector by focusing on one aspect: namely trade regimes and their related 'rules of origin'. We study Bangladesh, the leading least developed global garment manufacturer, to assess how changes in the European Union's regime for preferential market access affect the trade profile, and upgrading prospects, of Bangladesh's garment industry. We find that shifting trade preferences play a key role in determining structural transformations within the industry. This calls for more careful consideration of trade regimes within GVC analysis.

Introduction

Despite the phase out of the Multi Fibre Arrangement (MFA) in 2005, the global garment industry continues to remain a sector whose geographies of production are deeply influenced by prevailing trade regimes (Gereffi, 1999; Pickles et al, 2006; Memedovic, 2009; Pickles and Smith, 2011; Frederick et. al., 2014). The MFA was intended to protect textile and garment manufacturing in the industrialised North by imposing quotas on low cost exports from the developing world. In reality it accelerated the expansion of production, particularly in clothing, across much of the global South (Gereffi, 1999; Memedovic, 2009).

Bangladesh was one of the biggest winners in this process with garment exports rising from US$ 449M in 1989 to US$ 8BN in 2004. By the time the MFA was phased out, garment manufacturing dominated the economy, employing 40% of the country's manufacturing labour force and generating nearly 80% of its total export revenues (Mlachila and Yang, 2004). Because of this high dependence there were fears that low income countries, including Bangladesh,, would suffer significant export and employment losses as they struggled to compete against China, already established as *the* giant in the industry (Mlachila and Yang, 2004; Kaplinsky and Morris, 2006). Yet, the demise of the MFA has not resulted in a level playing field for suppliers. Bilateral trade agreements and preferences continue to proliferate, offering significant advantages to specific countries exporting to the key global markets of the European Union (EU) and the United States (US) (Pickles, 2012; Staritz, 2012, Frederick et al, 2014). It is the impact of such trade regimes which we explore in this paper.

There is now an extensive body of literature that has used the global value chains (GVC) framework to explain the dynamics within the garment sector, the ability of specific developing countries and regions to insert themselves into global markets via GVC linkages, the implications of GVC ties for upgrading strategies for local garment producers, the governance of social compliance and international labour standards and the consequences of these responses to improving working conditions and workers' rights (Nadvi and Thoburn, 2004; Palpacuer et. a., 2005; Frederick and Staritz 2012; Pickles, 2012; Staritz and Morris, 2013). Yet, despite acknowledging the importance of trade regimes, the role of trade preferences, and especially their defining rules, in determining value chain outcomes and upgrading strategies has rarely been studied in depth. Furthermore, while the significance of the institutional context in influencing value chain ties in a range of sectors is noted (Sturgeon et. al., 2008; Stevens, 2001; Gereffi, 1999), research on the extent of these impacts is limited.

Our aim is to investigate the impact of external trade policy changes on supply choices and upgrading within the value chain. We argue that preferential market access not only influences sourcing decisions of GVC lead firms , but can effect upgrading and influence industrial development in affected countries. We pose two questions: First, how have EU trade preferences, and changes within them, affected the Bangladeshi garment industry? Second, what consequences arise from this for upgrading?

The paper is structured as follows. Section 2 explains why the rules of origin (RoO) are important to trade flows, outlines the recent policy change in the EU that has consequences for Bangladesh, and summarizes the relevant international economics literature that investigates the relationship between RoO and trade flows. Section 3 reviews the GVC literature and its engagement to date with trade preference regimes in general and RoO in particular. Section 4 explains our methodology. Section 5 interprets the historic growth of the Bangladeshi garment industry through the lens of trade regimes. Section 6 presents the results of our analysis of recent changes. We conclude with a discussion on the wider implications of such trade regime changes on the structure and organization of apparel GVCs and indicate how further research using the GVC framework could be better informed by incorporating trade regimes into research methodologies.

Rules of origin and their importance to trade

Rules of origin constitute the 'small print' of trade agreements and are critical to determining the benefits and outcomes that ensue. Preferential trade agreements can provide developing countries, particular the poorest amongst them, with substantial tariff advantages. In sectors like clothing, where tariffs are high in the EU and US markets, such preferences can generate significant advantages over suppliers who are not offered the same access. The gains, however, depend on how market access rules are defined. When a country provides preferential market access to another country, this is conditional on the product being 'made in' the latter country. How 'made in' is defined can vary. The so-called 'Rules of Origin' (RoO) provide the specific definition for a given trade regime. They often run to many pages of detail. A common practice in trade regimes applying to clothing is that RoO require either the sourcing of inputs (such as textiles or even yarn) from the country, or region, offering the trade preference, or from the preference receiving country itself.

This latter criterion ostensibly seeks to encourage an increase in local value added by restricting preferences to garments made from locally produced textiles. This is often referred to as the 'double transformation' rule, namely that two distinct manufacturing processes (textile production *and*

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garment manufacture) are undertaken within the country. Such rules of origin can, however, become rather restrictive. This is especially so because many downstream textile activities are highly capital intensive, and thus often prohibitive for least developed countries (Brenton and Manchin, 2003; Oxfam, 2004; Inama, 2011; Rahman, 2011; Frederick and Staritz, 2012). Thus, although in theory restrictive RoO should encourage upgrading to higher value added activities, in practice this may often not arise.

RoO have consequently attracted a great deal of criticism from non-governmental organizations like Oxfam (2004) and development oriented international institutions like UNCTAD (2010) and the World Bank (Brenton, 2003). These criticisms center on the fact that, to qualify for preferential access, developing countries often require a functioning and efficient domestic supply chain. A recent European Commission paper identified three key criticisms of the EU's RoO: first, that more stringent rules of origin tend to correlate with low utilisation rates of trade preferences; second, that product specific rules can be very complicated; and, third, that compliance with RoO can be costly and burdensome (CEC, 2012: 27).

The garment sector is one where criticisms have been particularly strong and indeed utilisation rates of preferences have been historically low (Curran et. al., 2007; Pickles, 2012). Furthermore, many observers are sceptical that 'double transformation' RoO actually encourage the development of local textile production (Vermulst, 1992; Cadot et. al., 2008). A study undertaken for the European Commission indicated that its double transformation RoO for garment imports required local value added to be between 55-70% in most product categories (Scheffer, 2006), a level that many LDCs could not reach. Curran et al (2007) found that, in 2003, preference utilisation for EU imports from all sources was 64% in the woven garments sector[i]. For Bangladesh, only 60% of exports to the EU, most of which were clothing, qualified for the preferences to which they should have been entitled (Curran et al, 2007)[ii]. As Cadot et al (2008:105) conclude *'Forcing backward integration in the host country by imposing rules requiring substantial transformation of goods amounts to preventing the division of labour, i.e. organising and codifying inefficiency.'* The logic of GVCs has been that lead firms can lower costs, enhance efficiency and become more competitive in global markets by sourcing globally from the most cost efficient suppliers. RoO can distort the structure of GVCs by imposing specific sourcing conditions in order to ensure preferential access.

RoO clearly have an impact on how the global garment value chain has historically evolved, and where it 'lands'. For example, in 2000 the US launched a new system of trade preferences under the African Growth and Opportunity Act (AGOA) to promote industrial development in sub-Saharan Africa (SSA). AGOA adopted very liberal RoO, with preferential market access to the US for garments

produced in specific SSA countries from fabric sourced from third countries. One consequence of this was the rapid growth of garment exports from countries like Lesotho and Kenya (Gibbon 2003; Staritz and Morris, 2013). De Melo and Portugal-Pérez (2008) compared developments in African exports to the EU and US markets, where RoO were different and concluded that AGOA's more liberal RoO were associated with an increase of 300% in exports of the top seven beneficiaries and an increasing diversification of those exports. At the same time, they found the relatively restrictive RoO adopted by the EU held back EU imports from African LDCs. An econometric analysis of preference utilization for the EU's preferential access indicated that restrictive RoO had negative impacts on trade, identifying RoO in textiles as particularly onerous (Gasiorek et al, 2010).

Recognising the limitations of the double transformation rule, the EU in 2011 relaxed its RoO for goods from LDCs, such that clothing using textiles from any source could receive preferential treatment (CEC, 2010 – Annex 1, part II). The assumption behind this change in RoO was that a 'single transformation' trade regime (based solely on labour intensive garment manufacturing) would be good for exports, employment and poverty reduction in poor countries involved in the clothing value chain (Oxfam, 2004). This assumption is, however, problematic. First, not all LDCs are equally well positioned to benefit from the more liberal RoO. LDCs that are already well established in garment production are likely to have a competitive advantage. Second, the change, while potentially benefiting exports and employment in the garment sector, could have negative consequences for other, higher value, levels of the chain (particularly textile producers) in the countries in question. What is clear is that RoO influence the geographies of trade and GVC patterns, with differentiated outcomes. What is less clear is how well GVC analysts recognize this.

GVC and GPN research on trade regimes and Rules of Origin.

As industrial production spread across the globe in recent decades, researchers have explored the links that lead to globally inter-connected production arrangements in a variety of guises from global commodity chains to what is now more widely known as Global Value Chains (Bair, 2009; Parrilli et al 2013). The GVC framework explores the nature of these links, the power relationships between the actors involved, the implications for upgrading, and the ways in which such linkages impact on the geography of production – a motivation shared by the Global Production Networks (GPNs) approach which has emanated in parallel from economic geography (Coe et. al., 2008).

The impact of the institutional environment on choices within value chains (or networks) is widely acknowledged. Yet, while Gereffi (1995) viewed the institutional context as one of the key dimensions of value chains, subsequent GVC research has tended to focus on the governance

dimension and on upgrading (Humphrey and Schmitz 2002; Palpacuer et al, 2005; Gereffi et. al. 2005). Consequently, the institutional context, and in particular the impact that trade regimes can have on value chain dynamics has received less attention. One of the few studies to explicitly consider how to incorporate trade policy into GVC analysis is Stevens (2001), exploring the links between trade policy and GVCs in agriculture. He defined three necessary factors for trade regimes to have an impact on the sourcing decisions of GVC lead firms: high tariffs on imports; preferential access which gives full or partial relief from these; and limitations in this preferential access (competitors should not have similar advantages). These factors are present in several sector/market pairs, yet, with some notable exceptions in agriculture and clothing (Bair and Peters, 2006; Tozanli and El Hadad-Gauthier, 2010; Pickles and Smith, 2011; Frederick et al, 2014), little work has been undertaken on the direct and indirect effects of trade regimes on choices in GVCs.

One area where the consequences of regulatory regimes have been analysed in some depth in the GVC and GPN literatures is through the lens of standards. The issue of labour standards and compliance with private codes and international public norms has been of particular concern to the global garment sector (Nadvi and Thoburn 2004; Palpaceur et al 2005). Other aspects of trade regimes, and in particular the consequences of RoO, have been less often explored empirically. A notable exception has been in relation to the impact on GVCs of various US preferential access schemes and their RoO. In their work comparing Mexico and Honduras, Bair and Peters (2006) point to RoO as one of the key factors explaining how the two countries integrated with the US apparel value chain. More recent work on Nicaragua (Frederick et al. 2014) has highlighted the importance to the evolution of the garment sector of the very favourable RoO applied to US market access. Similarly, the African Growth and Opportunity Act (AGOA) and its liberal RoO were seen as vital to the emergence of an export oriented garment industry in Kenya and Lesotho (Pickles, 2012). However empirical analyses indicate that exports under AGOA tend to be in a limited range of basic low value-added products and there is little evidence that it has fostered product upgrading (Staritz and Morris, 2013).

In Jordan, fairly liberal RoO imposed by the US was seen to have a direct effect on garment GVCs. In 1997, as part of the US-Israel free trade agreement (FTA), Jordan was accorded preferential duty and quota free access to the US market for products manufactured in the 'qualified industrial zones (QIZ)' as long as a minimum level (8% in value terms) of Israeli content was used. Consequently, Jordan's share of US clothing imports increased from zero to 1.7%. In 2012 US imports from Jordan were over $1bn, more than all AGOA exporters put together. Recent research on the impacts of this regime indicates that it stimulated trade as well as investment, mainly from East Asian firms using migrant

labour, and was accompanied by significant increases in textile imports into Jordan from China. Yet, there are doubts as to the extent to which the QIZ trade regime stimulated 'Jordanian' industrial development (Azmeh and Nadvi, 2013).Thus existing research indicates that liberal RoO influence locational choices within the value chain and increase clothing exports, but there are doubts about whether RoO change can foster upgrading. Liberal RoO provide little incentive for backward integration. Yet, the double transformation rule is meant to promote industrial upgrading by incentivizing, through trade preferences, the development of key activities within the chain, such as textile production for garment manufacture.

Research in the GVC/GPN tradition of the consequences of RoO on GVC linkages within the EU context has been sparse. Although existing studies on the EU's regional garment suppliers acknowledge RoO as being important to sourcing choices, they are generally not studied in depth (Pickles and Smith, 2011; Plank et. al., 2012; Pickles 2012). Given that EU and US RoO are different and that the way in which their value chains are structured has also been seen to differ (Staritz and Morris, 2013; Pickles 2012), the impacts of such trade regimes on GVC linkages may also vary.

Approach and methodology

Our objective in this paper is to investigate how RoO impact GVC outcomes, both in terms of the structure of garment manufacturing within Bangladesh and the consequences for upgrading. The current context, namely the EU's changes in RoO for LDCs implemented in 2011, offers an opportune moment to study this. By changing the RoO for preferential access by LDCs to the EU market, the EU has changed the 'rules of the game' governing the global garment industry. These consequences are especially critical for Bangladesh, the world's leading LDC garment exporter. Despite the earlier, and more restrictive, double transformation RoO Bangladesh saw its garment exports to the EU grow rapidly. By 2010 Bangladesh was the EU's most significant LDC source for garments, accounting for 85% of the EU's clothing imports from LDCs. How might the relaxation in the RoO, shifting to a single transformation regime, impact on the Bangladeshi garment industry? Bangladesh has substantial productive capacity, with at least 3.6m people employed in garment production (BGMEA, 2014). It is thus best placed to benefit from the EU's relaxation of RoO for LDCs (UNCTAD 2010:178). However, the gains for Bangladesh may not be universally positive. In particular, its relatively smaller textiles industry could suffer from growing use of imported fabrics.

We focus our analysis by using disaggregated trade data to identify how the RoO, and changes within them, lead to specific trade impacts on Bangladeshi garment exports, as well as the implications for the evolving structure of its garment industry and its prospects for upgrading. Trade data is

considered to be a relatively reliable body of evidence, but tends to be underused in standard GVC studies. Trade data can, however, provide a useful indicator of industry wide responses to shifts in the institutional and policy environment. We extract trade values in dollars for the period from 2001 from the TradeMap database of the International Trade Centre (ITC)[iii]. Earlier figures come from the UN-Comtrade database which covers a much longer time series.

In Section 5 we cover the period since 1989 to assess the longer term historical impacts of trade policy regimes and RoO on the structure of the Bangladeshi garment industry. In Section 6 we consider the differential consequences of the post 2011 EU RoO liberalisation. While, we only have three years of trade figures, history has shown that sourcing strategies can react very quickly to trade policy change in the garment sector (Curran, 2008; Azmeh and Nadvi, 2013). In the discussion here we report data at a more disaggregated level, concentrating on the main types of clothing that dominate Bangladesh's garment exports. Finally, our research is also informed by interviews with European Commission officials during the period of regime change, with global garment lead firms sourcing from Bangladesh, and through earlier research conducted by one of the authors on the dynamics of the Bangladesh garment industry, which included interviews carried out with over 50 Bangladeshi knit and woven garment manufacturing firms.

Trade regimes, Bangladesh and the global clothing value chain

Trade policy had been used extensively in the textiles and garments sector to restrict trade flows. This was initially under the framework of the Multi Fibre Arrangement (MFA) which imposed quotas on garment exporters. Bangladesh's garment industry grew thanks to the MFA as quota constrained exporters shifted production, and sourcing, to Bangladesh to benefit from its then under-utilized MFA quotas. The Agreement on Textiles and Clothing (ATC) in 1995 created the framework to liberalise the textile and garment trade regime over a ten year period (Pickles, 2012).

Thus, the planned MFA phase out in 2005 led to dire predictions for Bangladesh, with analysts forecasting losses of 12-13% in clothing exports (Ananthakrishnan and Jain-Chandra, 2005; Mlachila and Yang, 2004) and substantial reductions in employment. In reality, Bangladesh's exports to the key affected markets, the EU and US, increased slightly in 2006 (Curran, 2008). In retrospect, we argue that Bangladesh has seen continuing export growth largely due to continuing preferential market access.

Shifts in the structural composition of the Bangladeshi garment industry began to emerge from the mid-1990s in response to a set of EU trade preferences. In this section we show how the evolution of

the two distinct segments of the Bangladeshi garment industry - knitwear and woven clothing - has been historically shaped by trade regimes and RoO.

The Garment Value Chain: Distinguishing between Knit and Woven Clothing

The value chain for clothing has been described comprehensively (see Frederick and Staritz, 2012; Pickles, 2012). The key stages are – raw material supply (natural and man-made fibers); yarn and fabric production; clothing production and finally distribution and sales. It is the third element of this chain – clothing production – that is the most labour intensive. It is here that Bangladesh has a key competitive advantage due to its very low labour costs (Frederick and Staritz, 2012). However, for the purposes of the discussion on double transformation RoO, and for understanding upgrading, there must be domestic textiles production. Yet, there is an important distinction between the production of knitted cloth and the production of woven textiles. Manufacturing woven textiles requires large and relatively capital intensive plants, often using different combinations of natural and man-made fibres. The dyeing of woven fabrics has to be done once the fabric is made and involves substantial capital investment in large scale plants as well as the adoption of technologies to mitigate environmental impacts arising from dyeing effluents and chemicals. In contrast, knit fabric making is relatively less capital intensive and can be undertaken on a smaller scale using small circular knit machines. Knitwear fabrics also tend to use pre-dyed yarn thus reducing the investments in dyeing. Consequently, many Bangladeshi knit garment producers can backwardly integrate by developing their own knit fabric production facilities. Woven garment producers, on the other hand, tend to rely on textiles sourced (usually imported) either by their lead firms, or through traders. Knitwear production, by virtue of its backward integration into fabric and garment manufacturing generally results in greater value addition.

One of the most important initial steps to upgrade along the GVC for Bangladeshi garment manufacturers is to take responsibility for (and risks associated with) fabric sourcing. This is often referred to as upgrading from basic cut-make-trim (CMT) process associated with garment construction to free-on-board (FOB) activities which include undertaking CMT but also engaging in all input sourcing, including sourcing textiles (Lopez-Acevedo and Robertson 2012:222). However, where textiles are sourced from outside Bangladesh those garments do not meet the 'double transformation' RoO, even if undertaken on a FoB basis by the Bangladeshi garment manufacturers. Knitwear – if it utilizes knit fabric produced within Bangladesh (usually within the integrated knitwear garment firm) - does benefit from the 'double transformation' rule. The cost differences associated with textiles production, have meant that the textiles weaving industry has historically been underdeveloped in LDCs such as Bangladesh (Rahman, 2011). Thus, only 25% of Bangladesh's woven

garment exports are made from locally sourced fabrics whereas 85-90% of knit fabric requirement is locally sourced (Frederick and Staritz, 2012).

Shifting Trade Regimes and the Long Term Evolution of the Bangladeshi Garment industry

Figure 1 provides a historical perspective on the industry's development in its two key markets - the EU and the US –since 1989. We differentiate between knitwear and woven garment exports. The following key observations emerge. First, that until the turn of the century, Bangladesh's garments exports were roughly equally divided between the US and EU markets. Following the implementation of the EU's 'Everything but Arms' (EBA) trade regime for LDCs in 2001, which provided duty and quota free access, the EU rapidly emerged as Bangladesh's key market. Second, after EBA, knitwear production saw the most rapid growth, in line with the EU's double transformation RoO. It quickly became the dominant segment of the Bangladesh garment industry[iv]. Third, that in woven goods, while the US was initially the more important market, by the late 1990s the two markets were of similar scale. Finally, this position changed post 2011 when Bangladesh's exports to the EU market for woven garments suddenly expanded, in line with the relaxation of the EU's RoO and the adoption of the single transformation rule.

Insert Figure 1 here

Analysis of EU trade since the changes in RoO

Trends in Bangladeshi exports following the liberalization of RoO

We turn now to a more in-depth analysis of Bangladeshi clothing exports to the EU since the liberalization of the EU's RoO in 2011. Figure 1 above shows how, following EBA access, export to the EU grew rapidly, especially in knitwear. The 2008 global economic crisis, and the recession that it engendered in the EU, did dampen export growth somewhat, but the overall trend of the growing dominance of the EU market for Bangladesh was clear. Moreover, the widening gap between knit and woven clothing exports to the EU continued to expand, in keeping with the EU's 'double transformation' RoO, until 2011. In 2011, however, EU imports from Bangladesh increased more rapidly for woven (by 49%) than knitted goods (by 30%). In 2012 Bangladeshi knitwear exports fell, but picked up again in 2013, while woven clothing exports continued to increase. Bangladesh's post 2011 garment export trends to the EU clearly underline how the change in trade regime, from double to single transformation, had an immediate effect on exports of woven goods, and thus advantaged this segment of the Bangladeshi garment industry.

It is always possible that increases in Bangladeshi exports to the EU were part of a wider trend of EU import growth. If that were the case, we can assume that trade growth is a reflection of market growth, not changes in the trade regime. It is also possible that increases in exports to the EU came at the expense of exports to other markets – a phenomenon that economist refer to as trade diversion. To test for whether either of these two factors impact on our analysis, we looked at overall trends in imports to the EU from key suppliers in the two key sub sectors of interest (Table 1) and compared exports to the EU with the 10 next most important export markets for Bangladesh (Table 2). This is notably a period when many of the EU member states were still experiencing recessionary pressures. It is clear from Table 1 that growth rates for EU garment imports from Bangladesh are higher than for all imports and all other key sources reported. This was the case even before the RoO change, but is particularly so since, especially in woven goods.

Insert Table 1 here

Table 2 indicates that as Bangladesh's exports to the EU rose in 2011, exports to other key markets did not fall in concert– rather quite the opposite, with total exports to non-EU markets rising by 6.2%. Export growth to the important US market stalled in 2012. This trend is more likely to reflect economic difficulties in the US than trade deflection to the EU, where in any case trade growth also stalled. Therefore Bangladesh did see more rapid growth than its competitors in recent years and this growth was additional to its exports elsewhere.

Insert Table 2 here

Increased market access as an opportunity for upgrading and capturing value

The impact of trade policy on value capture is difficult to assess with macro trade data. However, Kaplinsky and Readman (2005) have argued that where trade data shows increasing market share *and* higher export prices this would be unambiguously consistent with producers upgrading and capturing more value. The changes in trade preferences under the RoO provide Bangladesh with a 12% tariff advantage over non-preferential suppliers (effectively all non LDC suppliers, including China). In a highly competitive sector like clothing, 12% is a substantial margin. Yet, the extent to which trade policy rents actually accrue to Bangladeshi garment producers is a consequence of the governance relations within these value chains. The garment GVC is marked by highly asymmetrical ties with power vested in the hands of the global brands and retailers (Gereffi et al. 2005). Such hierarchical governance relationships are especially prevalent for Bangladeshi garment suppliers to global lead firms.

The data on EU imports of knitwear and woven garments in Table 3, shows clearly that Bangladesh's market share within the EU has grown since 2009 and, most markedly, since 2011 for woven goods.

Insert Table 3 here

In terms of unit values, trade data is not ideal as an indicator of unit prices. Unit prices for the EU are most widely available in $/ton, which, although often used as an indication of the market level of output (e.g. Frederick and Staritz, 2012; Staritz and Morris, 2013), is a very blunt indicator. We chose to use $/unit. Although this indicator is not available for all country/product pairs, it is more indicative of relative prices. We explored the evolution of unit prices in the key sectors of interest to Bangladesh in knitwear and woven garments - knitted T-shirts and jumpers and men's and women's woven trousers and skirts. Together these four product groups represent almost 70% of Bangladesh's total garment exports to the EU. Unit prices are not available for all EU Member States. The most problematic missing figures are for Belgium and Germany in all categories except T shirts. In cases where member states didn't declare unit prices for one year we used the average of the closest two years. Prices were weighted by trade values to avoid overweighting small countries.

We looked at unit prices over the period 2010-13, at a high level of disaggregation (HS6) in order to ensure the maximum comparability between goods. This led us to analyse 9 HS6 product codes. The results are indicated in Table 4. It is immediately obvious that EU unit prices are higher than those in the US in all products covered, often substantially so. This is consistent with other comparative country level studies (Staritz and Morris, 2013). The difference in our figures is particularly high in knitwear, where EU prices are over twice those in the US in the top two categories. However, there have been no major changes in these differentials since the 2011 RoO liberalisation. The average difference between woven goods prices in the two markets was 20% in 2010. This increased in 2011 to 30% before falling back in 2012 to 21% and 23% in 2013.

Insert Table 4 here

The fact that EU prices are consistently higher than those in the US may be indicative of a greater capacity of Bangladeshi exporters to capture value in the EU market. Relative prices in woven goods indicate less of a difference between the two markets. Overall, EU prices went up by slightly more in 2011 than equivalent US prices (+12% compared to +9%) consistent with Bangladeshi woven goods producers capturing more value, as export prices went up. However US prices continued to increase in 2012 (+7.5%) while EU prices rose by only +1% and both fell by an average of 2% in 2013. Thus we note no sustained impact on relative unit prices from the RoO change. Nevertheless the figures are indicative of a consistently greater capacity of Bangladeshi exporters to produce higher value goods

for the EU market than for the US market, especially in knitwear. Of course other factors impact on unit prices besides market access arrangements. However, it seems reasonable to suggest that the more favourable EU market access arrangements in place for Bangladesh since the 2001 EBA are at least part of the explanation.

The impact on Bangladeshi textile imports

While clothing exports to the EU have been stimulated by the new RoO, a key concern in the run up to the 2011 EU RoO change was that it would undermine the Bangladesh's domestic textile industry, by encouraging the substitution of local fabric with more competitive imports (Rahman, 2012). Bangladesh's textiles industry is, however, substantially smaller than its garment sector. The expectation following the liberalization in the EU's RoO in 2011 would be that textiles imports, especially for fabric used for woven garment products would rise. We provide some evidence on this in Table 5[v].

Insert Table 5 here

Cotton fabric - given Bangladesh's traditional specialization in cotton garments – is the most important textile imported into Bangladesh, accounting for nearly 60% of total textile related imports. We see wide variability in imports post 2011. Import growth rates, although still high, actually fell in 2011 compared with 2010 (where growth rates were very high, following falls in 2009) somewhat undermining the idea that the new RoO would lead to rapidly increased imports. There were reductions in some sectors in 2012, followed by increases in most sectors in 2013. Overall, textiles imports into Bangladesh have grown since the RoO change.

In summary, Bangladeshi trade figures clearly indicate that its clothing industry is experiencing strong export growth. The evidence on the impact on the textiles sector is less clear and would need further anaylsis. What is apparent is that textile imports have not grown as rapidly as would have been expected post 2011. This suggests that the diversion of sourcing from Bangladesh to third countries is limited and thus there is no evidence of the feared downgrading in the importance of the textile sector. Interestingly, the EU Commission indicated that there had been no complaints from Bangladeshi textile producers further to the 2011 RoO change and no lobbying efforts to reverse it (Author interview, 13.11.13).

Conclusions

The analysis of trade flows provided in this paper indicates that market access to the EU and the terms of that access, have had significant impacts on the structure and evolution of the Bangladeshi

garment industry. Bangladesh emerged in the late 1980s as a leading garment exporter thanks to MFA quotas. The industry was initially focused on woven garment production with exports primarily focused to the US market. Over time, however, the knitwear garment sector and the EU market came to dominate the industry, thanks, at least in part, to the RoO stipulations in the EBA benefits that the EU granted to Bangladesh in 2001 as an LDC. While knitwear was the sector which most benefitted from EBA, since 2011 when RoO were liberalized by the EU, exports of woven garments show particularly strong growth. This is consistent with the indirect evidence from preference utilization rates, that the RoO of the previous regime were particularly restrictive for woven clothing. As we have shown, this reversal in trends is linked directly to the single transformation requirement and the fact that woven textiles manufacturing is relatively capital intensive.

In terms of the possible impacts of the change on upgrading of goods and their price levels, initial figures indicate that unit prices of Bangladeshi exports to the EU are higher than the equivalent prices in the US and increased initially with RoO liberalisation. The growth of the knitwear sector in Bangladesh, which we show is clearly tied to the EU's 'double transformation' criteria in RoO, is a clear indicator that there has been upgrading within the Bangladesh garment industry, as Bangladesh's export knitwear production is more capital intensive and involves more functional tasks compared to its woven garment production, which relies more heavily on imported fabric. Putting our work in the wider context of global value chains and the impact of institutional factors on choices within them, we have here strong indirect evidence that changes in regulation can, and do, impact not only on buyers' choices, but also on upgrading. The traditional view within the GVC literature has been that upgrading can be differentiated according to process, product, function and chain (Humphrey and Schmitz 2002). Moreover, the ability of local producers to upgrade is closely tied to their governance relationship with lead firms, and to knowledge flows that percolate down the chain from lead firms. Our findings suggest that institutional factors, including trade regimes and RoO, can also directly impact the upgrading prospects of local producers. In fact, it may have a far greater impact on upgrading than GVC linkages alone. The evidence from trade flows is strong. Thanks to the 2001 EBA, and the double transformation rule, the Bangladeshi garment industry was able to upgrade in knitwear through the development of integrated knit textiles production. Following the change in RoO in 2011, Bangladesh consistently outperformed unaffected competing suppliers to the EU with increasing market shares. Furthermore, unit price analysis indicates that Bangladesh has historically exported higher value garments to the EU then it did to the US (where no such RoO based trade preferences applied).

From our reading of evidence on the Bangladesh garment industry we find no indication that buyers as lead firms have directly worked with local producers to engage in process, product or functional upgrading. Yet, there is evidence that not only have some of the Bangladesh's garment manufacturers functionally upgraded from CMT to FoB production, but that the rise of the knitwear sector shows substantial upgrading through the development of local knit fabric production – often in integrated facilities (Lopez Acevedo and Robertson, 2012). Clearly further research is needed to explore how important such regulatory factors are compared to other non-institutional factors within the GVC. To what extent do they motivate the sourcing decisions of global lead firms and traders in the global garment industry? Azmeh and Nadvi (2014) argue that preferential trade regimes, and associated RoO, were critical to the rapid evolution of garment exports from Jordan, and the strategic decision by leading international first tier suppliers within the global garment value chain to locate production facilities within Jordan. Frederick et. al. (2014) come to similar conclusions in explaining the rise of the Nicaraguan garment industry and the trade preferences offered by the US. Our evidence suggests that RoO have not only historically shaped the Bangladesh RMG sector but that they continue to have a strong impact.

As discussed above, the GVC and GPN literatures have paid considerable attention to one particular aspect of trade regimes – namely the challenges associated with compliance to labour, social and environmental standards. This has led to considerable debates on the nature of public and private forms of regulation and their consequences for governance within the chain. In the context of Bangladesh this is particularly pertinent given the tragic deaths that followed from the Tazreen factory fire in November 2012 and the Rana Plaza collapse in April 2013 (Taplin 2014). One outcome of this has been the efforts by global brands and local producers to engage in a collective effort to upgrade working conditions and building safety in Bangladeshi garment factories. Yet, there is little indication that GVC lead firms have extended their support to local suppliers beyond social compliance concerns. What our study suggests, and in this the Bangladeshi case is especially relevant, is the need to integrate the different dimensions of trade regimes. This would involve integrating analysis of trade preferences with social and environmental trade regulation in ways that throw more careful light on both the dynamics of local and global interactions within GVCs and GPNs and illustrate the developmental outcomes that ensue from a holistic analysis of trade regimes and GVC linkages.

Stepping away from the specificities of the Bangladesh case, our paper has sought to show that trade regimes, and in particular trade preferences and the rules which frame them, need to be taken more seriously by researchers from the GVC and GPN communities. Drawing on both conceptual

arguments, and empirical evidence, we show how rapidly changes in trade regimes can influence trade flows. What are less clear are the distributional consequences of such change and particularly the impact on upgrading. This calls for more detailed further study, that integrates trade data analysis with field work with global buyers, local producers and workers (and their representatives) to show more carefully how rents from changes in trade preferences are distributed within the chain, and whether trade preferences can act to leverage local upgrading *and* improved worker outcomes.
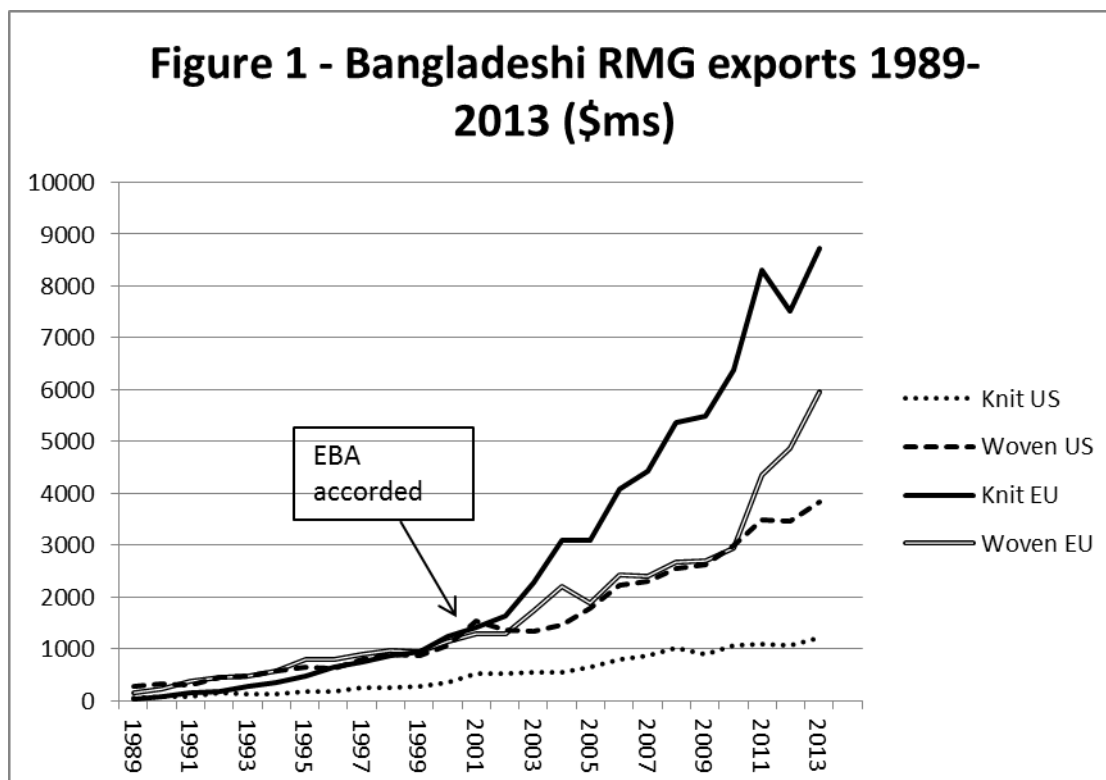
Acknowledgements

References

Azmeh, S and Nadvi, K. (2013) 'Greater Chinese' Global Production Networks in the Middle East: Chinese Garment Manufacturers in Jordan, *Development and Change*, 44: no 6, 1317-1340.

Azmeh, S and Nadvi, K. (2014), Asian firms and the restructuring of global value chains, *International Business Review*, 23: no 4, 708-717.

BGMEA (2014). Industry strengths. Accessed at: http://www.bgmea.com.bd/home/about/Strengths on 17/09/2014.

Brenton, P and Manchin, M (2003). Making EU Trade Agreements Work: The Role of Rules of Origin, *The World Economy*, 26: no 5, 755-769.

Brenton, P. (2003) Integrating the least developed countries into the world trading system: the current impact of EU preferences under everything but arms. *Policy Research Working Paper no. 3018*. Washington: The World Bank

Cadot, O. Djiofack, C. and De Melo, J (2008). Trade Preferences and Rules of Origin: The Economic Partnership Agreements' Prospects for West and Central Africa. Revue d'Economie du Développement. 22(5): 93-135.

CEC (2012); Commission Staff Working Document. Trade as a driver of development. Accompanying the document: Trade, growth and development, Tailoring trade and investment policy for those countries most in need. Brussels: Commission of the European Communities.

CEC (2010), Commission Regulation (EU) No 1063/2010 of 18 November 2010 amending Regulation (EEC) No 2454/93 laying down provisions for the implementation of Council Regulation (EEC) No 2913/92 establishing the Community Customs Code. Brussels: Commission of the European Communities.

Coe, N., Dicken, and Hess, M. (2008). Global production networks: realizing the potential. *Journal of Economic Geography*, 8: 271–295

Curran, L (2008). Forecasting the trade outcomes of liberalisation in a quota context – what do we learn from changes in textiles trade after the ATC? *Journal of World Trade*, 42: no1.

Curran, L, Nilsson, L and Frontini, G (2007). Assessing the Scope for preference erosion on the EU market: A Pragmatic Approach, *Global Trade and Customs Journal*, 2: no.10, 347-358.

De Melo, J and Portugal-Pérez, A (2008). Rules of Origin, preferences and diversification in apparel: African exports to the US and to the EU. *CEPR Discussion Paper 7072*. London: Centre for Economic Policy Research.

Francois, J, Machin, M, Norberg, H and Spinanger, D (2007). *Impacts of Textile and Clothing sectors liberalization on prices*. Report for The European Commission. Kiel Institute for the World Economy. Accessed at: http://trade.ec.europa.eu/doclib/html/134778.htm on 15/11/12

Frederick, S., Bair, J. and Gereffi, G. (2014). Nicaragua and the Apparel Value Chain in the Americas: Implications for Regional Trade and Employment. Duke Center on Globalization, Governance & Competitiveness. Accessed at: www.cggc.duke.edu. On 15/9/14.

Frederick, S and Staritz, C (2012) Developments in the Global Apparel Industry after the MFA phaseout. In World Bank (2012). In Lopez-Acevedo, G and Robertson, R (eds.). *Sewing Success: Employment, wages and poverty following the end of the Multi-Fibre Arrangement*. Washington: The World Bank: 41-86.

Gasiorek, M et al (2010). Mid-term Evaluation of the EU's Generalised System of Preferences. Report for the European Commission. CARIS. Accessed at: http://trade.ec.europa.eu/doclib/docs/2010/may/tradoc_146196.pdf on 08/03/12.

Gereffi, G (1999) International trade and industrial up-grading in the apparel commodity chain, *Journal of International Economics*, 48: 37-70.

Gereffi, G. (1995) Global production systems and third world development. In Stallings, B (ed) *Global Change, Regional Response: the new international context of development*. Cambridge University Press: New York.

Gereffi G, Humphrey J, Sturgeon T (2005) The governance of global value chains. *Review of International Political Economy* 12(1), 78-104.

Gibbon, P. (2003) African Growth and Opportunity Act and the global commodity chain for clothing. *World Development* 31 (11), 1809-1827.

Humphrey, J. and Schmitz, H (2002) How does insertion in global value chains affect upgrading in industrial clusters? *Regional Studies* 36: no.9, 1017-1027.

Kaplinsky, R. and Morris, M (2006). Dangling by a Thread: How sharp are the Chinese scissors? Brighton: Institute of Development Studies.

Kaplinsky, R and Readman, J (2005) Globalization and upgrading: what can (and cannot) be learnt from international trade statistics in the wood furniture sector? *Industrial and Corporate Change* 14: no.4, 679-703.

Lopez-Acevedo, G and Robertson, R (eds.) (2012) *Sewing Success: Employment, wages and poverty following the end of the Multi-Fibre Arrangement*. Washington: The World Bank

Memedovic, O. (2009). The Impact of Institutions on Structural Change in Manufacturing: The Case of International Trade Regime in Textiles and Clothing. *UNIDO Working Paper 25/2009*. Vienna: UNIDO.

Mlachila, M and Yang, Y (2004). *The end of textiles quotas: A case study of the impact on Bangladesh*. Washington: IMF.

Nadvi, K. and Thoburn, J T (2004). Vietnam in the global garment and textile value chain: Impacts on firms and workers, *Journal of International Development*, 16:1.

Oxfam (2004) Stitched up – How Rich Country protectionism in textiles and clothing trade prevents poverty alleviation. Oxford: Oxfam. Accessed from www.oxfam.org/sites/www.oxfam.org/files/stitched.pdf

Palpacuer, F., Gibbon, P. and Thomsen, L (2005). New challenges for developing country suppliers in global clothing chains: A comparative European perspective, *World Development*, 33: no.3.

Pickles, J. Smith, A., Bucek, M., Roukova, P. and Begg, R (2006). Upgrading, changing competitive pressures and diverse practices in the East and Central European apparel industry. *Environment and Planning A*. 38: 2305-2324.

Pickles, J. and Smith, A. (2011). De-localisation and Persistence in the European clothing Industry: the Reconfiguration of Trade and Production Networks. *Regional Studies*. 45: no.2, 167-185.

Pickles, J. (2012). Economic and social upgrading in apparel global value chains: public governance and trade policy. *Capturing the Gains, Working Paper 13*.

Plank, L., Rossi, A. and Staritz, C. (2012). Workers and Social Upgrading in "Fast Fashion": The Case of the Apparel Industry in Morocco and Romania. Working Paper 33. Vienna: ÖFSE. Accessed at: http://www.oefse.at/Downloads/publikationen/WP33_fast_fashion.pdf on 16/9/14

Rahman, M. (2011). *Trade Benefits for Least Developed Countries: The Bangladesh Case. Market Access Initiatives, Limitations and Policy Recommendations*. Dhaka: Centre for Policy Dialogue.

Rahman, S. (2012). EC revises rules of origin in its GSP scheme. *Bangladesh Textile Today*. 19.12.2010. downloaded from: From http://www.textiletoday.com.bd/newsletter/weekly_analysis.php?id=7 on 8/11/12

Scheffer, M. (2006). *Study on the Application of the Value Criteria for Textile Products in Preferential Rules of Origin*. Report for DG Trade. European Commission. Downloaded from: http://trade.ec.europa.eu/doclib/html/136620.htm on 17/01/14.

Staritz, C. (2012). Apparel exports – still a path for industrial development? Dynamics in apparel global value chains and implications for low-income countries. *Working Paper 34*. Vienna: ÖFSE. Accessed at: http://www.oefse.at/Downloads/publikationen/WP34_apparel_exports.pdf on 16/9/14

Staritz, C. and Morris, M. (2013). Local embeddedness, upgrading and skill development: global value chains and foreign direct investment in Lesotho's apparel industry. *Capturing the Gains Working Paper 20*.

Stevens, C. (2001). Value Chains and Trade Policy – The Case of Agriculture. *IDS Bulletin*. 32: no.3): 46-58.

Sturgeon, T., Van Biesebroeck, J and Gereffi, G (2008). Value chains, networks and clusters: reframing the global automotive industry. *Journal of Economic Geography*. 8 : 297-321.

Taplin, I (2014). Who is to blame? A re-examination of fast fashion after the 2013 factory disaster in Bangladesh. *Critical Perspectives on International Business*. 10: 72-83.

Tozanli, S and El Hadad-Gauthier, F (2010). Impact des politiques commerciales sur les systèmes de gouvernance. *Revue Française de Gestion*, 201: 161-176.

UNCTAD (2010). *The Least Developed Countries Report, 2010*. Geneva: UNCTAD.

Vermulst, E. (1992). Rules of Origin as Commercial Policy Instruments - Revisited, *Journal of World Trade*, 26 (6): 61-102.

Figure 1 - Bangladeshi RMG exports 1989-2013 ($ms)

EBA accorded

Knit US
Woven US
Knit EU
Woven EU

Source: ITC Trade Map. Mirror data.

Table 1 EU total imports, top 5 extra-EU sources ($000s) and annual change.						
	2009	2010	change	2011	change	2012	change
Knitwear (61)						
World	70925375	74656565	5,3	85561508	14,6	76344145	-10,8
China	19217075	21257918	10,6	23108507	8,7	20005772	-13,4
Bangladesh	5841274	6741355	15,4	8853632	31,3	8294382	-6,3
Turkey	7192414	7827899	8,8	8446906	7,9	8008693	-5,2
India	3161705	3152659	-0,3	3531223	12,0	2834771	-19,7
Cambodia	894257	1009775	12,9	1468038	45,4	1610312	9,7
Woven goods (62)						
World	75340806	76720771	1,8	89001153	16,0	80012821	-10,1
China	23400203	24785781	5,9	27811917	12,2	23745358	-14,6
Bangladesh	2873867	3105473	8,1	4619751	48,8	5374707	16,3
Turkey	4377000	4648213	6,2	5196467	11,8	4954045	-4,7
India	3625131	3849184	6,2	4490328	16,7	3616712	-19,5
Morocco	2277726	2306411	1,3	2443843	6,0	2262960	-7,4

Source: ITC Trade Map.

Table 2 Bangladeshi exports to EU and top 10 other markets					
	2010	2011	Change 2010-11	2012	Change 2011-12
Total	16068895	21192124	31,9	21837137	3,0
EU	9340193	12738444	36,4	12860042	1,0
United State	4063686	4566581	12,4	4520409	-1,0
Canada	720395	951483	32,1	995122	4,6
Turkey	647829	684096	5,6	536536	-21,6
Japan	196869	349537	77,5	486189	39,1
Australia	104824	227070	116,6	358003	57,7
Russian Fede	145630	269806	85,3	355107	31,6
Switzerland	135440	194711	43,8	281189	44,4
Mexico	120199	167002	38,9	176580	5,7
Brazil	70476	116708	65,6	157664	35,1
China	42401	103738	144,7	153019	47,5

Source: ITC TradeMap

Table 3: Bangladesh's share of the EU market 2009-12		
	Knitwear	Woven Garments
2009	8.24%	3.81%
2010	9.03%	4.04%
2011	10.35%	5.20%
2012	10.86%	6.72%

Source: ITC Trademap and author's calculations

Table 4 - Unit prices on EU and US markets ($/unit)								
		2010	2011	Change	2012	Change	2013	Change
Knitwear								
T-Shirts	EU	4,04	4,16	3,1	3,94	-5,4	3,73	-5,4
	US	1,64	1,85	12,8	1,84	-0,5	1,81	-1,6
cotton jumpers	EU	5,77	6,42	11,2	6,04	-5,9	5,79	-4,1
	US	2,58	2,99	15,9	2,81	-6,0	2,94	4,6
MM jumpers	EU	6,06	6,29	3,9	6,11	-2,8	5,98	-2,2
	US	3,54	3,97	12,1	4,07	2,5	4,03	-1,0
Woven Goods								
Mens trs CT	EU	6,11	7,28	19,1	7,31	0,4	6,94	-5,0
	US	4,84	5,40	11,6	6,10	13,0	5,48	-10,2
Mens Trs MM	EU	5,01	5,75	14,9	6,03	4,9	6,15	1,9
	US	4,03	3,80	-5,7	5,34	40,5	4,37	-18,2
Mens Tsrs OTR	EU	6,71	7,47	11,3	8,34	11,6	7,68	-7,9
	US	4,66	4,77	2,4	6,14	28,7	6,84	11,4
Wmens skt CT	EU	4,86	5,69	17,2	5,79	1,7	5,67	-2,0
	US	4,27	5,10	19,4	4,82	-5,5	4,62	-4,1
Wmens trs CT	EU	5,61	6,62	17,9	6,50	-1,8	6,39	-1,8
	US	4,73	5,53	16,9	5,63	1,8	5,39	-4,3
Wmens tsr MM	EU	4,95	5,53	11,8	5,76	4,1	5,73	-0,5
	US	5,12	5,01	-2,1	4,71	-6,0	4,92	4,5

Source ITC TradeMap and Authors' calculations

Code	Product label	2009	2010	Change%	2011	Change%	2012	Change%	2013	Change%
	Table 5 - Bangladeshi imports: Total and textiles and related goods 2008-12 ($000s)									
TOTAL	All products	18469489	26292768	42,4	31901850	21,3	30978756	-2,9	32836083	6,0
'52	Cotton	1953385	3397555	73,9	4321218	27,2	4600762	6,5	4974075	8,1
'55	Manmade staple fibres	632492	881471	39,4	1142038	29,6	1087181	-4,8	1204488	10,8
'54	Manmade filaments	395210	558247	41,3	592779	6,2	586802	-1,0	639635	9,0
'60	Knitted/crocheted fabric	287045	392712	36,8	476796	21,4	532794	11,7	534709	0,4
'58	Special fabric, lace	206729	252152	22,0	293024	16,2	320168	9,3	252653	-21,1
'59	Impregnated fabric	106284	143316	34,8	193914	35,3	192760	-0,6	217973	13,1
'53	Vegetable fibres/fabric	35406	51919	46,6	91779	76,8	94322	2,8	98430	4,4
'51	Wool	52574	54821	4,3	79425	44,9	90364	13,8	71816	-20,5
'56	Wadding, nonwovens	32254	45503	41,1	58452	28,5	64708	10,7	63987	-1,1
'50	Silk	6339	8061	27,2	5308	-34,2	6253	17,8	7397	18,3

Source: ITC Trademaps and author's calculations.

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[i] More recent figures indicate that utilization levels have improved, with 75% of EU imports from LDCs using preferences in 2006 (Nilsson and Matsson, 2009).

[ii] The figure for woven garment exports was even lower at only 33% (Curran et. al., 2007). The distinction between woven and knit garments is an important one to which we shall return later.

[iii] The International Trade Centre (ITC) TradeMap database is based on UN trade data. It uses mirror data to fill in missing flows and is therefore more complete than the UN's Comtrade database. Although we study trade with the EU we use US$, as most trade in this sector takes place in dollars (Francois et al, 2007).

[iv] The US does not give any preferences to LDCs in the RMG sector under their GSP, thus there is no incentive to conform to any RoO, as Bangladeshi goods will in any case face a tariff on the US market of 17-18% (Memedovic, 2009).

[v] Assessing the impact on Bangladeshi textile industry is complicated by the fact that Bangladesh has not declared import figures since 2007. We therefore use mirror data from exporting countries.