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# EU trade policy reform: towards reciprocal concessions with developing countries

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#### Abstract

The European Union (EU) supports developing countries with a unilateral trade preference scheme. The scheme underwent a major reform in 2014, in which many countries lost access to reduced tariff rates. We analyse how this radical step that removed preferences from 103 countries by 2018 fits into the EU's strategy to promote bilateral agreements and how it affected imports from the removed beneficiaries. Using the gravity model of trade with high-dimensional fixed effects, we show that the removal results in a significant decline in exports of affected developing countries. Some countries formed a bilateral free trade agreement with the EU, in which case the negative effect of removal of unilateral trade preferences is compensated but we do not find significant and consistent additional benefits. Thus, the threat of removal can be seen as a lever for beneficiaries that are about to become ineligible to negotiate a bilateral agreement with the EU.

Keywords: trade preferences, reciprocity, GSP, FTA, gravity model

**JEL Classification:** F13, F14, O19, O24, D78

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## 1 Introduction

The list of developing countries that benefit from the European Union's Generalised Scheme of Preferences (EU GSP)<sup>1</sup>, a program that grants unilateral tariff preferences to developing countries when exporting to the EU, has significantly shrunk since 2014. This is associated with the large-scale GSP reform that went into force in 2014 and the EU's pursuit of reciprocal trade agreements with developing countries while simultaneously drastically cutting down the number of countries eligible for unilateral preferences.

The EU's declared goal is that GSP should focus only on the countries most in need. As a result of the reform, three groups of countries discontinued being GSP beneficiaries: (i) those classified as upper-middle income for 3 years in a row by the World Bank income classification;<sup>2</sup> (ii) countries that signed and ratified a free trade agreement (FTA) with European Union; (iii) overseas territories of developed countries. EU imports using GSP preferences fell from above EUR 90 billion before the reform to about EUR 50 billion in 2014 and reaching EUR 60 billion in 2019.<sup>3</sup>

Such unilateral preferences for developing countries are permissible by the World Trade Organization rules as an exception to the reciprocity principle in order to spur development through trade. Indeed, trade can act as a catalyst for productivity gains which translate into income growth (Winters, 2004). Alcalá and Ciccone (2004) find that trade has a significant and robust positive effect on total factor productivity, even when accounting for the endogeneity of trade and institutional quality. While the distribution of welfare gains through trade can differ from country to country, trade liberalization in developing economies has helped reduce absolute poverty (Dollar and Kraay, 2004). Trade is vital for income growth even when controlling for the role of institutions (Busse and Königer, 2012; Dollar and Kraay, 2003).<sup>4</sup> Perla et al. (2021) model with heterogeneous firms shows that trade-induced productivity boost can be explained by higher incentives for less productive firms to adopt technology quicker, leading to a higher rate of technological diffusion and economic growth.

However, the effectiveness of special and differential treatment of developing countries in practice has long been debated (Hoekman and Özden, 2006; Silva, 2011). Beneficiary status is not secure as, for example in the case of the European

 $<sup>^{1}\</sup>mathrm{GSP}$  commonly stands for Generalised System of Preferences, however in case of European Union, the unilateral preferences program is Generalised Scheme of Preferences.

 $<sup>^{2}</sup>$ The upper-middle income threshold is relatively low: in the fiscal year 2012 the was annual GNI per capita \$3976 and is at \$4096 for 2022, the thresholds are adjusted annually to keep them fixed in real terms.

<sup>&</sup>lt;sup>3</sup>European Commission (2018, 2021c)

<sup>&</sup>lt;sup>4</sup>Generally, good institutions go hand in hand with high growth rates and trade openness. Freund and Bolaky (2008) show that an increase in trade is associated with large income gains but only in countries with lower firm entry barriers.

Union program, countries are removed from the scheme whenever their income reaches predefined thresholds. Further, certain export sectors of specific beneficiaries can lose preferences if they are deemed too competitive. Even the level of preference margin is not guaranteed if the European Union changes a sector's sensitivity status.

In this context, it has been suggested that the radical GSP reform and especially the reduction of beneficiaries is an attempt to gain bargaining power for future FTA negotiations as it left a substantial share of EU imports ineligible for lower tariff rates.<sup>5</sup> Siles-Brügge (2014) argues the reform can be seen as a means of gaining leverage for FTA negotiations, especially regarding those countries that were negotiating agreements with the EU at that time. Indeed, Besedeš and Prusa (2011) argue that the ability to maintaining export relationships is key for export growth of developing countries. Instead, the major changes of GSP, particularly the dynamically changing income threshold, have introduced more inconsistency and uncertainty to developing economies.

This paper reviews the latest EU GSP reform that marks the EU's shift towards reciprocal agreements and examines the impact on the developing countries' exports. For this, we construct a dataset that tracks beneficiary status information for all countries from 2009 to 2018, including shifts within different arrangements of the EU GSP. Using the best-practice gravity model with high-dimensional fixed effects, we analyze the trade impact of losing the GSP beneficiary status because of lowered income thresholds, newly formed bilateral agreements or the status as an overseas territory.

We assess whether the developing countries' exports reaped benefits from the EU's drive to move from unilateral tariff preferences to reciprocal FTAs.<sup>6</sup> Free trade agreements, on the one hand, provide duty-free access to practically all goods and reduce uncertainty in contrast to GSP. On the other hand, developing countries have to provide concessions in trade and non-trade areas, often going beyond WTO issues, in order to gain duty-free market access to the European Union under an FTA. Such compromises are not part of GSP. Indeed, developing countries were initially reluctant to embrace the shift. The EU initiated bilateral negotiations long before the GSP reform but faced reluctance from many developing countries. Some of them ultimately followed the path of reciprocal agreements once the continued GSP beneficiary status was under threat or not available to them (Apiko et al., 2019). The fears of opening up to competitive EU exports were exacerbated by the intentions to include the EU regulatory model, investment issues and other non-trade policy objectives in the reciprocal

<sup>&</sup>lt;sup>5</sup>In total, 87 billion of imports received tariff preferences in 2011, making up more than 60% of imports from beneficiaries in the year before the new regulation was announced (European Commission (2021a,b, 2012)European Commission, 2012).

<sup>&</sup>lt;sup>6</sup>European Commission (2021a,b) provide an overview of FTA and EPA negotiations.

Economic Partnership Agreements (EPAs) (Bilal et al., 2021; Hoekman, 2021).

Our paper makes three contributions. First, we quantify the effects of probably the most radical reform so far in trimming the world-wide spread of unilateral trade preferences for developing countries.

Second, we compare the unilateral preferences for developing countries with bilateral FTAs in a unified setting. A significant number of beneficiaries switch from GSP to a reciprocal FTA for the same destination in a relatively short time frame and pressured by the reform. Methodologically, our choice of the setting largely removes endogeneity concerns coming from selection into an agreement otherwise present in the FTA formation.

Finally, we quantify the advantages of the more comprehensive arrangement that provides duty-free access rather than partial tariff discounts but requires developing countries to ratify a large number of non-trade related agreements relative to the standard program. We do this by separating the group of countries that remained beneficiaries but moved from one arrangement to another. The benefits of the more comprehensive arrangement over the standard one appear to be not only substantial on their own, but they also exceed the effect of being removed entirely from the standard arrangement.

The effect of preference withdrawal depends on the reason for removing the benefits. We find that the effect is negative and significant for countries that were removed because the new income threshold disqualified them from the scheme (about 7.3%). Moreover, the effect is larger for the wealthier half of upper-middle income countries. Countries that signed new FTAs with the EU are compensated for the loss of GSP access but do not find additional trade benefits. The exports of overseas countries and territories (OCTs) do not show consistent impact as the estimated coefficient is large and negative but insignificant. This can be explained by more sporadic trade pattern of small economies of OCTs.

These results suggest that the expected decline in exports after losing GSP preferences could indeed incentivize developing countries to negotiate bilateral agreements with the EU to cushion the negative effect of the removal. The tightened criteria for GSP eligibility, which were introduced in 2014, are in line with the EU's strategic shift towards reciprocal trade agreements.

We outline in Section 2 the EU GSP's legal framework which is in place since 2014 and summarize some recent literature to show why the threat of preference withdrawal can serve as a leverage in FTA negotiations with developing countries.<sup>7</sup> Section 3 presents data and estimation strategy, Section 4 discusses the results and Section 5 concludes.

<sup>&</sup>lt;sup>7</sup>On the other hand, the pursuit of FTAs instead of GSP concessions due to commercial motives may limit the ability of the EU to condition the preferential access on non-trade aspects such as labor rights in FTAs as compared to unilateral preferences (Borchert and Di Ubaldo, 2020). It is not uncommon to use GSP benefits for a political agenda, however (Gassebner and Gnutzmann-Mkrtchyan, 2018).

## 2 European Union's GSP after the 2012 reform

The latest version of the EU GSP came into force on 1 January 2014, following the respective EU regulation 978/2012 that has been adopted in 2012. Some of the most salient changes implemented in the latest reform affect the circle of eligible countries and beneficiaries, resulting in a drastic reduction of the number of beneficiaries from 178 in 2013 to 96 in 2014.<sup>8</sup> The number of beneficiaries continued to decline further every year reaching 75 beneficiaries at the end of our sample period in 2018, thus overall 103 countries ceased being GSP beneficiaries.<sup>9</sup> Three changes of eligibility criteria were the reason: First, upper-middle income countries were removed from the scheme, in contrast to the EU GSP prior to the 2012 reform that excluded only high-income countries (traditionally known as developed countries). In addition, overseas territories lost eligibility status for GSP. Finally, FTA partners would automatically lose GSP beneficiary status as FTA should provide equivalent or better concessions. Overall, 38 countries were removed due to new FTAs. Moreover, 35 overseas territories ceased to be beneficiaries and 22 upper-middle income countries as well as 8 high-income countries by 2018.

The EU GSP comprises one general and two special arrangements. This segmentation is supposed to account for the different levels of economic development and the different needs of the beneficiary countries. All three arrangements offer tariff reductions but do so to a different extent: the degree of preferential treatment is mainly bound to the economic development, i.e. less developed countries benefit from wider and higher reductions. All three preferential arrangements can be temporarily withdrawn with respect to a country in case of serious and systematic violations of the core human and labor rights conventions laid down in Annex VIII and some other reasons listed in Article 19.

The general arrangement (Standard GSP) addresses all countries that satisfy the income criterion. In order to benefit from Standard GSP, countries do not have to apply; they are added and removed by decision of the EU Commission. It is important to distinguish between eligible countries and beneficiary countries. Annex I of Regulation 978/2012 establishes a fixed list of eligible countries that will be added to Annex II, i.e. benefit from the scheme unless they fulfill one of the two exclusion criteria laid down in Article 4(1): First, countries that have been classified as an upper-middle or high income country for three consecutive years by the World Bank cannot benefit from the scheme. Second, countries that

<sup>&</sup>lt;sup>8</sup>The number of beneficiaries increases in 2013 as newly created country South Sudan is admitted into GSP. In addition, Myanmar is readmitted to the program: it was suspended until July 2013 due to labor rights violations and here is not counted for 2013. Finally, Netherlands Antilles dissolves into three countries.

<sup>&</sup>lt;sup>9</sup>The number of beneficiaries continued declining after the end of our sample period to only 67 countries in 2021. Source: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri= CELEX%3A02012R0978-20210410. Accessed on 30 September 2021.)

have a market access arrangement with the EU which provides the same level of preferences as the scheme, or better, cease to be GSP beneficiary as well. In either case, the Commission decides to remove the respective country from the list of beneficiaries laid out in Annex II. This list is reviewed by the European Commission on a yearly basis. However, in the case of a removal, the country remains eligible as its status might change again in the future. The overseas territories that were excluded in 2014 are a special case; they have been removed from the list of eligible countries as well.

Standard GSP covers roughly two thirds of all EU Combined Nomenclature (CN) tariff lines, or about 6,350 products out of about 7,100 products with nonzero tariffs (UNCTAD, 2015; European Commission, 2012).<sup>10</sup> These products are categorized into sensitive and non-sensitive products. For the former, duties are reduced by 3.5 percentage points and 30 percent for ad valorem duties and specific duties, respectively. Non-sensitive products are free of duty.

In addition to the country removal mechanism, Article 8 of EU Regulation 978/2012 provides for the graduation of a certain product-country pair from Standard GSP. Graduation means that certain products from a country no longer receive preferences when they can be produced in that country competitively. The level of competitiveness is measured by the EU imports from one country compared with the total EU imports from all beneficiary countries. If the average imports over three consecutive years of that product from the country account for more than 57 percent of total imports of that product from all beneficiary countries, it is no longer eligible for tariff reductions.<sup>11</sup>,<sup>12</sup> As part of the reform, the number of product sections have been expanded from 21 to 32, allowing to target sectors more specifically.

The special incentive arrangement for sustainable development and good governance (GSP+) grants duty-free access for roughly the same products that are covered by Standard GSP. In order to benefit from GSP+, a country must fulfill two additional criteria. First, it must be considered vulnerable. This is the case when the exports from the seven largest GSP sectors account for more than 75 percent of total exports under GSP for three consecutive years and when the three-year average share of the country's GSP-covered imports, relative to the GSP-covered imports of all GSP countries, is lower than 6.5%. Second, the country must ratify and implement 27 international conventions regarding human and labor rights as well as conventions related to the environment and to government principles. If a country is granted GSP+ status, it is under ongoing observation by the EU to ensure compliance with the conventions.

<sup>&</sup>lt;sup>10</sup>Approximately 2,300 additional products have zero MFN tariffs.

<sup>&</sup>lt;sup>11</sup>Originally, the threshold was set at 17.5% but after China's removal in 2015 it was adjusted as China was by far the largest exporter among the beneficiaries.

 $<sup>^{12}</sup>$  Different thresholds are set for textiles (47.2%) and some foods (17.5%).

In contrast to the old GSP version that was in force until the reform, GSP+ beneficiaries are no longer graduated by sections and applications are accepted at any time instead of every 1.5 years. Borchert and Di Ubaldo (2020) analyze the sector graduation aspect of the GSP reform and find that associated decline in uncertainty increases the exports significantly.

The most beneficial arrangement is the special arrangement for the leastdeveloped countries "Everything But Arms" (EBA). It offers all countries that are classified as Least Developed Countries (LDCs) free market access for all products except for arms. In order to ensure continued security, this agreement has not been subject to changes as part of the latest reform. Moreover, it is open-ended. Once a country ceases to be an LDC, it is removed from the list of beneficiaries following a transitional period of three years to allow for a smooth transition. This time span, as defined by the EU, is less generous for Standard GSP and GSP+ and also depends on the removal reason: Countries that sign an FTA with the EU quit the scheme after (at least) two years from the agreement's date of application. When a country is classified as upper-middle or high income country, the removal decision applies one year after the adoption.

# 2.1 The 2012 GSP reform as a part of EU's goal toward reciprocal agreements

Since the beginning of the millennium, the EU has increasingly focused on the creation of new FTAs as a building block in its trade policy strategy. The European Commission officially declared that "for an open trade policy in Europe to succeed politically, others – including both our developed and emerging partners – must match our efforts, in a spirit of reciprocity and mutual benefit" (European Commission (2010), from Siles-Brügge (2014)).

Woolcock (2007) identifies political considerations like foreign policy and security interests as well as commercial motives for the EU's trade policy shift. Commercial interests like market access for European firms are probably a major reason for the EU to negotiate bilateral agreement, but the EU has also started negotiations with regional groups of African, Caribbean and Pacific (ACP) countries whose trade relations with the EU are relatively small in value. In these cases, the goal to promote the European model of economic integration is likely to be a central objective of the strategy change.

Siles-Brügge (2014) questions the credibility of the EU Commission's statement to focus on the countries most in need as it is not consistent with the EU's "general preference for contractually enshrined free trade". Instead, the paper argues that the removal of numerous beneficiaries serves the goal of gaining leverage for future FTA negotiations with emerging economies. Moreover, in the drafting process of the new GSP framework, the views of European importers and development-minded NGOs were neglected in favor of the exporters' interests. However, reciprocal agreements may in the long run also benefit the developing countries as unilateral preferences lead to protectionist trade policies of the recipients by shifting the domestic interests from balancing export and import goals towards import-competing firms (Özden and Reinhardt, 2005).

As documented in the report of Apiko et al. (2019), the shift to bilateral agreements has been pushed by the European Union. Many developing countries have been reluctant to sign the EPAs due to concerns regarding the development dimension of an FTA. Analyzing the EPA negotiations in West Africa, the report writes that some developing countries signed an EPA to continue receiving preferential market access while others required development aid in order to unlock the negotiations. However, early assessments indicate that trade gains from concluded EPAs are not straightforward and significant.<sup>13</sup>

#### 2.2 Background evidence on GSP effectiveness

The EU can only improve its bargaining power if the withdrawal of trade preferences is felt by former GSP beneficiaries. Beneficiaries who lose preferences or might do so in the future have an incentive to enter negotiations for bilateral agreements with the EU to prevent damage to their exporting industry. Prior literature that studies the effect of granting and withdrawing unilateral preferences have come to mixed conclusions. Preferences are important for countries and sectors that receive largest tariff cuts and duty-free access (Hoekman et al., 2009).

Thelle and Biesebroeck (2015) explore sectoral graduations and find that EU GSP preferences have boosted exports by up to 5% on average.<sup>14</sup> The effect is particularly pronounced for LDCs as they benefit from more comprehensive trade preferences. As documented by Hoekman et al. (2002), EBA provided duty-free access in goods with high MFN tariffs where other developing countries have no or small preference. Similarly, Frazer and Van Biesebroeck (2010) study the impact of the African Growth and Opportunitiy Act (AGOA) that was enacted by the United States in 2000 and added selected countries and products to the US GSP. Using triple difference-in-differences regressions, they find that the act significantly stimulates exports of the products in question and estimate the causal effect of AGOA in the key product categories apparel, agriculture and manufactures at a 28% increase.

Further evidence relating to the effectiveness of the GSP can be found in the cases of preference suspension or withdrawal. In the 1995 version of GSP, the EU has for the first time implemented the option to temporarily suspend a country

 $<sup>^{13}</sup>$ Stender et al. (2021); Plaisir et al. (2021); Fuenfzig et al. (2021).

 $<sup>^{14}</sup>$ These findings are also supported by Cirera et al. (2016)

if it violates international forced labor conventions. In the latest version, Article 19 provides for withdrawal in case of serious violations of core human and labor rights, export of goods made by prison labor, shortcomings in drug trade prevention, non-compliance with conventions on anti-terrorism and money laundering, unfair trading practices or the infringement on the objectives adopted by the Regional Fishery Organizations. The EU has suspended Myanmar in 1997 and Belarus in 2006 for the use of forced labor and for violations of the freedom of association. Zhou and Cuyvers (2011) analyze the impact of sanctions on both countries. They conclude that the withdrawal did not lead to an improvement in labor rights because the effect on total trade was very limited. In fact, both countries' EU exports increased significantly, even after the suspension. Generally, sanctions are more likely to take full effect if the economic links are close, which was neither the case for Myanmar nor for Belarus. Gnutzmann and Gnutzmann-Mkrtchyan (2022) use a triple difference-in-differences regression to study the sectors that were affected by the sanctions imposed on Belarus. They find that the trade in products that had previously been covered by GSP declined by 25 - 28% while the overall effect on trade was not large as the main exports of Belarus had not been eligible for preferences before the withdrawal.

Related, Hakobyan (2020) studies the expiration of the US GSP in 2011: As the Congress failed to renew GSP, a large number of countries found themselves temporarily deprived of preferential treatment. Even though the duties that were paid initially had been reimbursed retroactively in the past, exports from the affected countries to the US dropped by about 3 percent across all products in 2011, with products facing higher tariffs being particularly affected.

A number of studies assess a wide range of GSP programs in a simultaneous setting. Ornelas and Ritel (2020) carry out a gravity analysis and obtain ambiguous results about the developmental benefits of non-reciprocal trade programs. Exports from LDCs are boosted if they are WTO members, while non-LDCs gain from preferences only if they are not, suggesting that poor countries require a basic level of international economic integration to benefit from the tariff cuts. Gil-Pareja et al. (2014) estimate the effect of developing countries' exports to richer countries for a wide range of non-reciprocal preference agreements and find that they generally (as well as EU programs specifically) boost exports. In contrast, Eicher and Henn (2011), while focusing rather on preferential trade agreements, as well as Herz and Wagner (2011) come to the opposite conclusion, finding large negative GSP trade effects for the long run.

Given the existing evidence, it seems unclear whether the suspension of unilateral preferences, in particular for upper-middle income countries, would give the EU an edge in negotiations for FTAs and whether the developing countries' exports will benefit from such shift. It suggests that the effect of unilateral trade preferences depends on the characteristics of the eligible countries and products and their relationship to the preference-granting countries, but similarly the bilateral FTAs have very wide-ranging effects.

To shed more light on the issue, we take a closer look at the latest EU GSP reform that entered into force in 2014. It more than halved the number of beneficiary countries initially, an unprecedented step in the history of GSP worldwide, and led to numerous further removals in the following years. This situation provides a firm ground for an empirical assessment of the impact of unilateral preferences on the part of the EU.

## 3 Data and Estimation Strategy

We use total export trade value in USD as our measure of exports. The bilateral trade flows are taken from the UN Comtrade database for the sample period from 2009 to 2018 and include trade among more than 32,705 importer-exporter combinations. The sample starts in 2009 as by that year the implementation of the modern structure of the EU GSP (Standard GSP, GSP+ and EBA), established by the Council Regulation (EC) No 980/2005, has come into effect (Bartels, 2007).<sup>15</sup>

Second, we created a dataset that provides information on the beneficiary status of 232 countries and territories for each year between 2009 and 2018. It also includes the type of arrangement, i.e. Standard GSP, GSP+ or EBA, and, if the status changes from one year to another, the reason for the change. The data was collected from official documents from the EU Commission: The starting point of the creation of our dataset is the EU Council Regulation No. 732/2008<sup>16</sup> establishing the scheme from 2009 until 2011. It provides a list of all beneficiary countries including their respective arrangement. Since only two changes occurred during this period (the admission of South Sudan and the dissolution of the Netherlands Antilles) and since the scheme was later extended until 2013, the beneficiary list stayed virtually identical in the years from 2009 to 2013. In addition, Myanmar was readmitted in July 2013. We thus exclude Netherlands Antilles, Myanmar, and South Sudan from the regression sample; however, their inclusion does not affect the results.

All other removals from and admissions to the scheme took place from 2014 onwards. Using the information handbook "The EU's New Generalised Scheme of

<sup>&</sup>lt;sup>15</sup>Countries that did not apply for GSP+ before October 2005 had to wait until 2009 to apply again. Therefore, the year 2009 marks the last significant change regarding the status of beneficiary countries after which the beneficiary list has been stable.

<sup>&</sup>lt;sup>16</sup>Council Regulation (EC) No 732/2008 of 22 July 2008 applying a scheme of generalized tariff preferences for the period from 1 January 2009 to 31 December 2011 and amending Regulations (EC) No 552/97, (EC) No 1933/2006 and Commission Regulations (EC) No 1100/2006 and (EC) No 964/2007.

Preferences (GSP)"<sup>17</sup>, we marked all removals that came with the implementation of the new GSP in 2014 including the removal reason for each country. To keep track of further removals and admissions that were decided afterwards, we went through all amendments to Regulation 978/2012 that were adopted later on and incorporated these changes into our dataset. These amendments are adopted whenever beneficiaries fail to meet the eligibility requirements due to their income or newly created FTAs and are published on the EUR-Lex platform<sup>18</sup>. They contain information about the legal ground of the decision and when it will come into force. This way we ended up with a complete history of EU GSP beneficiaries for the period from 2009 to 2018 including the specific arrangements under which they could export to EU countries in any given year. In some cases, changes that affected the list of beneficiaries went into force during the year; we therefore added a dummy variable that equals 1 if the admission, the removal or the change of arrangement took place after May.

We use the Economic Integration Agreements (EIA) dataset (Baier et al., 2014) that marks the level of economic integration between all possible pairs among 195 countries, reaching from no agreement at all up to economic union, for preferential trade agreements other than EU GSP. This dataset also distinguishes between unilateral and bilateral preferences which allows us to study the impact of both trade regimes on total exports. It does not distinguish between different GSP programs, e.g. the EU GSP and the US GSP.

#### 3.1 Descriptive Statistics of the beneficiary structure

This subsection describes the impact of the 2014 reform on the composition of beneficiary countries.

As mentioned above, the latest reform of the EU GSP had a significant effect on the number and on the composition of the pool of beneficiary countries. While the initial drop in 2014 leaps to the eye, a closer look reveals that also in the following years the circle of beneficiaries has kept shrinking. Figure 1 shows how many countries were covered by one of the three arrangements before and at any point in time after the reform. Consistent with the claim to ensure security and continuity for the LDCs, the number of countries benefiting from EBA has almost remained constant. While South Sudan was added in 2013 after it had declared independence, only Cape Verde and the Maldives have been removed from the EBA arrangement.<sup>19</sup>

In contrast, the other two arrangements have undergone various changes in terms of the beneficiaries they cover. Standard GSP reported the largest drop

 $<sup>^{17}\</sup>mbox{Available at https://trade.ec.europa.eu/doclib/docs/2015/august/tradoc_153732.pdf$ 

<sup>&</sup>lt;sup>18</sup>https://eur-lex.europa.eu/homepage.html

<sup>&</sup>lt;sup>19</sup>Samoa and Equatorial Guinea were removed in 2019 and 2021, respectively, which is outside our sample period.

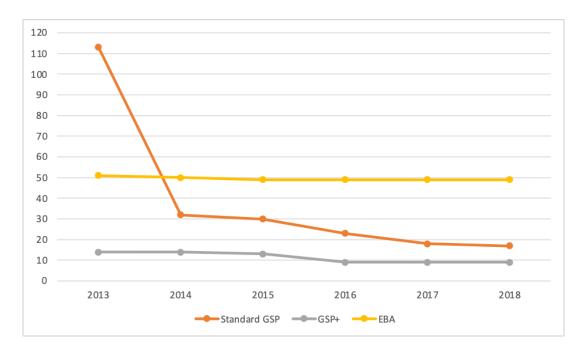


Figure 1: Number of beneficiaries over time by scheme

from 113 beneficiaries at the end of 2013 to only 32 beneficiaries in 2014. In the following years, the tightened criteria let the list shrink down to only 17 beneficiaries in 2018.

The changes in the GSP+ beneficiary group can be explained with the fact that all countries – including former beneficiaries – had to apply once again to receive the preferences under GSP+. However, the group of GSP+ beneficiaries shrank from  $14^{20}$  – before the reform - to 9 in 2018 by the end of our sample period.

Figure 2 gives an overview for which reason the countries had their preferences revoked due to the GSP reform in the sample period between 2014 and 2018. Sometimes two events, such as the application of a bilateral agreement and climbing up into a higher income category, coincide. In these cases, the removal is attributed to the FTA removal category as the exporter continues to have preferential market access.<sup>21</sup> Clearly, the ongoing expansion of FTAs accounts for most removals, followed by the classification as an upper-middle income country. Figure 3 provides an overview about the removals in map format.

 $<sup>^{20}\</sup>mathrm{Sri}$  Lanka is not included as it was temporarily suspended from GSP+ in 2010. It was admit-ted again in 2017.

<sup>&</sup>lt;sup>21</sup>This applies also to our baseline regressions, in robustness checks we consider alternative attribution and exclusion of these countries.

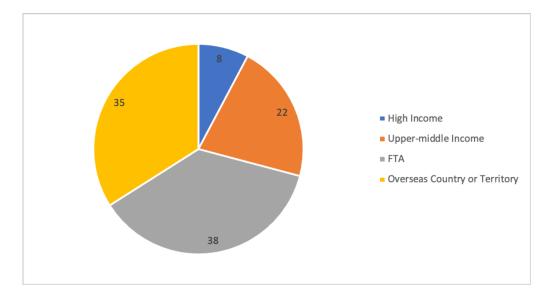


Figure 2: GSP removal reasons 2014-2018

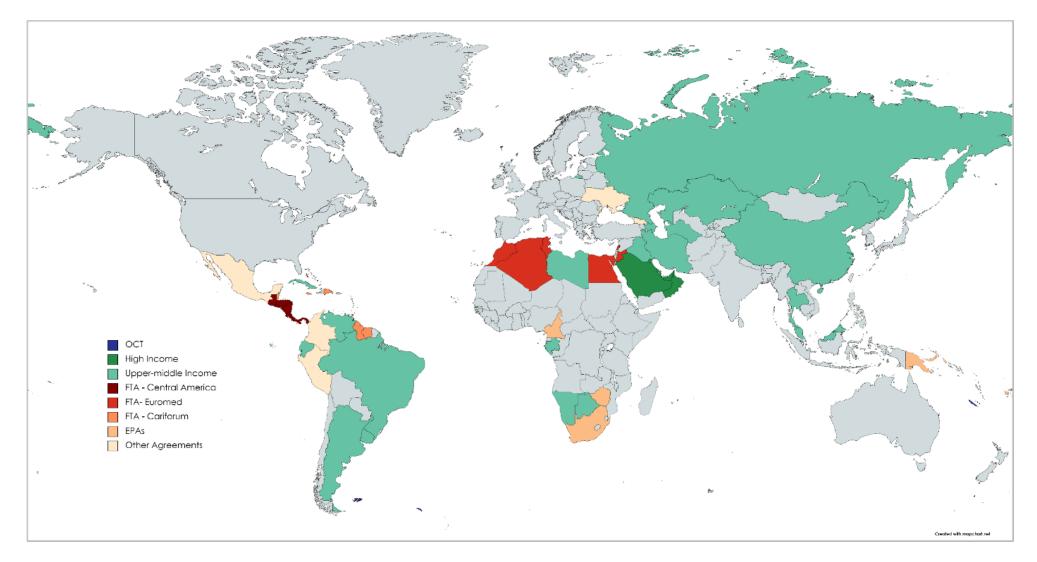


Figure 3: Map of GSP removals 2014-2018

#### **3.2** Estimation strategy

In this subsection we present the gravity equation of the trade impact of the largescale reform of the EU GSP. We estimate trade flows using the Pseudo-Poisson-Maximum-Likelihood (PPML) estimator, considered a best-practice estimator in empirical trade literature and exhibits some desirable properties.<sup>22</sup> PPML estimator allows for gravity estimation in multiplicative form, which also accounts for heteroscedasticity in the trade data and avoids heteroscedasticity-driven bias present in log-linear form while taking zero trade flows into account (Silva and Tenreyro, 2006).

We employ the estimable structural gravity equation and describe trade flows  $X_{ijt}$  between origin i and destination j in year t as in the notation and nomenclature of Yotov et al. (2016). Following the derivation of the structural gravity model in Anderson and Van Wincoop (2003) and describe the bilateral value of exports  $X_{ijt}$  from origin i to destination j in year t via the equation:

$$X_{ijt} = \frac{E_{jt}Y_{it}}{Y_t} \left(\frac{t_{ijt}}{\Pi_{it}P_{jt}}\right)^{1-\sigma} \tag{1}$$

where  $Y_t$  denotes world production,  $Y_{it}$  - country i 's domestic production, and  $E_{jt}$  - country j's aggregate expenditure.  $(t_{ijt}/(\Pi_i t P_{jt}))^{(1-\sigma)}$  captures all "trade costs" that hamper trade between the two countries in period t. The trade cost term consists of three components:  $t_{ijt}$  - bilateral trade cost between i and j;  $\Pi_i t$  - outward multilateral resistance term, measuring exporter i's market access for exports; and  $P_{jt}$  - inward multilateral resistance term, measuring importer j's ease of access for imports.

We follow the recommendation of Olivero and Yotov (2012) as well as Baier et al. (2019) and include importer-year and exporter-year fixed effects to control for multilateral resistance terms in panel data setting. This approach is extending the Feenstra (2016) recommendation of using fixed effects to account for multilateral resistance terms in cross-sectional data. Importer-year and exporter-year fixed effects absorb all observable and unobservable variation at importer-year and exporter-year level (GDP, population, exchange rates, national policy and institutional characteristics). Among others, these fixed effects also absorb the production and expenditure terms of the structural gravity.

In addition, we include pair fixed effects that encompass time-invariant bilateral trade costs, such as geographical properties or common cultural aspects. They also address the issue of endogeneity due to unobserved time-invariant heterogeneity (Baier and Bergstrand, 2007). Further, fixed effects control for unobservable pair-level trade costs. Egger and Nigai (2015) show that they account for bilateral trade costs better than traditional gravity controls.

 $<sup>^{22}</sup>$ We use Stata command ppmlhdfe by Correia et al. (2020).

Thus, we include three sets of fixed effects: time-varying importer fixed effects, time-varying exporter fixed effects and time-invariant bilateral fixed effects and the identifying variation is at the bilateral time-varying level.

We are interested in the bilateral trade costs  $t_{ijt}$ , which we can characterize as

$$(t_{ijt})^{1-\sigma} = exp[BTP_{ijt} + \mu_{ij}]\epsilon_{ijt}$$
<sup>(2)</sup>

The time variable vector BTP (Bilateral trade policy) comprises all timevarying bilateral trade costs, including our variables of interest as it captures the changes in GSP status of a given country, while the pair fixed effects  $\mu_{ij}$  contain time-invariant bilateral trade costs.

We include indicator variables for GSP, PSA, or an RTA being in place between countries i and j in year t, therefore estimating the coefficients  $\beta_{GSP}$ ,  $\beta_{PSA}$ , and  $\beta_{RTA}$ , respectively. The variable GSP indicates that the exporter is receiving nonreciprocal preferences from the importing country (except for the recipients of EU GSP as these are controlled by the variables of interest); PSA stands for a partial scope agreement – these are reciprocal agreements that provide trade preferences but do not have nearly universal coverage of free trade agreements, and RTA includes free trade agreements, customs unions, and other deep agreements (Baier et al., 2018).<sup>23</sup>

$$BTP_{ijt} = \beta_0 \times Removal_{ijt} + \beta_{GSP} \times GSP_{ijt} + \beta_{PSA} \times PSA_{ijt} + \beta_{RTA} \times RTA_{ijt}$$
(3)

Finally, we add the dummy variable Removal to our regressions, which takes the value of one for the countries affected by the reform in years when they lost the preferences. Subject to the control variables and fixed effects included in our regressions, we can assume that our Removal dummy and the error term  $\varepsilon_{ijt}$  are uncorrelated. Hence, we can interpret  $\beta_0$  as the causal effect loss of preferences on exports to the EU. Concluding, our baseline estimation equation can be written as follows:

$$X_{ijt} = exp[\beta_0 \times Removal_{ijt} + \beta_{GSP} \times GSP_{ijt} + \beta_{PSA} \times PSA_{ijt} + \beta_{RTA} \times RTA_{ijt} + \pi_{it} + \chi_{jt} + \mu_{ij}] \times \epsilon_{ijt}$$
(4)

where we cluster the composite error term  $\varepsilon_{ijt}$  at the dyad-level.

Removal of GSP does not necessarily affect all beneficiaries similarly, first and foremost due to various channels of the GSP reform that lead to preferences

 $<sup>^{23} {\</sup>rm Including}$  separate dummies for FTAs and Customs Unions instead of an RTA dummy does not affect the results.

removal. To assess the effect of preference withdrawal we define three binary variables for countries affected by the reform that reflect that reason for preference removal: Removal  $\times$  Income, Removal  $\times$  FTA and Removal  $\times$  Income. The variable Removal  $\times$  Income takes the value 1 if the country used to receive preferences in the past but has been removed from the scheme because it has been classified as upper-middle or high income for three consecutive years. The other two variables are defined analogously for countries that were removed because they signed an FTA with the EU or because they were territories associated with the EU. The latter case is restricted to territories that were removed in 2012 following the GSP reform. Removals from Standard GSP make up for the vast majority of sample observations (about 90%), since GSP+ had fewer beneficiaries in the past and the list of EBA beneficiaries has been very stable over the whole observation period. Specifically, the only removal of an EBA beneficiary is Maldives removed due to income criterion, and there are 9 GSP+ recipients whose preferences were removed (6 due to FTA and 3 due to income).<sup>24</sup>

The above estimation specification presents the baseline model. To explore the heterogeneity and robustness of the impact we consider specification and sample variations. First, we assess all regressions separately for EU members while alternatively treating the EU as a single importer. Second, in addition to estimating the impact of losing the preferences, we assess the trade impact of having the preferences "downgraded" (e.g., from more privileged GSP+ to Standard GSP).

### 4 Regression results

Table 1 shows the results for the PPML estimates for the three different model specifications. As outlined above, we regress bilateral trade volume on a dummy variable that indicates whether the exporting country has lost trade preferences for EU importers in the past. In addition, we control for all other trade agreements or preferences received by the exporter.

The results of the baseline regression are presented in column 1 and 2. With our specification of the gravity model, the trade volume effect is given by  $(e^{\beta_0} - 1)$ . Preference withdrawal reduces trade volumes by 7.3% if the exporter exceeded the income threshold while it increased by 10.5% if the GSP relationship was replaced by an FTA. The coefficients are significant at the 1-percent level and the 5-percent level, respectively. Aggregating EU importers hardly changes the coefficients. The effect of preference removal on overseas countries and territories is not statistically significant. This finding stays consistent throughout the remaining regressions. Regarding the countries that signed an FTA with the EU,

<sup>&</sup>lt;sup>24</sup>We did not find any impact on the main findings from controlling separately or removing these exporters from the sample.

Dependent variable: Trade Value				
	(1)	(2)	(3)	(4)
Sample:	Baseline	EU Aggregate	Downgrade	Income Split
Removal $\times$				
Income	-0.076**	-0.076**	-0.076**	
	(0.023)	(0.027)	(0.023)	
FTA	0.10*	$0.094^{*}$	$0.10^{*}$	$0.10^{*}$
	(0.050)	(0.042)	(0.050)	(0.050)
OCT	-0.30	-0.22	-0.30	-0.30
	(0.26)	(0.25)	(0.26)	(0.26)
GSP downgrade			-0.20**	
CDI downgrade			(0.072)	
Income > median				-0.12**
median				
				(0.044)
Income < median				-0.051*
				(0.025)
GSP	0.087**	0.029	0.087**	0.086**
	(0.032)	(0.023)	(0.032)	(0.032)
PSA	0.12***	$0.11^{***}$	0.12***	0.12***
- ~	(0.033)	(0.034)	(0.033)	(0.033)
RTA	0.13***	0.12***	0.13***	0.13***
	(0.13) $(0.024)$	(0.026)	(0.024)	(0.024)
	(0.024)	(0.020)	(0.024)	(0.024)
Observations	252610	168590	252610	252610

#### Table 1: Impact OF European Union GSP loss

Notes: Standard errors clustered by country-pair combinations in parentheses.

All regressions include pair, importer-year and exporter-year fixed effects. +  $p<0.10,\,^*$   $p<0.05,\,^{**}$   $p<0.01,\,^{***}$  p<0.001

it seems that these agreements, on average, come with better market access than the GSP. Before an FTA in place was considered a criterion to lose preferences, FTAs and GSP existed side by side for some exporters. We will later distinguish these cases from those where a new bilateral agreement came in place of GSP access (Table 2).

In our second model, we include the variable GSP downgrade to capture the cases where the recipient has not been removed entirely but only switched between GSP and GSP+ arrangements.<sup>25</sup> Therefore, these countries are no longer in the control but in the treatment group. Column 3 shows the regression results. While the other coefficients that were already included in the first specification are quite stable, the impact on trade caused by a downgrade is negative and amounts to 18%. The benefits of GSP+ over Standard GSP appear to be not only substantial on their own, but they also exceed the effect of being removed entirely from GSP. In fact, GSP+ and EBA beneficiaries are freed from tariffs on a large portion of products or even all goods in case of EBA, while Standard GSP only offers tariff reductions on a less diverse variety of goods. In other words, being downgraded in the sense of our model is equivalent to going from a zero to a positive tariff for a large number of goods.

The result is consistent with other evidence suggesting that even small nonzero tariffs pose a burden for trade due to the costs associated with it. Gnutzmann-Mkrtchyan and Henn (2018) find that setting tariffs to zero provides trade gains in addition to tariff reductions. The intuition stems from the fact that across the board zero tariffs reduce incentives to, e.g., under-value the imports and miscategorize the product code to one with a lower tariff rate. As modern customs systems work on risk-based checks, wide-range zero tariffs would lead to lower risk profile of importers and faster customs clearance (Hintsa et al., 2011).<sup>26</sup>

Next, we separate low-income and high-income countries to see whether rich or poor countries are hit harder by the removal. To this end, we divide the coefficient of removal due to income into two groups of above and below median income (at about USD 8650): countries whose average income was lower than this on average during the observation period are taken into account by the variable  $Removal \times (Income > median)$ , those below the threshold by the variable  $Removal \times (Income < median)$ . While none of the other coefficients change considerably, the effect on countries with higher incomes seems to be more pronounced compared to their poorer counterparts with an 11% drop in exports. The effect on poorer countries is less than half of that at 5%.

<sup>&</sup>lt;sup>25</sup>These are Kyrgyzstan, Pakistan, Philippines (switched from Standard GSP to GSP+) and Sri Lanka (moved from GSP+ to Standard GSP and back to GSP+). In addition, Cape Verde moved from EBA to GSP+ beneficiary, however the estimated coefficient is positive (regression that controls separately for this case is available upon request).

 $<sup>^{26}</sup>$ See De Wulf (2005) and Widdowson (2005) for more details on the risk assessment and management in customs procedures.

	(1)	(2)
Sample:	EU Aggregate	EU Aggregate
Removal $\times$		
Income		
	-0.076**	-0.076**
	(0.027)	(0.027)
Preexisting FTA		
	$0.13^{+}$	$0.13^{+}$
	(0.068)	(0.068)
ACP EPA		
	0.032	$0.31^{***}$
	(0.041)	(0.085)
ACP EPA $\times Pref.share$		
		-0.96***
		(0.27)
New FTA		
	0.092	0.092
	(0.11)	(0.11)
OCT		
	-0.22	-0.22
	(0.25)	(0.25)
$Controls^1$	Yes	Yes
Observations	168590	168590

Table 2: Heterogeneity of the impact of the GSP loss across FTAs

Dependent variable: Trade Value

Notes: Standard errors clustered by country-pair combinations in parentheses. All regressions include pair, importer-year and exporter-year fixed effects.

+ p < 0.10, \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001

<sup>1</sup> The coefficients and standard errors of control variables GSP, PSA and RTA are qualitatively and quantitively similar to those in the baseline Table 1 and are not reported here for visual tractability.

Thus, the finding that most of the overall impact of preference removal that we found in the other models can be attributed to the relatively wealthier recipients. Apparently, they can make more use of the trade preferences, possibly because the exporters in these countries are more competitive in the first place and therefore can handle trade barriers such as tariffs and the associated costs like organizational hurdles better. On the contrary, poorer countries do not really benefit from Standard GSP because the benefits are not high enough to offset their structural economic deficits.

In Table 2 we split the countries that were removed due to FTAs into groups based on the type of agreement.<sup>27</sup> Exploring the heterogeneity across FTAs has

 $<sup>$^{27}</sup>Complete$  list of countries with the reason and year of removal, including various FTAs, is in Table A1

several rationales. First, before an FTA in place was considered a criterion to lose preferences, FTAs and GSP existed side by side for some exporters. These are the FTAs with countries in the Euro-Mediterranean Area (Euromed) and Mexico.<sup>28</sup> We will denote this group of countries as Preexisting FTA. These countries had an established FTA before the GSP reform and the GSP is thus redundant. Second group, denoted ACP EPA, includes African, Caribbean and Pacific region countries. These countries were reluctant to trade under reciprocal agreements but came to ratify Economic Partnership Agreement in order to maintain preferential access. Some of the countries signed EPAs already in 2008 however ratification and implementation were stalled until the GSP reform. It is noteworthy that EU provided provisional application to the countries even before the agreements were ratified. The proper implementation of bilateral agreements came after the unilateral preferences were pulled back. The situation where exporters benefit from GSP and provisionally from a new EPA at a time might cause an environment of non-transparency for exporters, deterring firms from engaging in trade. This can also lead to a large heterogeneity across countries in the extent of using the preferential market access. In column 2 of Table 2 we add a variable that interacts the loss of GSP dummy with the share of exports benefiting from EPA preferences 2 years before the announcement of the GSP loss. This way we can see how the effect of GSP withdrawal varies between countries that did or did not benefit from the EPA prior to withdrawal of GSP.

Finally, there is a group of countries who signed new reciprocal FTAs with the EU after the GSP reform, denoted New FTA. This group includes Central American countries, Colombia, Peru, Ukraine, Georgia. All FTAs in this group are deep and comprehensive, covering non-tariff issues as EU has been increasing the scope of the FTAs over time.<sup>29</sup> Given the existing evidence that deeper agreements have, on average, larger trade impact, we would expect this group to see the largest trade benefits.

Results in column 1 show that it is mainly the beneficiaries with a preexisting FTA that drive the increase in trade after the GSP access is removed. It appears that these countries successfully absorb the trade diverted away from countries that lost GSP benefits due to income but did not sign an FTA. Indeed, for countries with preexisting FTAs GSP access was redundant to more comprehensive FTAs. However GSP benefits of other countries were eroding the advantages of their FTAs. The reform thus benefits the countries with preexisting FTAs. In contrast, we do not find a consistent and significant positive impact for exporters with new FTAs and EPAs. The FTAs compensate the loss of GSP but do not appear to provide an additional trade boost. switching from unilateral prefer-

 $<sup>^{28}</sup>$ FTAs with these countries came into force latest by 2006 (in the case of Lebanon).

<sup>&</sup>lt;sup>29</sup>In fact, some of the older more basic FTAs, e.g., with the Euromed countries, are currently being renegotiated by the EU towards a more comprehensive one.

ences to a full-fledged FTA. This is the case also for the "deep" agreements that involve significant non-tariff measures, suggesting that significant heterogeneity remains even for the deep FTAs.

The impact of the FTA might depend on the preferences that the exporters received under the GSP. All ACP EPA and Peexisting FTA exporters benefited from Standard GSP. Incidentally, all exporters that signed a new FTA with EU were recipients of GSP+ in the sample period except for Ukraine.<sup>30</sup> So even if DCFTA were to provide trade benefits over GSP, they do not appear to provide consistent advantages over GSP+.

Table 3 presents some robustness tests of the baseline regressions. Column 1 analyses whether it is the announcement date of preference withdrawal that is decisive for the decrease in trade versus the date of entry into force. We introduce three new variables that are defined analogously to the first three except that they mark the 2 years when the removal was announced but has not yet become effective. There are only slight differences compared to the baseline regression in Table 1. Instead, the coefficients on announcement variables are smaller in magnitude and insignificant, indicating that exports are not affected by the notice of the trade regime change (neither a significant anticipation effect, nor significant diversion of trade from the announcement of withdrawal).

In column 2 we consider a shorter sample that ends in 2016. This is done for two reasons: first, in June 2016 United Kingdom voted in a referendum to leave the European Union. This decision could have had significant impact on the behavior of trading firms in anticipation of trade policy changes in the years after the vote. Second, a subsample until 2016 provides more symmetric timing before the announcement of the reform and the measures coming into force for the majority of affected exporters. The shorter sample period does not change the results for the income-related GSP removals but leads to an insignificant coefficient for the FTA removals. In column 3 we exclude the two years when the reform has already been adopted but no measure has yet come into force. The results are very similar to our baseline findings, so no reaction can be seen in the data in that period.<sup>31</sup>

Finally, in columns 4 and 5 we address the special cases of countries in the sample that were removed and reinstated in the same year. There are 8 countries that lost their GSP access in January 2014 following the 2012 reform due to a new FTA with the EU but were reinstated in October of the same year as their FTA arrangements were still not fully in force (e.g., because they were not ratified by one side). In the baseline regressions these cases are coded as benefiting from

 $<sup>^{30}</sup>$ Ukraine lost the GSP access only in 2018, the last year of the sample. Panama benefited from GSP+ only in the two last years before the loss of the GSP, however its exclusion does not affect the results.

 $<sup>^{31}</sup>$ We also ran regressions that exclude simultaneously the years 2012-2013 and 2017-2018 (available upon request), the results are similar.

#### Table 3: Robustness of the Impact of GSP loss

Dependent variable: Trade Value

Sample:	(1) Baseline	(2) Exclude '17,'18	(3) Exclude '12,'13	(4) Special cases	(5) No special cases
Removal × Income	-0.079** (0.026)	-0.070** (0.022)	$-0.082^{***}$ (0.025)	$-0.076^{**}$ (0.023)	$-0.075^{**}$ (0.023)
FTA	0.12+ (0.065)	$0.081 \\ (0.057)$	0.11 (0.066)	0.093+ (0.048)	$0.10^{*}$ (0.050)
OCT Announcemen Income	-0.39 (0.28) t of GSP > -0.0075 (0.019)	-0.25 (0.24)	-0.41 (0.28)	-0.30 (0.26)	-0.30 (0.26)
FTA	$0.055 \\ (0.071)$				
OCT	-0.20 (0.29)				
GSP	$0.086^{**}$ (0.032)	$0.12^{*}$ (0.049)	$0.11^{**}$ (0.034)	$0.087^{**}$ (0.032)	$0.086^{**}$ (0.032)
PSA	$0.12^{***}$ (0.033)	$0.10^{**}$ (0.035)	$0.15^{***}$ (0.032)	$0.12^{***}$ (0.033)	$0.12^{***}$ (0.033)
RTA	$\begin{array}{c} 0.13^{***} \\ (0.024) \end{array}$	$\begin{array}{c} 0.13^{***} \\ (0.031) \end{array}$	$0.16^{***}$ (0.027)	$\begin{array}{c} 0.13^{***} \\ (0.024) \end{array}$	$0.13^{***}$ (0.024)
	(0.0063)	(0.0083)	(0.0073)	(0.0063)	(0.0063)
Observations	252610	204110	199303	252610	242734

Notes: Standard errors clustered by country-pair combinations in parentheses.

All regressions include pair, importer-year and exporter-year fixed effects. +  $p<0.10,\,^*$   $p<0.05,\,^{**}$   $p<0.01,\,^{***}$  p<0.001

#### Table 4: Heterogeneity of the impact of GSP loss across OCTs

Dependent variable: Trade Value

Sample	(1) Baseline	(2) Baseline
Removal × Upper-middle or High Income	$-0.076^{**}$ (0.023)	
FTA	$0.10^{*}$ (0.050)	0.12+ (0.065)
EU OCT, X to administering state	-0.58 (0.36)	-0.68+ (0.38)
EU OCT, X to EU rest	-0.16 (0.29)	-0.23 (0.31)
Non-EU OCT	-0.41 (0.37)	-0.60 (0.42)
$Controls^1$	Yes	Yes
Observations	252610	252610

Notes: Standard errors clustered by country-pair combinations in parentheses.

All regressions include pair, importer-year and exporter-year fixed effects.

+ p < 0.10, \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001

<sup>1</sup> The coefficients and standard errors of control variables GSP, PSA and RTA are qualitatively and quantitively similar to those in the baseline Table 1 and are not reported here for visual tractability.

GSP in 2014. In the regression in column 4 these countries are coded as not benefiting from GSP in 2014.<sup>32</sup> Column 5 excludes all 8 special case countries from the sample. The coefficients in columns 4 and 5 are in line with the baseline findings.

In Table 4 we explore the result that, unlike income and FTA-related loss of preferences, removal of eligibility status of OCTs has an immediate impact after the announcement before the measure comes into force (see regression 1 in Table 1). In particular, we want to examine, whether this finding is an artefact driven by specific OCTs or groups of OCTs. For example, it could be the case that the OCTs governed by an EU member found a workaround to the reform that is organized through exports to the governing state within. We group export

<sup>&</sup>lt;sup>32</sup>Botswana and Namibia later lost GSP access from 2016 due to income criterion, and Cameroon and Fiji in 2017 due to a bilateral FTA arrangement. These removals are, of course, already controlled for in our baseline specification.

flows of OCTs into three categories: export of OCTs that are governed by a non-EU country (e.g., Australia, New Zealand, Norway and US); export of OCTs governed by an EU member to the governing state; export of OCTs to other EU members apart from the governing state. Column 1 is an analogue of column 1 of Table 1 and we see that the loss of preferences had no significant impact on exports of either category of OCT flows. Column 2, analogous to column 1 of Table 2, includes also announcement of the reform dummies. Contrary to the "workaround" scenario the exports of EU OCTs to governing states are significantly lower in the period after the announcement and after the measure comes into force than in the pre-reform years. No such effect is seen in exports to other EU members. Finally, the exports of non-EU OCTs halve after the eligibility loss is announced, two years before it comes into force.<sup>33</sup>

Thus, the impact of the reform on OCTs' exports realized right after the announcement, in contrast to the impact on income- and FTA-related withdrawals. This result is found across the OCTs rather than driven by specific exporters. We did not find in EU regulation documents any specific reason that could explain the discrepancy. The only explanation at hand is the qualitative distinction in status. While countries that lose GSP due to income or FTA remain potentially eligible (e.g., if income falls below threshold in the future), the OCTs lost their preferences permanently as they became ineligible. It is possible that the certainty in the trade policy change led to a more instant impact as the OCT exporters reoriented their trade away from the European Union.

## 5 Conclusion

Our goal was to assess if the latest reform of the EU GSP fits into the EU's strategy to further promote the creation of bilateral trade agreements. The tightened eligibility criteria and the resulting wave of removals have indeed led to declining exports from former beneficiaries to the EU, while new FTA partners were able to expand their exports. We find that income-induced removals reduce exports by more than 7% while those countries who go from GSP preferences to an FTA can increase their exports by, on average, 10%. However, there is a significant heterogeneity, and the significant effect is found only for the Central American Association Agreement, the only "deep" agreement. More shallow tariff liberalization agreements can provide trade gains over the MFN regime but no robust gains over and above GSP level. Thus, countries that already were or that are about to be excluded from the scheme might be inclined to negotiate a bilateral agreement.

<sup>&</sup>lt;sup>33</sup>In addition to the regressions in Table 4 we conducted exclude-one regressions as well as excluding random sets of countries, and the result that OCT export decline is apparent already after the reform announcement remains robust.

However, our results also stress the importance of comprehensive trade agreements. The positive effect of FTAs can to a large extent be attributed to the Central Association Agreement, which features significant non-tariff measures.

Being downgraded from GSP+ or EBA to Standard GSP hurts more than losing Standard GSP beneficiary status, likely due to the extensive use of zero tariffs anchored in these arrangements. Standard GSP seems to offer only few benefits, so that the reward of either fulfilling additional criteria and applying for GSP+ or forming an individual agreement with the EU is set at a potentially high level.

These results overall confirm that the tightened eligibility criteria and the following removal of many emerging countries can indeed have improved the bargaining position of the EU for negotiations. Several bilateral agreements have been forged after the reform and more are currently negotiated.<sup>34</sup> The results also give a hint that deep trade agreements that go beyond just reducing tariff rates are more appropriate to foster growth in developing countries. Only offering discounted tariff rates may not be sufficient to really boost exports in poorer countries. Instead, this can rather be achieved by completely dropping tariffs through GSP+ or EBA or through bilateral agreements.

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<sup>&</sup>lt;sup>34</sup>European Commission (2021a,b)

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## Appendix

Table A1: List of countries that lost benefits by category<sup>35</sup>

Income

Upper-middle income:	Argentina (2014), Azerbaijan (2014), Brazil (2014), Cuba (2014), Gabon (2014), Iran (2014), Kazakhstan (2014), Libya (2014), Malaysia (2014), Palau (2014), Russian Federation (2014), Uruguay (2014), Venezuela (2014), China (2015), Ecuador (2015), Thailand (2015), Maldives (2015), Botswana (2016), Namibia (2016), Turkmenistan (2016), Iraq (2017), Marshall Islands (2017) <sup>36</sup> , <sup>37</sup>
High Income:	Bahrain, Brunei Darussalam, Kuwait, Macao SAR, Oman, Qatar, Saudi Arabia, United Arab Emirates (all 2014)
FTA	
Preexisting FTAs:	Euromed (all 2014): Algeria, Egypt, Jordan, Lebanon, Morocco, Tunisia; Mexico (2014)
ACP EPAs	
Caribbean:	Antigua and Barbuda, Bahamas, Barbados, Belize, Dominica, Dominican Republic, Grenada, Guyana, Jamaica, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, (all 2014)Trinidad and Tobago
Africa and Pacific	Cameroon (2017), Seychelles (2014), Mauritius (2014), Zimbabwe (2014), Papua New Guinea (2014), Fiji (2017), South Africa $(2014)^{38}$
New FTAs	
Central America	Costa Rica, Guatemala, El Salvador, Honduras, Nicaragua, Panama (all 2016)
Colombia-Peru	Colombia, Peru (both 2016)
Other:	Ukraine (2018), Georgia (2017, also UM income)
OCT :	American Samoa, Anguilla, Antarctica, Aruba, Bermuda, Bonaire, British Indi-an Ocean Territory, Bouvet Island, Cayman Islands, Christmas Island, Cocos Islands, Curação, Falkland Islands, French Polynesia, French Southern Territories, Gibraltar, Greenland, Guam, Herd Islands and McDonald Islands, Mayotte, Montserrat, New Caledonia, Norfolk Island, Northern Mariana Islands, Pitcairn, Saint Helena, Sint Maarten, South Georgia and South Sandwich Islands, St Pierre and Miquelon, Tokelau, Turks and Caicos Islands, US Minor Outlying Islands, Virgin Islands (British), Virgin Islands (U.S.), Wallis and Futuna (all 2014)

<sup>35</sup>The year in brackets corresponds to the removal year of beneficiary or eligibility status. <sup>36</sup>Belarus is excluded from this group as it had the GSP access suspended from 2007 onwards

due to labor rights violations and was not a beneficiary throughout our sample.

<sup>&</sup>lt;sup>37</sup>Georgia (2017 FTA), Fiji (2017 FTA) are not included in this group as in the year when they would lose preferences due to upper-middle income they received preferential access through an FTA.

<sup>&</sup>lt;sup>38</sup>Côte d'Ivoire, Kenya, Namibia, Botswana, Eswatini (Swaziland), Ghana were scheduled to lose preferences in 2014 due to an FTA however kept their preferences as the FTA was not in force by 2014. Within our sample period Namibia and Botswana lost preferences in 2016 due to upper-middle income status.