# CERTIFICATES AND RULES OF ORIGIN: THE EXPERIENCE OF UK FIRMS Online Appendix

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Literature review of Rules of Origin costs and preference utilisation

# Literature review: Introduction

The costs and benefits of different methods of certifying origin have not been widely studied by economists but there is a lively literature that is concerned with measuring the impact of Rule of Origins (RoOs) on trade flows. There are two main questions that have interested economists. Firstly, there has been an effort to understand the size of the non-tariff barrier that is created by a Rule of Origin. And secondly there has been a related attempt to explain large differences between countries and between products, and of the degree to which firms actually use preferential rates when they are included in FTAs.

This section summarises the academic literature on the costs of RoOs and the determinants of 'preference utilisation rates' (PURs) — the share of trade that uses preferences.

PURs vary widely for FTAs, partners, industries and products (Yi, 2015) as not all exporters claim preferences. Identifying and then complying with the appropriate RoO can be costly for firms — so much so that firms may prefer not to claim preference and instead pay the Most Favoured Nation (MFN) tariff instead.

The total cost of compliance can be broken down into variable and fixed components. Variable components, varying with shipment size, reflect costs such as switching to less efficient FTA area suppliers or changing processes in order to meet origin rules. Fixed costs include administrative costs such as obtaining COs or managing supplier declarations. The literature identifies preference margins, RoO restrictiveness and import values as key determinants of PURs although is far from settled on estimates of the costs, which in general range from less than 3% to as much as 8% of shipment values.

# Utilisation and preference margins

Utilisation rates can vary widely by FTA. Studies summarised in Yi (2015) of the ASEAN free trade agreement (AFTA) found some utilisation rates as low as 5%, early 2010s studies of Korea-Australia (KAFTA) found a PUR of 49.9%, Thailand-Australia (TAFTA) got to 60% and the non-reciprocal preference regimes<sup>1</sup> of the EU and US were found to have a PUR of 89%.

There are few figures in the public domain for UK firms' PURs. One exception is an EU calculation that UK firms exporting under the EU-Korea FTA only had a PUR of 62% in 2015.

<sup>&</sup>lt;sup>1</sup> Under WTO rules, developed countries can offer preferences to developing countries that do not need to be reciprocated.

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# Determinants of utilisation

The most obvious driver of PUR is the preference margin (the difference between the FTA partner tariff and the MFN tariff) as this is the raw benefit for a firm of using the available preferences.

However, PURs are not always strongly correlated with margins. Cadot (2006) shows, for instance, that restrictive Rules of Origin can be a substitute for tariffs – industries with a high level of pre-FTA protection (and so higher post-FTA preference margins) receive tougher post-FTA Rules of Origin, breaking the link between margin and utilisation. Keck and Lendle (2012) note this behaviour in some categories of Bangladeshi garment exports to the US, where utilisation rates are low despite a high preference margin.

It is also common for PUR to be very high – at or near 100% - despite very low preference margins. Swiss watch exports to the EU for instance enjoy a preference margin of less than 1% but near-perfect utilisation rates (Keck and Lendle).

Illustrating the impact that ROO can have on export volumes, De Melo and Portugal-Perez (2012) uses a quasi-natural experiment in African textile exports to the US and Europe in the early 2000s – the relaxation of US RoO without a change in preference margin alongside an unchanged EU regime that granted the same preference margin. The impact of the US change led to export growth of African textile exports of 212% to the US.

Quantitative analysis of the importance of fixed costs in driving PURs is hampered by a lack of transaction-level data detailing shipment sizes. A rare example of a study using such data, Hawakaya et al. (2014), finds however that the 'scale effect' — the average export volume — makes a contribution to PUR of more than 10 times that of margin and restrictiveness effects, as described earlier, putting a disproportionate burden of RoO on small and medium-sized enterprises (SMEs) that have relatively low value shipments.

# Costs of utilisation

A 'revealed preference' approach can be used to infer a range of costs of compliance with rules of origin — a mixture of the fixed and variable costs described above —as a proportion of the value of the shipment.

For products with preference utilisation rates at or close to 100%, the costs of compliance are 'revealed' to be lower than the preferential margin — otherwise exporters would prefer not to comply and simply pay the MFN tariff. This is an upper bound for cost of compliance. Likewise, for products which do not enter using preferential tariffs, the margin is a lower bound for the cost of compliance. Cadot et al. (2006) estimates compliance costs at 6.8% for NAFTA and 8% for PAN-EURO, and by considering only products with the least restrictive ROO, estimates the administrative costs to be about 1.9% for NAFTA and 6.8% for PAN-EURO.

Other studies take a threshold regression approach to a 'gravity equation', a common method of analysing trade flows. Hayakawa (2011) finds that costs of compliance are lower using this approach, around 3% on average.

In one of the most complete studies, Keck & Lendle (2012) create 'pseudo' transaction level data to assess when available preferences are used and find that the costs are overwhelmingly fixed rather than being a share of trade value. The paper's estimates of the per-transaction fixed (administrative) costs are from as low as \$14 up to \$1500.



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The academic literature<sup>2</sup> points to several determinants of firms' use of preferences, notably preference margins, RoO restrictiveness and shipment size. There is evidence that the latter is quantitatively more important than the other two, making RoO costlier for smaller firms.

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<sup>&</sup>lt;sup>2</sup> Not discussed here are other contributions not directly relevant to future UK-EU trade. Estevadeordal (2000) creates indices for the restrictiveness of a RoO, and several papers attempt such as Cadot et al. (2006) to relate these measures to political economy factors, interpreting RoO as barriers to trade that often substitute for tariffs. Brenton and Imagawa (2005) considers the (labour) cost to customs authorities of checking COs and compliance. Izam (2003) discusses the question of the issuing authorities for CO, and the sanctions that are used to enforce compliance under various FTAs. Harris and Staples (2009) explores reducing the trade barrier effects of RoOs through trade facilitation. Manchin and Pelksman-Balaoing (2007) navigate the 'maze' of East Asian trade agreements and uncoordinated RoOs, and find that in the ASEAN context, administrative costs of claiming preferences could be hindering trade at preference margins at as high as 25%. There are also a number of surveys of the impact of RoO on trade. Among firm surveys have been a global survey (Thomson Reuters and KPMG International, 2016) and Asia-focused studies including Wignaraja et al. (2010), Kawai and Wignaraja (2010) and (2011), Ratananarumitsorn et al. (2008).



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