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Book

Rules of origin: can the noodle bowl of trade agreements be untangled?

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Productivity Commission

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The Productivity Commission

The Productivity Commission is the Australian Government's independent research and advisory body on a range of economic, social and environmental issues affecting the welfare of Australians. Its role, expressed most simply, is to help governments make better policies, in the long term interest of the Australian community.

The Commission's independence is underpinned by an Act of Parliament. Its processes and outputs are open to public scrutiny and are driven by concern for the wellbeing of the community as a whole.

Further information on the Productivity Commission can be obtained from the Commission's website (www.pc.gov.au).

Contents

Abbreviations

AANZFTA	ASEAN-Australia-New Zealand Free Trade Agreement
ACIFTA	Australia-Chile Free Trade Agreement
ANZCERTA	Australia-New Zealand Closer Economic Relation Trade Agreement
APEC	The Asia-Pacific Economic Community (Australia, Brunei Darussalam, Canada, Chile, People's Republic of China, Hong Kong, Indonesia, Japan, Republic of Korea, Malaysia, Mexico, New Zealand Papua New Guinea, Peru, the Philippines, the Russian Federation Singapore, Chinese Taipei, Thailand, United States of America, Vietnam).
ASEAN	Association of South East Asian Nations (Brunei-Darussalam, Cambodia, Indonesia, Laos, Malaysia, the Philippines, Singapore, Thailand, Vietnam)
AUSFTA	Australia-United State Free Trade Agreement
ChAFTA	China-Australia Free Trade Agreement
CoO	Certificate of Origin
CTC	Change of tariff classification
DFAT	Department of Foreign Affairs and Trade
HS	Harmonized System
ITA	Information Technology Agreement
JAEPA	Japan-Australia Economic Partnership Agreement
MAFTA	Malaysia-Australia Free Trade Agreement
MFN	Most Favoured Nation
NAFTA	North American Free Trade Agreement
PTA	Preferential Trade Agreement

RCEP	Regional Comprehensive Economic Partnership (proposed between ASEAN, Australia, China, India, Japan, South Korea and New Zealand).
RoO	Rules of Origin
RVC	Regional Value Content
SAFTA	Singapore-Australia Free Trade Agreement
TAFTA	Thailand-Australia Free Trade Agreement
TPP	Trans-Pacific Partnership Agreement (agreed between Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, the United States (until 23 January 2017) and Vietnam.
WCO	World Customs Organization
WTO	World Trade Organization


RULES OF ORIGIN
MAKE ACCESSING THE BENEFITS
OF TRADE AGREEMENTS ABOUT
AS EASY AS EATING A BOWL
OF NOODLES WITH ONLY
ONE CHOPSTICK
RULES OF ORIGIN
CHINA
JAPAN
USA
THAILAND
ASEAN
AUSTRALIA
NEW ZEALAND
CHILE
MALAYSIA
KOREA
TRADE AGREEMENTS

Key points

- Rules of Origin (RoO) have become a pernicious barrier to trade for Australian business. Their inherent protectionism is little known — well disguised in their daunting yet mind numbingly dull complexity.
- RoO are transformation tests (often requiring a local value added threshold be met) to earn tariff and quota preferences under preferential trade agreements (PTAs). They are a non-tariff barrier.
  - The more stringent the transformation test, the greater protection afforded and higher the import prices for consumers.
- Australia's PTAs contain RoO that can differ widely between agreements, creating a messy 'noodle bowl' that is hard for many Australian exporters and importers to navigate and raises the cost for those that do.
- RoO are insidious as they afford an impression of trade concessions, but instead their complexity and restrictiveness substantively erode the purported positive trade impacts of the PTA.
  - One study estimated that RoO (across 149 countries) reduced the trade creation effects of PTAs by around two thirds.
- The costs of RoO (which also include business uncertainty and trade concession erosion) will only worsen in a world of fragmented global value add chains and PTA proliferation.
- There is also evidence that the application of RoO by Customs is a growing 'at the border' barrier in some Asian countries.
- RoO reform is needed. The most effective remediation is unilateral (MFN) tariff liberalisation. This would make importing simpler and less costly, and assist Australian exporters through lower input costs.
  - There is no case against unilateral action as the negotiating coin argument has been comprehensively debunked. Moreover, holding out for reciprocity would erode the wellbeing of Australians and deny the dynamic benefits of open markets.
- PTAs will not deliver on their 'advertised' trade benefits if future regional agreements do not reduce RoO stringency and work toward removing them altogether – untangling the 'noodle bowl' thus far created. Removing RoO that limit broader liberalisation may allow PTAs to become stepping stones for multilateral trade liberalisation, rather than the stumbling blocks they are today.

Rules of Origin

Rules of origin have long been ignored for two good reasons: they are dauntingly complex and at first sight appear mind-numbingly dull. The third standard reason for ignoring them — the assertion that they do not matter much — turns out to be wrong …. rules of origin are important barriers to trade. Moreover, such rules are emerging as an important trade issue for three additional reasons. First, preferential trade deals are proliferating worldwide. Second, the global fragmentation of production implies complex international supply chains which are particularly constrained and distorted by rules of origin. Third, the extent to which regionalism challenges the WTO-based trading system depends in part on incompatibilities and rigidities built into rules of origin. (Augier et al 2005)

1 Why look at Rules of Origin?

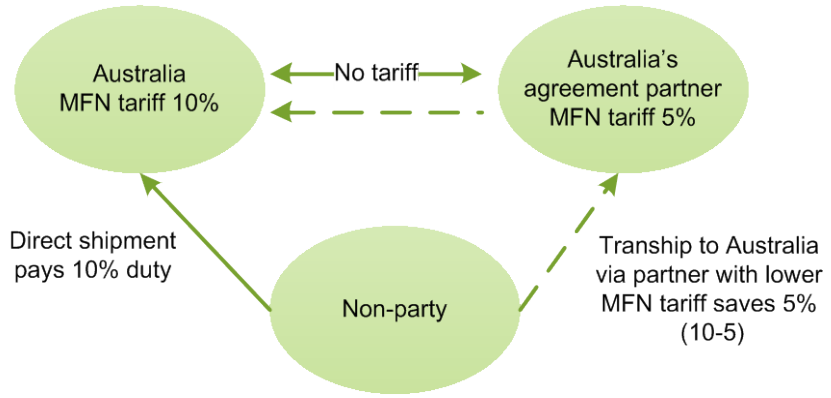
Rules of Origin (RoO) are intended to stop exporters in countries, other than partners to a preferential trade agreement (PTA)[1], availing themselves of the preferences negotiated in the agreement. Goods partly manufactured in a partner country (using inputs from non-partner countries) are only eligible for preferential tariff treatment if the local manufacturing has sufficiently transformed the non-partner inputs. The RoO in the agreement sets out the criteria for what constitutes sufficient transformation.

While the historical reason for prescribing substantial production transformation tests was to prevent firms in countries outside the agreement taking advantage of the agreement by transhipment (figure 1), they involve a lot of complexity and additional cost. They also distort firm behaviour, which gets compounded with multiple agreements. Moreover, the rationale for 'strong' transformation rules, in order to dissuade (re-package and run) transhipment, has lost currency for Australia, given the low rates of tariffs and higher share of trade now covered by PTAs.

With the stalling of the Doha Round of multilateral trade negotiations, Australia, like many other countries, has expanded its bilateral and regional agreement making. Some have argued that multiple PTAs act as stepping stones towards the objective of multilateral trade liberalisation (Griswold 2003). But others view PTAs more as stumbling blocks (Baghwati 2008). The operation of RoO is fundamental to whether the growing portfolio of PTAs help or hinder the liberalisation of trade.

[1] Although many PTAs are labelled Free Trade Agreements, they rarely reduce barriers to trade between the partner countries sufficiently to warrant this title — they are typically full of exclusions and restrictions to 'free trade'.

Figure 1 **RoO aim to prevent non-agreement parties taking advantage of preferential tariffs**



This paper seeks to answer the following questions:

- How much are RoO being used for trade creation or protectionist purposes (section 1)?
- Are RoO getting in the way of the expansion of PTAs working for overall trade liberalisation (section 2)?
- Does the cost of compliance undermine the value of PTAs for importers and exporters (section 3)?

The final section discusses some options for reform to better achieve the intent of PTAs as stepping stones to a more liberalised multilateral trading system (section 4).

2 How protectionist are RoO?

Discriminatory tariff preferences in each trade agreement have both trade creating and trade diverting tendencies. The RoO in each agreement affects just how much trade is restricted. Both the nature of the transformation test (box 1) and the level of stringency affect the extent of protection provided by RoO.

In a PTA the transformation tests can be varied by product and it is generally agreed that no one test is best. The WTO concluded that there is no fully satisfactory methodology for origin determination, applicable to all products and serving all purposes (WTO 2002). This gives considerable scope for the RoO to be designed with protection for import competing industries (and regional input suppliers).

With RoO, the devil is in the details. More stringent RoO reduce the scope for transhipment, but they also can act as protection for import competing firms from competition from the exporters in the PTA partner country. That is, they can restrict the very trade that the PTA was aiming to boost.

Box 1 **There are three types of transformation test**

- The regional value content (RVC) test — the exported good must reach a threshold percentage value of locally or regionally produced inputs. For instance, a family car imported into Australia from the USA is eligible for tariff reduction under the AUSFTA if at least 50 per cent of the production cost was on USA and Australian inputs. The costing methodologies for RVCs are detailed and there is no single global accounting method.
- The change in tariff classification (CTC) test — the exported good must have a different tariff classification from any imported inputs. The CTC method can be applied at 'broad' more restrictive (2 digit or chapter) or more 'fine' less restrictive (HS 4 digit or heading or HS 6 digit sub-heading) product groupings of the Harmonized Commodity Description and Coding System (HS). For instance, transforming non-originating cotton (within chapter 52) into clothing (within chapter 61) involves more significant transformation than the 4 digit change of turning uncarded cotton (52.01) into carded cotton (52.02).
- The specified process test — the exported good must have undergone specified manufacturing or processing operations which are deemed to confer origin of the country in which they were carried out. Required processes such as chemical reaction, purification, blend, change in particle size, isomer separation and distillation are technically prescribed. For example, dissolving solution in water or other solvents is not considered a chemical reaction and purification must result in the elimination of not less than 80 per cent of the impurities.

There are also two rules that can potentially reduce the stringency of RoO, although rarely their complexity:

- de minimis — exempts a certain minimal part of non-originating goods from having to satisfy a CTC test. For instance, AUSFTA allows up to 10 per cent of the free on board value of the final good for all non-originating materials. The ASEAN, EU and proposed TPP all use 10 per cent, and NAFTA 7 per cent, but are not all directly comparable as there are differences in the calculation basis (such as free on board, ex-works, total cost, and final price).
- Cumulation — extends the definition of originating inputs to include other countries. For example, under the ANZCERTA an Australian exporter to New Zealand can count inputs from New Zealand as 'originating'. RoO today routinely allow for this bilateral accumulation. A more liberal arrangement is diagonal cumulation. This allows an Australian exporter to New Zealand to count Chilean inputs because both Australian and New Zealand had agreements with Chile. Full cumulation occurs when a group of countries are all linked to each other by a network of agreements and the cumulation area is the whole area covered by the countries in two or more separate PTAs.

RoO stringency rises with:

- a higher share of local value added required under the RVC test as this requires more of the total cost to be spent on locally (and with bilateral cumulation rules, partner) sourced inputs
- the lower the level of product classification transformation — 2-digit is more restrictive than 6-digit — as a much greater transformation is usually required to change a product into a completely different product category
- the greater the technical change specified.

Most RoO are set above the least stringent transformation level (CTC 6) and/or require a substantial partner country value add (RVC).

Some industries benefit from more stringent RoO

Given the divergent economic interests — of consumers, exporters of final goods, import competing domestic producers, exporters of inputs used by the trade partner, and importers of inputs — it would be surprising if there was a unanimous view about what RoO, if any, are desirable (table 1).

Table 1 **The political interests in setting RoO**

Stakeholder	*Desire*	*Attitude to RoO*	*Transhipment considerations*
Consumer	Lowest cost source	None or liberal as possible	Not concerned about transhipment
Importer of inputs	Lowest cost source	None or liberal as possible	Not concerned about transhipment
Import competing producer in a partner country	Minimise competition	Stringent RoO	Avoid transhipment from low-cost non-Partner. Avoid competition from partner exports
Existing exporter to partner pre-agreement	Increase exports to partner via lowering price (claiming preference).	None or liberal	Concern if they use imported inputs in their production
New exporter to partner under agreement preferences • divert trade away from existing third-party suppliers • 'pure' new trade creation	Wants to 'undercut' existing third party suppliers to partner. Wants to create new (non-diverted) sales, including as inputs into partner production for re-export to Australia	Indeterminant. If exporting inputs to partner for re-export to Australia (which is only competitive under the agreement preferences) then want partner to face RoO that they can satisfy	If the RoO are too liberal, existing third party suppliers may transhipment. If the RoO are too restrictive the potential new exporter may not be able to satisfy the transformation test.

Indeed, determining how RoO apply is inherently a political process.

> Rules of origin, because they affect who gets what, when and how, are intrinsically political. They can exhibit, in accentuated form, the political imbalance that can tilt overall trade policy toward restrictiveness and against the maximization of national welfare. (Destler 2003 p. 1)

A common view is that RoO (primarily) reflect import competing interests, especially in sensitive sectors.

> Some critics of rules of origin tests used in FTAs allege that because ROO are negotiated product by product and industry by industry, there is "enormous scope for well-organized

industries to essentially insulate themselves from the effects of the FTA by devising suitable ROO", thus diminishing its trade liberalizing effects overall. (Jones 2015, p. 10)

Studies find evidence of stricter RoO for products with high tariffs (sensitive sectors) under NAFTA (Cadot et. al. 2002) and ASEAN agreements (Cadot and Ing 2014). In these industries goods are often traded under the higher MFN rate instead of the lower preference rate. Numerous studies, covering a range of methodologies and scenarios indicate significant trade restricting effects of RoO, with all aspects of RoO having been found to restrict trade (box 2).

Box 2 **RoO have been found to restrict trade**

- In a study of 149 countries for 1999–2001 Anson et. al. (2005) estimated that RoO reduced the trade creation effects of PTAs by around two-thirds. The study also found that the cost of meeting the NAFTA RoO are equivalent to almost one-half of the available tariff preferences. They disentangle this overall cost into the transformation (higher input cost sourcing) effect (about 60 per cent) and the administrative cost of compliance (about 40 per cent).
- Augier et. al. (2004) study the trade effect of the EU relaxing the cumulation rules, which moved to diagonal cumulation in 1997. They estimate that more restrictive cumulation before reform reduced trade by between 10 and 70 per cent.
- Cadot et. al. (2006) tested the effect of value-content rules on the utilisation of EU developing country preferences. They found that utilisation is lower the higher the minimum value content. Hakobyan (2010) finds a similar result for US developing country trade preferences over 2007–2008 covering about 5000 products.
- Cadot and Ing (2014) estimate that ASEAN RoO (across several agreements) impose an average tariff cost equivalent of 3.4 per cent (about one-quarter of the average preference available), with higher costs for products with more restrictive tests (on paper).
- Inama (2015) reports that liberalisation of the RoO for developing countries for textiles and clothing (by Canada in 2003 and the EU in 2011) increased preference usage 'immediately' to 100 per cent, from pre-reform rates of around 20 and 40 per cent respectively.

Source: As referenced.

While RoO transformation rules are used to restrict trade, other features of PTAs can also undermine the announced tariff reductions (or quota expansion). In particular, the length of time over which tariff reductions are phased in can be considerable, and can vary at quite fine classification levels, again demonstrating the tailoring of protection (box 3). There are often other elements of PTAs, such as standards, that can facilitate or act as a barrier to trade.

Box 3 The phase in of tariff reductions reflect industry sensitivities at the time of negotiation

Industry sensitivities can be apparent in how quickly preferences are phased in under agreements. The Australia-US agreement (AUSFTA) phases in the agreed tariff schedule on quota constrained product (such as beef, dairy, peanuts, cotton, tin products and rubber) over 18 years. Some start in year one, some are frozen for the first six years and others are frozen for the first eight years, reflecting the interest of domestic producers. Some products, such as condensed milk, offer no tariff preference, and only an 18 year gradual quota increase. The tailored tariff reductions even occur within similar product categories. For instance, among footwear products, both HS6404.19.20 and HS 6404.11.70 have the same base (starting tariff of 37.5 per cent), yet the phasing is 10 years for the former and immediately to zero for the latter. Australia's longest phasing under AUSFTA is ten years.

The tariff reductions to zero by China under its agreement with Australia consist of nine different time paths, from immediate to fifteen years. Australia's tariff reductions consist of three different time paths (immediate, three years and five years). However, Australia's tariff phasing is not always faster than the Chinese. For example, the 'iron and steel' product (HS 7210.49) is subject to a CTC(4) RoO for trade in either direction, but imports into Australia face a slower tariff phasing than imports into China (table 2). This likely reflects greater Australian steel industry concerns, than that of the Chinese industry for these products. The converse also arises where Australia's phasing is quicker than China's within the iron and steel product range (product HS7208.36).

Table 2 Comparison of tariff reduction schedules in CHAFTA

Steel products

	RoO	*Australia tariff reduction*	*China tariff reduction*
Flat–rolled products of iron or non-alloy steel, width 600mm or more, plated or coated with aluminium, other (HS 7210.49)	CTC(4)	Australia slower	China faster
		From 5 per cent pre-agreement and decreasing one percentage point per year to zero from 1 January 2019	From 4 per cent pre-agreement and decreasing to zero upon implementation on 20 December 2015
Flat–rolled products of iron or non-alloy steel, width 600mm or more, hot rolled, not clad, plated or coated, other, in coils, not further work, thickness exceeding 10mm (HS 7208.36)	CTC(4)	Australia faster	China slower[a]
		From 5 per cent pre-agreement to zero upon implementation on 20 December 2015	From 6 per cent pre-agreement then phased 4.8, 3.6, 2.4, 1.2 and zero on 1 January 2019

a China has a 'slow' phase for many steel products (chapter 72) even though Australia exports very little to China.

Source: China-Australia Free Trade Agreement, chapter 2, Annex I (Schedules of Tariff Reduction Commitments of Australia and China) and chapter 3, Annex II Product Specific Rules of Origin).

How do negotiators decide on what to bargain for and with?

Given the approach to trade negotiations, the decision process about what to offer and what to request is not at all transparent (PC 2010). Greater access for Australian agricultural exports is clearly an objective, as agriculture remains the most protected sector in most countries, but the rest is a black box. Influence by strong industry players is highly likely to be part of the equation. For example, the US automobile sector clearly exerted considerable influence during negotiations on the NAFTA.

> All three [U.S.] automakers had an interest in a reasonably high rule of origin to make it more difficult for European and Japanese competitors to locate assembly plants in Canada or Mexico and thereby ship finished automobiles to the United States duty-free. But GM differed from Chrysler …. Because of [its] joint venture with Isuzu in Canada, GM favoured a lower rule of origin, around 60 per cent [regional content requirement]. For reasons that reflect their own patterns of production and competitive position, Ford and Chrysler preferred a higher rule, approximately 70 per cent. (Jones 2015, p. 10)

The problem with lack of transparency is that firms and industries whose interests are not paramount, may find themselves facing RoO that are not in their interests with little opportunity to present their case. A *prima facie* case can be mounted that it is the interests of large, more influential, firms that will be best defended in the negotiation process.

A second problem with the RoO in PTAs is that they will reflect the interests at the time the agreement was negotiated. RoO rarely change after being negotiated, at least not until after many years of operation. They are set at a point in time (in light of current trade patterns and domestic interests) and do not recognise future changes in competitiveness/comparative advantage. Where changes have been made after a period of experience, such as the Australian-New Zealand RoO and the revised 2016 Australia-Singapore RoO (yet to take effect), they appear not to have been significantly liberalising.

So how do government negotiators determine what to offer and accept given the myriad of inherent and conflicting RoO preferences?

There does not appear to be any official Australian statements explaining how the different inherent preferences are taken into consideration. It is impossible for an 'outsider' to reverse engineer from economic efficiency first principles (or transhipment possibility patterns) the existing structure of RoO within and across agreements. You had to be there — only those involved in the negotiations can say what considerations and trade-offs were made and why. While low Australian tariff rates mean that the rate of preference offered under a PTA is small for most imports,[2] the absolute saving in duty can be worthwhile where the value of the shipment is large. So import competing industries can still have reason for pursuing more stringent RoO to be imposed on Australian PTA partner exports

[2] Around half of all products have a Most Favoured Nation (MFN) tariff of zero. The MFN tariff rate applies to imports from countries other than parties to a PTA. Australian MFN rates have been 5 per cent or below since 1996 except imported textiles, footwear, clothing and automobiles, for which tariffs were variously lowered from 15 per cent in 2005, to 10 per cent in 2010 and 5 per cent since 2015.

(and Australian imports). Discussions with DFAT suggest that in most cases Australian firms do not exert pressure to set stringent RoO for imports into Australia. Rather input suppliers in partner countries may want more stringent RoO to protect their role as a local content supplier to their country's exporters.[3] A high value added requirement in the TPP would, for example, potentially have reduced the involvement of China in the value chain for products traded under the TPP. As Australia is not a major supplier of intermediate goods into global value chains it has nothing to gain from such exclusions.

The gains from access to preferences for Australian exporters can be considerable where partner countries have high MFN tariffs and/or quotas – especially for agriculture. But consumers in the partner country also benefit by accessing lower cost Australian products. So the need to agree to stringent RoO in order to access such mutually beneficial trade preferences is doubtful. Moreover, as RoO restrictions are symmetric by convention — a product faces the same RoO whatever direction is the trade between partners — RoO designed to protect a partner's import competing industries may well hamper the future development of Australian industries. For example, an Australian food processor may want to be able to import product from another country to keep plant fully utilised in the off season for Australian sources, yet may not be able to access preferences to export their products because of RoO originally designed to protect the food processing industry in the partner country.

Use of the preferences in Australian PTAs

Data on the extent to which available preferences are used can shed some light on the stringency and complexity of the RoO facing our importers (and partner country exporters) and our exporters in partner country markets.

Imports into Australia

In 2015-16, 66 per cent of imports into Australia came from countries with which Australia has a reciprocal preference agreement (table 3). About one third of these imports were of goods that had a zero-MFN tariff and a further 12 per cent came in under tariff concessions separate from a PTA (such as Developing Country preferences, Tariff Concessions Orders, TRADEX and the Enhanced Project By-Law Scheme). The proportion of imports coming in under a trade agreement preference was 26 per cent. The remaining 29 per cent of imports paid the full MFN rate even though a preference was available under the agreement. One reason why firms fail to use the preference would be that the imports did not qualify due to the stringency of the RoO. A second reason would be because the partner country exporter or Australian importer decided that the preference on offer was not worth the costs of compliance. A third explanation is that the exporter or importer was not aware of the preference.

3 They want to uphold strong local content rules (which they can meet) in order to maintain their role in global value chains.

Table 3 **Imports into Australia, 2015-16**

By type of tariff entry

	Total imports	*MFN zero*	*Other concession*	*Claimed the tariff concession under a trade agreement* [a]	*MFN >zero*	*Total*
	% of value	% of value	% of value	% of value	% of value	% of value
From trade agreement partners	66	32	12	26	29 [b]	100
From Rest of the World	33	45	6	Not applicable	49	100
	100					

[a] Some concessions still involve some tariff duty, where the preference rate has yet to be reduced to zero. [b] This is biased up because it includes some trade that was not eligible under the agreements. However, the bias should be small because PTAs are required to cover 'substantially all trade' to be WTO compliant.

Source: Commission estimates based on ABS (2016).

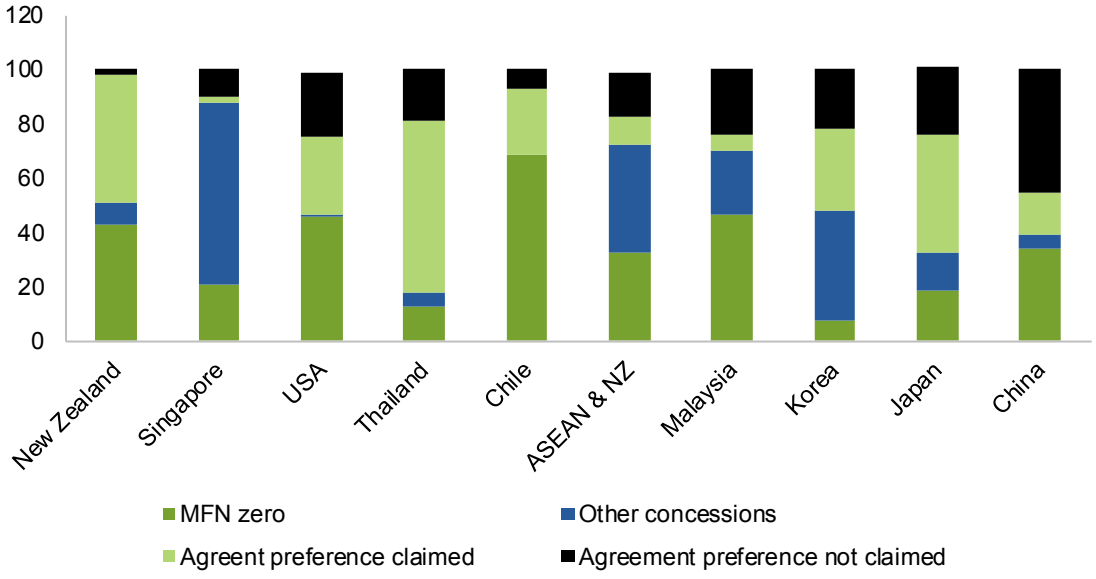
The pattern of liberalised trade and preference usage differs widely among Australia's agreements (figure 2). At the country level, imports from New Zealand had the highest proportion of duty free or concessional entry (98 per cent), while China had the lowest (55 per cent).

The *relative* contribution of zero MFN tariffs, other concessions and trade preferences to overall liberalised trade varies across agreements. Chile enjoys most (74 per cent) of its liberalised trade with Australia in the form of zero-MFN tariffs. Singapore enjoys most (74 per cent) of its liberalised trade in the form of non-agreement preferences. Thailand enjoys most (78 per cent) of its liberalised trade in the form of agreement preferences. Overall, more imports (44 per cent) from trade agreement partners came into Australia in 2015-16 via zero MFN and non-agreement preferences than the PTA preferences (26 per cent). Pomfret et. al. (2009) studied Australian import patterns before and after trade agreements over 2000–2009 and found little evidence of expanded use of concessions (either trade agreement preferences or other concessions) relative to zero-MFN imports.

RoO are likely to be acting as a constraint on trade where imports come in at the full MFN tariff rather than the trade agreement preference. The relatively low share of preference use on imports from Singapore, Malaysia, China and AANZFTA (figure 3) suggests that either the RoO was too restrictive, the compliance cost of the RoO exceeded the potential benefit of the preference, or importers (and these countries exporters) were unaware of the preference.

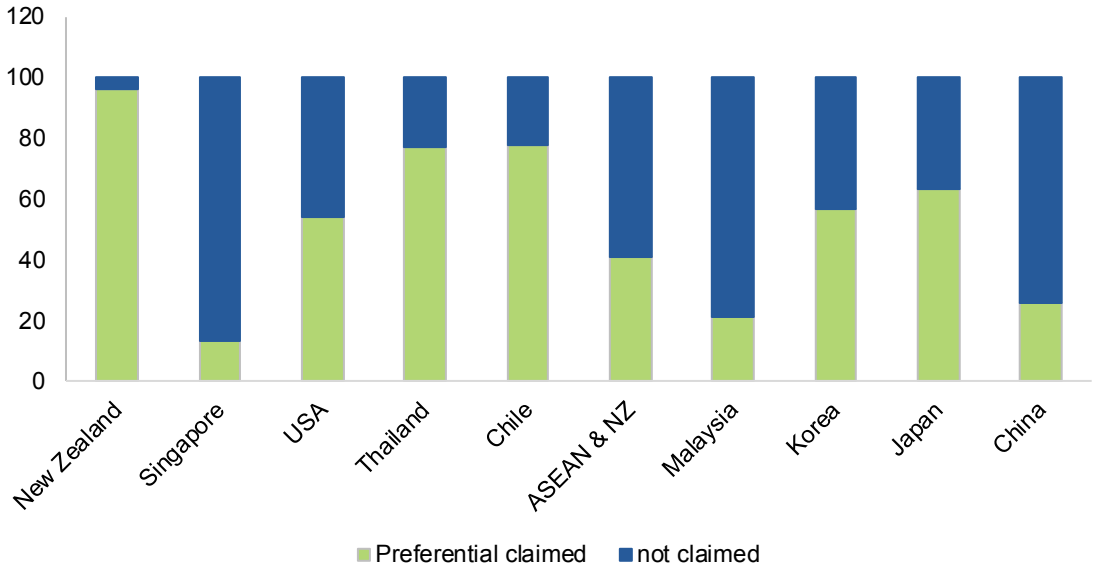
Figure 2 **Imports into Australia, 2015-16**

By type of tariff entry and trade agreement



Source: Commission estimates based on ABS (2016).

Figure 3 **Share of eligible imports where preference was claimed, 2015-16**



Source: Commission estimates based on ABS (2016).

Given the compliance costs of meeting RoO, the size of the shipment also matters, and import preference utilisation has been found to increase with the size of the shipment as well as the size of the preference margin (table 4).

Table 4 **Australian imports preference utilisation rates, 2008**
By preference margin and import value range

Preference margin (m) (%) *Import value (v) ($US)*	*All imports*	*0< m ≤1*	*1< m ≤ 2.5*	*2.5< m ≤5*	*5< m ≤10* [a]	*15< m ≤20*
Eligible imports	0.42	0.28	0.32	0.46	0.44	0.69
100< v ≤1000	0.29	0.23	0.35	0.27	0.27	0.52
1000< v ≤10 000	0.30	0.22	0.28	0.30	0.34	0.47
10 000< v ≤100 000	0.40	0.28	0.28	0.42	0.44	0.76
100 000< v≤ 1million	0.48	0.31	0.37	0.52	0.49	0.91
1million <v≤ 10m	0.55	0.34	0.45	0.61	0.59	0.98
10m< v≤ 100m	0.58	0.48	0.35	0.61	0.59	0.98
100m< v≤ 1billion	0.59	0.63		0.54	1.00	
V > $1 billion	1.00			1.00		

[a] In 2008 Australia did not have any imports where the tariff margin was between 10 and 15 per cent..

Source: Keck and Lendle (2012), table 5.

In addition to RoO acting to offset PTA tariff concessions, the trade effects of some of Australia's PTAs are likely to be smaller than implied by the headline tariff concessions. This is because some of the countries that Australia now has a PTA with were, and are still, able to access preferences under the 'developing country trade preference system' (known as the Australian System of Tariff Preferences (ASTP)) (box 4). For example, Chinese exporters (and Australian consumers) saved an estimated $43 million in duty over 2013–2015, prior to ChAFTA being implemented (DFAT 2016). Pomfret et. al. (2009) found that a significant share of imports from Singapore, Thailand and Chile were coming in under some type of concession (including developing country preferences) before their PTA.

Exports from Australia

Comparable calculations on the export side require the import data of each of the agreement partners, a major data gathering exercise which has yet to be undertaken comprehensively for all Australia's PTAs. But several Australian results come from studies of other countries' imports. The estimated preference utilisation rate for Australian exporters was 84 per cent under AUSFTA in 2008 (Keck and Lendle 2012) and, despite further reductions in some tariff lines, remained the same in 2011 (Abreu 2013).

Box 4 Australia's system of non-reciprocal tariff preferences for developing countries

In 1966, Australia became the first country to introduce tariff preferences for developing countries, known as Australian System of Tariff Preferences (ASTP). The intent of ASTP is to support the integration of developing countries into the global trading system as a means to promote their economic growth.

The ATSP covers 145 countries and 31 places. All countries, except the USA, NZ and Japan, with which Australia has a PTA are on the ASTP eligible list, and all (except Chile) have utilised the ATSP between 2013 and 2015 (DFAT 2016, table 3, p. 16).

The RoO for the ATSP requires that the final manufacture must be carried out in the country claiming preferences, and at least 50 per cent of the factory cost must consist of labour and/or materials. However, these qualifying inputs can come from one or more of the over 100 countries covered by the scheme (essentially, full-scale cumulation). For Less Developed Countries (LDCs) the RoO is, surprisingly, more stringent. At least 25 per cent of factory cost must be from one or more of the LDC (a more limited list than of developing countries) with at least 25 per cent from other countries in the qualifying area. This difference in RoO is a consequence of the ad hoc nature by which the ATSP has evolved. DFAT are currently reviewing the ASTP.

Following the 1979 General Agreement on Tariffs and Trade (GATT), contracting parties established the basis for a generalized system of non-discriminatory and non-reciprocal preferences (GSP) for developing countries. There are now 11 WTO members with GSP schemes: Australia, Canada, the European Union (EU), Japan, Iceland, New Zealand, Norway, the Eurasian Customs Union, Switzerland, Turkey and the USA. The international GSP schemes differ in the coverage of countries, the amount of preference and the ROO.

Source: Australian Government 2016.

Survey evidence provides some insights into the awareness of preferences by Australian exporters. BCA (2015a) report that 85 per cent of respondents (Australian and non-Australian) in a survey across the Asia-Pacific region who have used agreements declared that their exports had increased either significantly (23 per cent) or moderately (63 per cent) as a result of the PTAs that they use. But more generally, there is a lack of awareness of PTAs (44 per cent of respondents). For Australian respondents, 19 per cent utilised PTAs, with many non-users submitting they were deterred by the complexity and regulatory hurdles they face to comply with the agreements. Other reasons cited for not using PTAs in order of importance were: PTA countries were not attractive markets; offered no substantial new market access; irrelevance; and cannot see the benefits.

Another recent survey of 202 Australian international trade businesses found that PTAs were not relevant to around 45 per cent of respondents (ACCI 2016a, p. 13) [4]. For those where PTAs were relevant, over half reported they did not understand the agreements (though about 10 per cent of this group did nonetheless use the agreements). Only one-third of those who did understand the agreements reported accessing the preferences.

4 This is an aggregate approximation based on the reported results for each individual agreement.

The AUSFTA and Australia-ASEAN-New Zealand agreements were the most 'understood and used' and the Australia-Chile agreement the least.

3 Are RoO adding stumbling blocks to multilateralisation?

In a world where governments have largely stepped back from unilateral trade liberalisation and multilateral negotiations have stalled, it has been argued that bilateral and regional trade agreements can be a force for liberalisation (for example, Griswold (2003), Hufbauer (WTO Forum 2013)). However, multiple agreements, each with its own RoO, and tariff reduction schedules, complicate the production and trade calculus. Baghwati (2008) has described this set of overlapping agreements as the 'spaghetti bowl', and more recently Davidson (2014) labelled Australia's set of agreements as the 'noodle-bowl'. Bhagwati's real concern about PTAs is that they have distortionary effects on world trade, with costs imposed not just on the party countries (relative to free trade and on occasion relative to the status quo), but on other, third-party, countries. They can also be distortionary for the countries involved, and such distortions can multiply with the number of agreements (box 5).

The spaghetti bowl of PTAs and RoO arrangements

Australia's 'noodle-bowl' of PTAs

Australia has signed 10 PTAs (9 bilateral), and is negotiating agreements with India and Indonesia (figure 4). Australia also signed the Trans-Pacific Partnership Agreement (TPP) in 2016, although this is unlikely to be implemented due to the withdrawal of the United States. Australia is also part of the Asia-Pacific Economic Community (APEC), although this is a commitment to cooperation on (tariff) liberalisation and other activities to support trade on an MFN basis — a concept known as open regionalism — rather than a PTA.

As a reminder that multilateral approaches are not quite dead, in 2015 Australia concluded the Expansion of the Information Technology Agreement (ITA) with over 50 WTO Member countries, which provides for tariff reductions on 201 IT products. All of these products are also covered by Australia's PTAs. The tariff reductions on these products differ between the PTAs and the ITA. The ITA tariff reductions are on an MFN bound rate basis — passed on to all WTO members, not just the ITA signatories — and therefore not subject to RoO. Another multilateral negotiation underway is the Environmental Goods Agreement (EGA), which Australia chairs. This aims to expand the list of 54 environmental goods that the APEC countries agreed for tariff reduction in 2012.

Box 5 The distortionary influences of RoO in PTAs

While consumers, exporters, and importers should gain from preference utilisation under any PTA, this has the potential to divert trade from more efficient providers in non-partner countries.

Trade diversion happens because the tariff preference allows the PTA-partner exporter to 'undercut' existing (or potential) cheaper non-party suppliers. It is the RoO transformation test that protects this advantage by preventing third-party country transhipment. Thus, there is trade creation between the partners and trade diversion away from lower cost sources. If the agreement partner is the existing supplier of a product — a so called natural trading partner — the RoO is unlikely to be needed. But its existence may exclude relatively 'lightly' transformed product and thereby diminish trade creation.

How the exporter advantage is materialised is often overlooked. The exporter may 'pass on' the tariff preference as a lower price if it wants to greatly expand volume (if they face a highly price responsive demand). Or, the exporter may 'pocket' the tariff rent, in which case local consumers do not gain (Hayakawa and Ito 2015)). Unilateral and multilateral tariff cuts are more likely to be passed on as lower import prices because of competition from multiple sources.

If the RoO is more stringent than necessary to deter transhipment, such that it chokes off at the margin partner production that cannot quite satisfy the RoO, then the efficiency gains from increased import competition are muted.

A single PTA RoO, and the preference it gives access to, can reduce the efficiency of domestic producers if they alter their production decisions to take advantage of the preferences offered. For example, producers may switch their input sourcing from non-party sources to (higher cost) domestic or partner sources, using the tariff preference to cover the higher cost of switching. The producer is better off, but the country is not as it also lost tariff revenue. Moreover, unlike free trade, where producers are free to choose the least cost inputs regardless of source, there is a resource allocation efficiency loss. Multiple agreements increase the complexity of the input mix calculation for potential exporters.

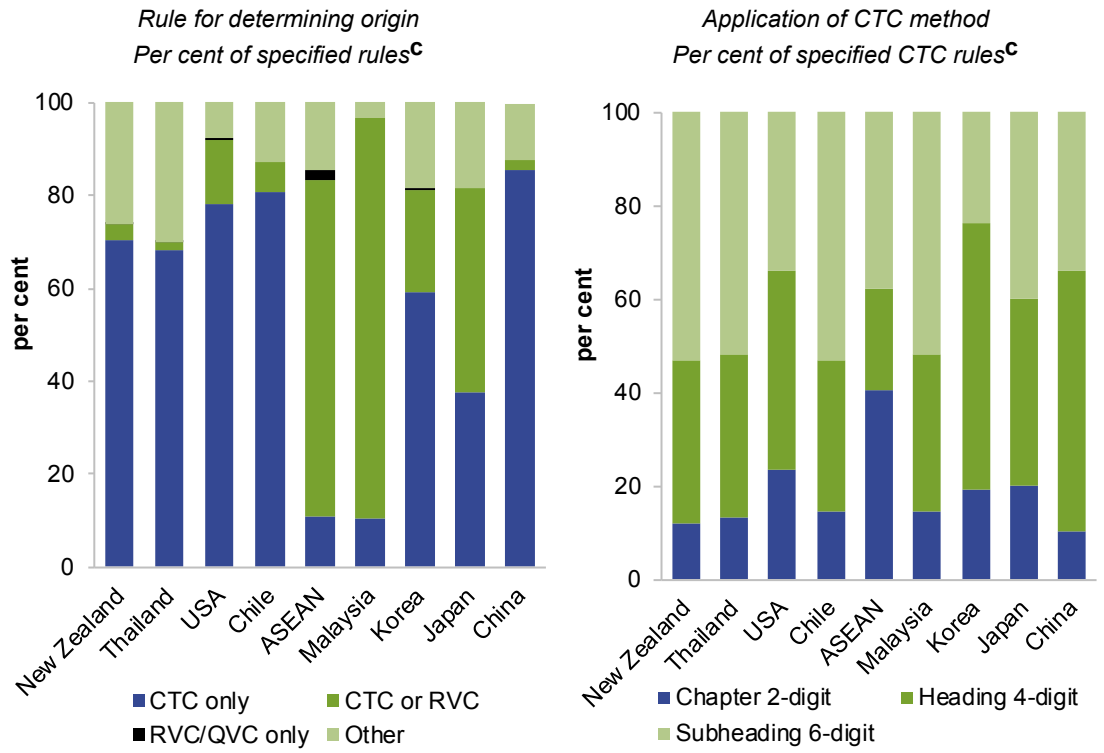
Trade diverted due to stringent RoO can cause producers to shift production between countries to access preferential tariffs, causing international investment diversion. A well-known example is the case of Chinese textile manufacturers moving production to Vietnam in anticipation of the strict yarn-forward RoO in the proposed Trans-Pacific Partnership (TPP) agreement. The increased market access in the United States negotiated by fellow TPP member Vietnam would only have been available where their yarn and other intermediate inputs were sourced from a TPP member. As China was not a party to the TPP this would have reduced Chinese exports of yarn and intermediate inputs to Vietnam. By producing these inputs in Vietnam the resulting finished products would be eligible for the preferential access to the United States market under the TPP.

Figure 4 Australia's bilateral and regional trade agreements in force

Australian PTAs involve a mix of RoO tests

All Australia's existing trade agreements (other than with Singapore) include all of the three transformation test types (figure 5). Overall, the CTC-only test appears to be the most common.[5] In cases where CTC applies, about 20 per cent are at the 2-digit level (the most restrictive). Some agreements use a single rate for all RVC tests, as in the case of the 40 per cent rate in JAEPA, AANZFTA and MAFTA, and the 50 per cent rule in the ANZCERTA. Other agreements use a variety of rates, for example the AUSFTA includes rates of 35, 45, 50 and 55 per cent (though not all expressed on the same cost basis).

Figure 5 **Methods used to determine origin of merchandise trade in Australia's preferential trade agreements[a,b,c,d]**



[a] CTC refers to a change in tariff classification test. RVC refers to a regional or qualifying value content rule. 'Other' includes combined CTC and RVC rules, CTC rules with exceptions, and specified process tests requiring particular production methods needed to qualify for preferential entry. [b] The agreement with Singapore is not included as it applies a RVC-only test to all products, of either 30 or 50 per cent. In 2016 it was agreed that it would change to a CTC only system that aligns with the AANZFTA (yet to take effect). [c] Individual rules can be expressed at the 4 digit heading level, 6 digit subheading level or groupings of tariff line items. [d] When the ANZCERTA entered into force in 1983, an RVC rule with a simple technical test was the main rule applied. The figure reflects revised rules in force since 1 January 2007.

Source: Commission estimates.

5 The CTC-only results may be overstated. For example, when zero tariff rates are removed from the list of products in the US tariff schedule, around 70 per cent of tariff items are subject to a percentage rule (PC 2004, p. 33).

All of Australia's trade agreements provide some products with a choice between a CTC *or* RVC test. Allowing choice should act to reduce the stringency and compliance costs compared to only the specified CTC or RVC.[6] The choice formulation is highly prevalent for the MAFTA (almost 90 per cent of tariff lines), ANZCERTA (around 85 per cent) and JAEPA (about 50 per cent).

In contrast to a choice formulation, some RoO require dual tests, for instance a CTC *and* RVC, which effectively sets the RoO at the more restrictive of the two. The ChAFTA requires motor vehicles (HS 8704) to satisfy both a CTC(4) and a RVC45 test. Curiously, the parts and accessories for these vehicles (HS 8708) are subject to a choice test (CTC(4) or RVC50).

An example that combines both a choice and a dual test can be found in the AANZFTA. Cooking appliances and plate warmers: for gas fuel or for both gas and other fuels (HS 7321.11) offer a choice between a RVC(40) or CTC(4) test, or alternatively the choice of a dual test of (RVC(35) + CTC(6)).

A producer may face different tests across different markets

A significant consequence of tailor-made RoO across agreements is that an exporter faces different RoO in different markets. For example, in the case of bed linen (HS 6302), six agreements require a CTC(2) transformation but differ in the supplementary tests and exceptions (box 6). Pity the manufacturer who has to navigate this. Where an exporter faces different RoO the most restrictive can become binding for a firm. That is, if that market is important to the firm and the costs of altering the product for different markets are non-trivial, firms have to change their production process in order to comply.

Overlapping trade agreements compound the problem. Australia has bilateral preferential arrangements with New Zealand (1983), Singapore (2003), Thailand (2005) and Malaysia (2012), which are also members of the AANZFTA (2010) agreement. The 2016 revision (yet to take effect) to the SAFTA (to a CTC based system to align with the AANZFTA) resolved one overlap as originally the Singapore agreement was a RVC-only test of either 30 or 50 per cent, but other overlaps remain.

And have a choice proof-of-origin systems even within a single market

The complexity issue is not just the different RoO. There are also different types of paperwork for tests of RoO, and at least three different 'proof-of-origin' systems (see below). And because of overlapping trade agreements, there can be multiple systems even with the same trading partner. For example, there are two proof-of-origin systems for Australian preferential exports to Malaysia. First, Malaysia is part of the 2010 AANZFTA agreement which adopted a third party Certificate of Origin model. After AANZFTA,

6 Nonetheless the choice test may be quite stringent if both the options are quite stringent. Choice, in and of itself, does not determine the restrictiveness of the RoO.

Australia entered a bilateral agreement with Malaysia in 2012 which adopted a first party declaration-of-origin model. To date, the protocols for RoO have not superseded one another as new agreements are completed.

Box 6 **Different RoO treatment for the same product**

In order to qualify for concessional entry, Bed linen, table linen, toilet linen and kitchen linen [HS item 6302] must meet the following criteria:

- *Australia–United States*. Change to heading 6302 from any other chapter, except from heading 5106 through 5113, 5204 through 5212, 5307 through 5308 or 5310 through 5311, chapter 54, or heading 5508 through 5516, 5801 through 5802 or 6001 through 6006, provided that the good is both cut (or knit to shape) and sewn or otherwise assembled in the US or Australia.
- *Thailand–Australia*. Change to heading 6302 from any other chapter, provided that any non-originating material that is fabric is pre-bleached or unbleached, and that there is a regional value content of not less than 55 per cent.
- *Australia–New Zealand.* Change to heading 6302 from any other chapter, provided that where the starting material is fabric, the fabric is raw and fully finished in the territory of the Parties; or No change in tariff classification is required, provided that there is a regional value content of not less than 45 per cent based on the build down method.
- *Australia–Chil*e. Change to heading 6302 from any other chapter provided that where the starting material is fabric, the fabric is raw and fully finished in the territory of the parties.
- *Malaysia–Australia.* Change to heading 6302 from any other chapter, provided that where the starting material is fabric, the fabric was greige fabric that: (a) is dyed or printed; and (b) finished in Australia or Malaysia to render it directly usable.
- *Japan–Australia*. Change to heading from any other chapter provided that, where non-originating materials of headings 50.07, 51.11 through 51.13, 52.08 through 52.12, 53.09 through 53.11, 54.07, 54.08, 55.12 through 55.16, or chapter 60 are used, each of the non-originating materials is woven, or knitted or crocheted entirely in the Area of one or both Parties.

With many PTAs to choose from, complexity may simply trump use

When faced with a number of PTAs, exporters may be pulled in different ways, depending on which PTA partner countries it purchases inputs from and which it wants to sell to. For small firms the computational requirements to work out what is worthwhile and what is not will generally be overwhelming, and rules of thumb that may or may not be efficient will often be used.

With a RVC test a change in the exchange rate (affecting the cost of imported inputs and the final selling price) can affect eligibility for a preference. Monitoring this for one destination market or one source partner country adds to the complexity of system; monitoring it for a myriad of agreements is almost impossible. Unsurprisingly, many small firms report confusion about just what advantage the system of PTAs offers.

> The use and understanding of Australia's multiple free trade agreements is very low, with the majority of businesses surveyed struggling to navigate complex rules and regulations. (ACCI 2016b National Trade Survey, p. 4)

While this means that they will not distort their production decisions to satisfy RoO, it also means that they do not get the trade creation benefits that can be in PTAs. And they might not bother to export at all.

Overall, it is hard to see the current noodle-bowl of PTAs working as effective stepping stones toward greater trade liberalisation on a multilateral basis (Davidson 2014). The focus on PTAs also undermines the incentive to act unilaterally, as current tariffs and other restrictions are often seen as negotiating coin. This is a pity, as unilateral liberalisation has been shown to offer not just gains to trade, but more importantly competitive pressures and cheaper access to imports that embody new technology (PC 2010).

4 Does the cost of compliance undermine the value of PTAs?

Previous work by the Commission recommended that RoO be waived when the difference in MFN tariffs between agreement partners is five percentage points or less.[7] The reasoning was that the risk of transhipment is minimal and there can be substantial costs associated with the paperwork required for satisfying the RoO, which reduces the use of the preference. The 2010 recommendation was agreed to by the government (Australian Government 2011), yet subsequent agreements did not adopt this position.

To enjoy the reduced tariff on offer through RoO, importers have to 'prove' that the economic transformation rule has been met. Documentary evidence such as furnishing an authorised certificate with production information or self-declaration paperwork is required.

As origin identification is required for non-preferential trade, it is the additional costs of proof-of-origin protocols for preferential treatment that matter. These costs include: additional certification of origin; processing time that can delay release of the cargo; rebatable duties to be paid before release where the certification is checked after release; and potentially a requirement to meet costs associated with investigations about whether the cargo meets the RoO requirement.

Declaring origin for non-preferential imports

Non-preferential trade imports *into Australia* require labelling on goods packaging, including their origin. Separate from these commercial markings is the cargo

[7] The Research Report, Rules of Origin under the Australia-New Zealand Closer Economic Relations Trade Agreement (PC 2004), and Bilateral and Regional Trade Agreements report (PC 2010).

documentation, which includes origin information, such as country of production, country of loading, and last country of dispatch. Country of production is where the 'last substantial transformation' occurred, but this is not further defined and there are no RoO-like quantitative tests. There is no general requirement to 'prove' origin in the normal course of import.

Australia's cargo clearance system may trigger other origin related questions and evidence requirements, such as for quarantine, and permits for restricted goods. Other origin documents (outside of Customs requirements) include Certificates of Origin, issued by business chambers, in the ordinary course of trade, for such purposes as trade finance.[8]

Declaration of origin in the normal course of trade varies around the world. Most members of the World Customs Organization (WCO) do not require any non-preferential proof of origin for most types of imports, though many do require proof in certain circumstances. However, some members always require a non-preferential certificate of origin, and this is inconsistent with the WTO Agreement on Customs Valuation (Azzam 2015). The reasons cited for always requiring evidence of proof-of-origin in non-preferential cases were: customs valuation purposes; duty purposes in general; consumer protection; intellectual property rights protection; risk management profiling; and application of quotas and bans.

Proving Rule-of Origin for preferential trade

For preferential trade treatment origin is defined by the RoO. There may be complete agreement that the good came from country X and that some manufacturing took place there, but to claim the tariff preference, you have to prove (to the satisfaction of the import country Customs) it meets the RoO.

This raises some key issues. What evidence do Customs require? Does the examination occur before cargo is released? If examination is after release, does the importer have to pay the duty and reclaim it back once approved? What if Customs does not agree with the submitted evidence? Uncertainty about the answers to these questions can restrict the use of preferences. But even without uncertainty, the treatment affects the costs that importers (and by extension exporters) face.

Internationally, there are four main proof of origin models for preferential trade (table 5).

8 Proof of origin may also arise under Australian consumer law. In the normal course of business a misleading and false origin claim (such as on labels and websites) may be prosecuted. A 'safe harbour' provision against false labelling exists if the trader can prove 'substantial transformation' and 50 per cent of value added (ACCC 2014). Another example of proof of origin requirements is the tests applied for USA government procurement under the Buy America Act. These origin tests differ from the USA trade agreement origin tests (Koehl and Doran n.d).

Table 5 **Proof-of-origin systems: import country requirements**

System	*Key features*	*Percentage of trade agreements*[a]	*Typical adoptees*
1. Authority issued certification, including e-certificates	Government authorities or delegated bodies issue the certificate of origin in a prescribed format	32.9	Intra-African and intra-Asian
2. Approved Exporter system	Exporters with prior approval may make origin declaration on commercial documents	36.9	European
3. Fully exporter-based system	Any exporter can sign and issue a certificate of origin of a prescribed form	22.1	Americas
4. Importer-based certification	Importers certify the origin of goods	8.1	

[a] 149 trade agreements entered into force 1994 to 2013.

Source: Azzam 201.

Proof of origin under Australia's trade agreements

The proof-of-origin model differs between Australia's trade agreements (table 6). For example:

- No proof is required for preferential trade with either NZ or the USA at the time the goods are imported or enter commerce, but *may* be asked for later.
- The agreements with Thailand, ASEAN and New Zealand, and China require that an exporter (in either trade direction) apply for a standardised Certificate of Origin issued by an authorised party.
- Australia's other agreements require proof-of-origin at the time of trade (or soon after), generally with a choice between an authorised Certificate of Origin (obtained by the exporter) and other forms of declaration of origin, variously by the exporter, producer or importer (box 7).

There are other non-trivial compliance cost differences across proof of origin arrangements. There are differences in terms of: how long the Certificate is valid, and how many shipments it covers; the minimum threshold shipment value requiring proof; the scope for, and validity of, Advance Rulings; the language of documentation; scope for electronic paperwork; ex-post origin verification visits (notification, time frames and information questionnaires); the scope to apply for refunds of tariffs if documentation is provided after general tariffs were paid; and how long records need be kept.

Table 6 **Proof of origin requirements under Australia's trade agreements**

Agreement (commencement)	*Imports to Australia and exports from Australia*	*Accredited issuer of Certificate of Origin*
Preferential agreements		
Australia-New Zealand (1983)	No Certificate. Importer claim for preferential treatment based on a declaration by exporter (if requested) in non-prescribed format.	
Australia-Singapore (2003)	Importer must possess a Declaration made by the exporter. The exporter Declaration must be based on a valid Certificate or Origin issued by an authorised third party. If the exporter is not the producer the exporter must provide the producer with the Certificate and the producer must provide the exporter written confirmation that the good are originating goods in accordance with the furnished Certificate. In 2016 it was agreed the proof-of-origin provisions will change to self-certification by the importer, exporter or producer.	Mandatory Certificate ACCI, AiGroup International Enterprise Singapore
Australia-United States (2005)	No Certificate. Importer claim for preferential treatment based on a declaration by exporter (if requested) in non-prescribed format	
Australia-Thailand (2005)	The importer must have a Certificate Of Origin, obtained by a registered exporter from an authorised Third Party Certificate of origin.	Mandatory Certificate ACCI, AiGroup Department of Foreign Trade - Ministry of Commerce (Thailand)
Australia-Chile (2009)	An importer must have a Certificate Of Origin from the exporter (or exporter agent) **a**. If the exporter is not the producer the exporter must sign the Certificate on the basis of the exporters knowledge or written declaration by the producer. The producer is not compelled to make a declaration.	Certificate does not need to be from an authorised issuer
Australia-ASEAN-New Zealand (2010)	Importer must have an authorised Certificate of Origin from an exporter. A Certificate can be obtained by a manufacturer or producer or exporter.	ASEAN Secretariat maintains a list of authorised issuers
Australia-Malaysia (2012)	Importer provides Declaration of Origin completed by the exporter or producer. The Declaration may be on the invoice or company letter head. Notwithstanding, Malaysia requires its exporters or producers to obtain a Certificate of Origin from an Issuer.	Issuing Authority of Malaysia (not specified in the Agreement)
Australia- Korea (2014)	Importer to provide a Certificate of Origin completed by the exporter or producer. If the exporter is not the producer, the producer is not compelled to provide any information. For Australia, a Certificate can be voluntarily obtained from an authorised body.	Voluntary ACCI, AiGroup

(continued next page)

Table 6 (continued)

Agreement (commencement)	*Imports to Australia and exports from Australia*	Accredited issuer of Certificate of Origin
Preferential agreements		
Australia-Japan (2015)	Importer has choice of providing an authorised Third Party 'Certificate of Origin' or declaration or origin documents (from the importer, exporter, or producer	Voluntary ACCI, AiGroup Japan Government
Australia-China (2015)	Importer must have an Authorised Third Party Certificate of Origin, obtained by the exporter A Declaration of origin can be used when an Advance Ruling is available.	Mandatory ACCI, AiGroup; Wine Authority China Government.
Non-preferential agreements	**Imports to Australia**	
Developing Country preferences	Declaration of origin on the invoice of the normal commercial invoice; or using normal commercial invoice plus a completed Form A (Combined Declaration and Certificate of Origin).	

a Only 'exporter' appears in the text of the Agreement (chapter 4). Agent was included in the Agreement via exchange of side letters of understanding at the time of signing the Agreement (Annex).

Source: Commission assembly from trade agreements.

Australia's authorised Certificates of Origin for exports

In 2010 Australia established an accreditation system for authorising bodies to issue Certificates of Origin. To date, the authorised bodies are ACCI and AiGroup for all agreements where an authorised body is involved. In the case of the China agreement, the Wine Authority is an additional authorised body.

The costs of certificates issued by AiGroup range from $16-$47 depending on member status and paper format. In addition, there is a $60 exporter registration fee (for non-members). Internationally, reported issuance costs of a Certificate are up to USD $9 when issued by Customs or other government agencies, and range from USD $1.50 to $50 (average USD $34) when issued by a Chamber of Commerce (WCO 2015). These costs do not include the time and other costs for the firm in making the application.

Box 7 Choice of documentary evidence (Japan-Australian agreement)

Documentary Evidence of Origin (Article 3.14)

For the purposes of this chapter, the following documents shall be considered to be Documentary Evidence of Origin:

(a) a Certificate of Origin referred to in Article 3.15; or

(b) an origin certification document referred to in Article 3.16.

Certificate of Origin (Article 3.15)

2. A Certificate of Origin shall be issued by an authorised body or other certification bodies of the exporting Party, following a written application submitted by an exporter, by a producer or, under the exporter's or producer's responsibility, by their authorised representative located in the exporting Party.

3. Where an exporter in a Party is not the producer of the good, the exporter may apply for a Certificate of Origin on the basis of:

   (a) its knowledge that the good qualifies as an originating good based on the information provided by the producer;

   (b) a written or electronic declaration or statement that the good qualifies as an originating good, provided by the producer; or

   (c) a written or electronic declaration or statement that the good qualifies as an originating good, voluntarily provided by the producer of the good directly to the authorised body or other certification bodies of the exporting Party on request of the exporter.

Origin Certification Document (Article 3.16)

1. An origin certification document referred to in subparagraph (b) of Article 3.14 may be completed, in accordance with this Article, by an importer, by an exporter, or by a producer of the good on the basis of:

   (a) the importer's, exporter's or producer's information demonstrating that the good is an originating good;

   (b) in the case of an origin certification document completed by an importer, reasonable reliance on the exporter's or, if the exporter is not a producer of the good, producer's written or electronic declaration or statement that the good is an originating good; or

   (c) in the case of an origin certification document completed by an exporter, reasonable reliance on, if the exporter is not the producer of the good, the producer's written or electronic declaration or statement that the good is an originating good.

Source: JAEPA, chapter 3.

How Customs handles RoO makes a major difference to cost

The Customs approach (regardless of the proof model) may affect the usage of agreements.[9] Some jurisdictions examine all preference claims and others use a risk sampling approach. Some verify documents after imports have cleared Customs, but may require bonds. Some administrations carry out verification of origin documentation only before release (ACCI 2012, p. 7). Since prompt clearance of cargo is vitally important in commercial trade, the approach that Customs take to verifying RoO affect the costs of importing. Indeed, they can form a new type of barrier at or behind the border. Moreover, as tariff revenue remains an important source of government funds in some countries, Customs may approach proof-of-origin verification with revenue protection as a guiding influence.

Disputes about tariff classification for PTA RoO purposes can also see preferences not granted, or tie importers up in a costly process (box 8). So getting the tariff classification right is increasingly important in light of the significant increases in ex-post origin verification audits by many jurisdictions (WCO 2014).

Increases in the administrative costs of verifications may be passed on to importers. For instance, ACCI (2016a) reported discussions with the US Department of Finance about the TPP self-declaration model that indicated there may be an attempt to shift the costs of compliance investigation from the Customs agency to the importer, with requirements for higher bonds, increases in insurance against investigation, and increased company costs of supply chain due diligence.

The very complexity of RoO makes some disagreements inevitable. RoO are product specific, generally with around 2000 to 3000 per agreement. Although most traders would only need to focus on a small subset, the importer needs to correctly identify the applicable tariff classification code (a known challenge and source of dispute) as well as interpret the wording of the RoO. Internationally, RoO for textiles and clothing are renowned for impenetrability and practical restrictiveness. Other product RoO may be comparatively clearer but leave lingering doubt about qualification. Even if the producer thinks they satisfy the transformation rules, there is no guarantee that the importing country Customs will agree.

To the extent that compliance costs rather than stringency of the RoO limits the use of preferences there is a case for reducing these costs. The Business Council of Australia promoted the option of self-certification, noting that 350 companies account for 85 per cent of Australian exports, involving many transactions per company per year (BCA 2015). The National Interest Analysis for the TPP reported an estimated savings to Australian exporters of around $150 000 per year by adopting self-declaration (Australian Government 2016, p. 38).

[9] Australia's agreements do not specify how Australian exports should be 'treated'. Perhaps future negotiations should consider agreeing a risk based, post cargo clearance approach to Australian origin goods, as occurs with NZ and USA (though not specified in the agreement).

Box 8 **The challenge of identifying the correct tariff classification and applicable RoO**

Tariff classification is arguably the most important feature of every import and export transaction. Not only does it determine applicable import or export tax rates or eligibility for trade agreement benefits or duty exemptions, it also triggers a range of possible non-tariff barriers, such as inspections, license requirements, quota restrictions, trade embargoes, and permanent establishment conditions,.

Traded goods are classified according to the internationally agreed Harmonized Commodity Description and Coding System (HS system). There are around 5000 tariff codes at the HS-6 digit level.

Tariff classification disputes (between customs and traders) are not uncommon. Disputes may not only be in respect of individual shipments, but may involve all trade in a product. For example, the USA lodged a complaint under the WTO Dispute Resolution provisions against the EU over the tariff treatment of certain information technology products.

As RoO differ between products and/or across agreements, identifying the correct tariff classification is important to facilitating trade under trade agreements. HS code discrepancies between export countries and import countries cause confusion among preferential trade agreement users. As noted by Panasonic (2014):

- Manufacturers have difficulty finding out HS codes of import countries. For example, glasses for 3D television could be TV accessories (HS8529), glasses (HS9004) or new products (HS8543).
- Some import customs make sudden changes in HS code interpretation and ask importers to pay tax retrospectively.
- PTA rules do not keep up with the 5-year changes in HS codes. RoO tariff codes are locked-in at the time of agreement under the existing HS system. Contemporary trade uses the current HS system and even slight variations in the updated codes may invoke different RoO.

However, the cost of meeting the RoO is more than getting the certificate of origin. The response by Customs to the preference claim and 'evidence' is fundamental. If self-declaration certificates are more likely to be challenged, the cost savings may be quickly eroded.

Many countries have significantly increased their 'at border' and ex-post origin verification activities in recent years (WCO 2014). For instance, Korean Customs ex-post origin verification audits increased four-fold between 2011 and 2013, and assessed 46 per cent as failing the RoO, 37 per cent as non-conforming Certificate of Origin and 9 per cent as using the wrong tariff classification. Increased international verification has been driven by the increase in trade agreements and the volume of claims for preference. However, the increase in the intensity of verification has also been driven by evidence of failure to meet the RoO test, fraudulent claims and inadvertent errors. Many Customs administrations, while attempting to meet increased volume of claims and apply greater scrutiny, lack sufficient trained staff to deal with language and format differences in paperwork.

Against this backdrop, standardised Certificates of Origin issued by government accredited bodies may engender trust by Customs administrations, expedite cargo clearance and facilitate the use of trade preferences. Notwithstanding, there have been minor problems in practice where inadvertent changes to format have delayed trade.[10] ACCI (2016a) also observed that the certificate template for the China and Korea agreements does not comply with the non-preferential Certificates needed to support international trade finance. Consequently exporters seeking trade finance have to seek two certificates.

Self-declaration systems potentially expose the importer (where it is not the producer or exporter) to verification costs if challenged and without the assistance of a Certificate Issuer to defend the case. ACCI (2016c) claimed that the TPP self-declaration regime was unclear about acceptable 'safe harbours' of documentary evidence to support the claim of PTA compliance.

> To date we have not been able to establish what will be legally defensible set of documents that can be exchanged between exporters and importers in order to satisfy the Customs agency (or legal appeal) in making a claim for preference. (p. 13)

ACCI (2016c) recommended generally

> In the absence of a legally defensible third party certified system to support claims for preference, product origin claims should be abandoned all together. (p. 13)

On the other hand, importer self-certification (and on the spot correction) may expedite the clearing-up of paperwork queries.

The 'optimal' proof of origin regime is thus far from clear. The key note speech of the WCO Origin Conference (Eastevadeordal 2014) summed the issue as follows:

> There is practically no research on questions related to administration of RoO, which are essential to the functioning of trade agreements, from transparency, to border controls, to ex-post verification. Does 3rd party certification help or hinder trade? Is self-certification more prone to fraud? Does fear of origin liability depress utilization? Does more frequent ex-post verification improve compliance or supress utilization?

The WCO (non-binding) Guidelines on certification of origin encourages, in the first instance, the use of self-certification:

> Considering the increasing volume of preferential trade and recognizing the need for the facilitation of origin-related procedures, self-certification of origin by a producer, manufacturer, exporter and/or importer shall be utilized to the maximum extent possible while recognizing the specifics of domestic business environment. (Azzam 2015)

[10] The Commission was given examples of rejected Certificates because of change of font, border sizing, software changes to electronic signatures and not providing double sided copies. Mexico Customs reported that one problem under NAFTA has been where the importer relies on a Certificate supplied to it by the exporter but the exporter has subsequently changed address without notifying the importer (WCO 2014). This results in verification problems with the importer's claim for preferences.

ASEAN and EU have piloted self-declaration systems involving accredited and registered exporters (WCO 2014), while Medalla (2015) has suggested a hybrid system for the RCEP involving large firms that have a known reputation being able to engage in self-certification, while smaller firms benefit from third party certification.

The relative advantages and disadvantages of the different approaches should become clearer with growing experience with different proof-of-origin approaches in Australia's PTAs. It is important that importers/exporters are cognisant of the verification environment they face and be provided with information that allows them to approach RoO proof in the manner of their choice. In sum, the compliance costs of RoO may be far more significant than previously assessed, and preference usage lower, once proof of origin complications, and jurisdictional differences, are taken into account.

5 What can be done to improve RoO to make PTAs work better?

This paper has explained how the complex system of RoO can limit, and appears to be limiting, the success of Australia's PTAs in delivering net benefits to Australians. It has illustrated that the differences between RoO across the PTAs and the overlapping nature of RoO can restrict trade and that less stringent RoO are to be preferred. The complexity of the different sets of RoO and the way that they are administered adds to compliance costs. RoO also opens up avenues for 'at' and 'behind the border' type actions that can increase costs and uncertainty about access to the preferences offered in PTAs. The extent to which such activities occur is difficult to assess, but in an increasingly protectionist world, the risk is that their use will expand.

The first best solution is unilateral liberalisation of Australia's MFN tariffs

The Commission has long argued that unilateral liberalisation of trade is in the best interests of the economy (PC 2010). Unilateral action delivers benefits on the import side, in reduced costs for consumers, and for firms, including exporters, that use imported inputs. It can drive competition, which over time improves the performance of import competing firms. For Australia, with half of the product lines with an MFN tariff of zero, and other tariffs 5 per cent or less, phasing out the remaining low tariffs would remove all the costs related to RoO. The direct further gains from tariff reductions will be small but the protection they offer to industries is also negligible and there are no economic reasons or strong political reasons for keeping them.[11] If importers are not required to demonstrate

[11] There is some debate about whether at this rate the loss in tariff revenue, which has to be replaced by a tax that may be more distortionary, is more than fully offset by the gains from reduced price distortions (Dixon paper ref). However, the models used to estimate this impact do not capture the dynamic effects of greater competition, nor the potential administrative savings for Customs.

that they meet the RoO to get a preference, their costs can only be lower. Such gains, while likely to be small, will flow through to the Australian economy, and in today's environment every little bit helps.

Unilateral action does not resolve the problem of RoO facing Australian exporters. And some may argue that it gives away negotiating coin to leverage preferences for exporters in future agreement partner markets. But the negotiating coin argument has been comprehensively debunked (PC 2010), and reciprocity is not a sustainable argument for welfare-reducing policies. Moreover, the dynamic effects of open markets offer long-run benefits through greater competition and improved access to ideas and capital.

Given there is some doubt over the size of the trade and economy-wide benefits of PTAs, more PTAs may not be an improvement (PC 2010; Armstrong 2015). They are even less likely to be so if they add to the tangles in the noodle-bowl. Moreover, the focus on the remaining tariffs and the RoO required for preference access must be absorbing DFAT resources, which may be better used in developing the trade facilitation actions in PTAs than designing RoO. RoO are about restricting trade while trade facilitation is about smoothing the path for exporters (and importers) through reducing red tape, improving mutual recognition of certification and standards, and addressing at and behind the border barriers to trade. Where PTAs achieve these kinds of results they have positive impacts on trade.

Port of origin identification should be sufficient to demonstrate RoO compliance

The scope for transhipment through Australia is very limited. Given Australia's geographic location and international shipping routes, the likelihood that a non-party country exporter would take this route to access a preference in a country with which Australia has a PTA must be close to zero. This means the current proof-of-origin systems, whether self-declaration or the ACCI and AiG Certificate of Origin system, is unnecessary red tape. PTA partner countries should be willing to accept the Australian port of origin as sufficient to demonstrate origin and meet the RoO. Some of Australia's PTA partners point to opportunities for transhipment, such as New Zealand dairy products and Brazilian meat claiming Australian preferences under agreements such as ChAFTA. At worst, if Australia's PTA partners have strong views on a possible transhipment opportunity, then RoO could be negotiated just for this small, select, subset of products, with Australian port-of-origin being the arrangement for the bulk of PTA trade.

For imports into Australia under PTAs, RoO act as an import barrier as they reduce the use of preferences, and a port-of-origin approach would help liberalise trade.[12]

12 DFAT have argued that some of Australia's PTA partners do not want RoO on all or some of their exports relaxed, and would resist this change, which would require a treaty amendment.

The Commission's 2004 and 2010 recommendation that RoO be waved whenever the difference in tariffs was less than 5 percentage points would effectively provide the same deal — a port of origin certification would suffice. Medalla (2015) has identified such a waiver for consideration for the RCEP.

A shift to port of origin as sufficient certification by all PTA partners should effectively eliminate the opportunity to use RoO compliance tests as an at the border barrier.

Regional agreements offer an opportunity to reduce RoO

Harmonising RoO across agreements for each product could substantially reduce the complexity for Australian firms. Harmonisation would be needed on the transformation test and the proof of origin, but need not be on the preferential tariff schedule offered. However, harmonisation risks a rise in the restrictiveness for some products under some PTAs, so agreement to move to the least stringent of the set is needed.

Trade would be facilitated by consistent and clear proof verification, at the border and after cargo clearance. Consistency of the standardised Certificate with existing origin certificates used in the normal course of trade (such as for trade finance) would also reduce costs.

Clearly, negotiating common approaches will require all or at least many PTA partner countries to be involved. Regional agreements should consider 'wiping' the preceding building-block agreements/RoO. The TPP did not take this approach. However, the Regional Comprehensive Economic Partnership (RCEP) has been cited as an opportunity to lead the way towards a more harmonised multi-lateral trade liberalisation platform (Armstrong 2017). DFAT have indicated a desire to pursue trade facilitative RoO in RCEP. This, along with the plurilateral cumulation (recognising inputs from any of the partner countries as local content) and scope for countries to join over time, could make RCEP useful stepping stone to a more multilateral agreement.

PTAs without RoO would help untangle the noodle bowl

Most RoO are negotiated behind closed doors, and the reasons why they are as they are remain a mystery to many. Their impact can range from a minor inconvenience to a costly barrier that distorts trade. The types of reforms set out above could make a difference to the contribution PTAs make to improving multilateral liberalisation. In negotiating future PTAs, including regional agreements, those seeking to include RoO beyond port of origin identification should have to demonstrate why this is in the national interest, and this case be tested publicly. With this test only RoO that deliver net gains should be included in PTAs, and less stringent and more harmonised RoO should result.

The forward to Baghwati (2008) quotes the former president of Mexico:

> Every additional PTA will become one more obstacle to the universal and non-discriminatory trade liberalization that the world needs. PTAs have been more easily hijacked by the special interest groups and are not resulting in really good instruments. The present deals are little monsters that will be much regretted in the future. (Ernesto Zedillo, n.d)

Removing RoO, accepting the port of origin certification as sufficient evidence for compliance, or at least harmonising at the least stringent level in any new regional agreements or revisions of current PTAs, would go some way to making PTAs more stepping stones than stumbling blocks.

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