Circumvention of Anti-dumping: A Law and Economics Analysis of Proportionality in EU Rules

Laura Puccio & Aksel Erbahar*

This paper deals with one of the controversial trade issues on the agenda for negotiations in the WTO since the Uruguay Round. Anti-circumvention rules (AC) allow the application of trade remedies to products that would fall outside the scope of the trade remedy regulation. The rationale is that some practices allow circumvention of the extra duties and so lessen the effective application of remedies. In this article, we argue that, in order to avoid protectionist abuses, these AC rules should only extend trade measures to those goods that both effectively circumvent and undermine those remedies, meaning the tests included in AC investigations must lead to the proportional application of AC measures. More specifically, we use a law and economics approach to analyse the proportionality of AC rules in the context of the largest AC user, the EU, who, according to our estimations, have extended its existing anti-dumping coverage by an additional annual import value of USD 2 billion via new AC measures imposed in 1995–2013.

1 INTRODUCTION

The use of anti-dumping as a trade remedy has become pervasive. Anti-dumping duties are imposed on a precisely defined 'unfairly' traded product from a specific country, relying therefore upon a definition of 'like' product to identify which good shipped from that particular country is subject to the extra duty. The so-defined *precise product* and *origin scope* of the trade remedies can however be circumvented: by *trans-shipping goods* subject to anti-dumping through less restrictive borders (a practice called trans-shipment) or by creating *assembly operations* in other countries, or by *slightly modifying* the product. In the first two practices, the firm circumvents the anti-dumping by changing the origin of the product, i.e., falling outside the original scope of the trade remedy. In the last type,

Laura Puccio (Ph.D. Law) is currently policy analyst in the Members' Research Service of DG EPRS of the European Parliament. This paper was written while she was a Post-doc at ECARES of the Université Libre de Bruxelles (ULB). Aksel Erbahar is a Ph.D. candidate in Economics at the Graduate Institute of Geneva.

The research of this paper was funded as part of the project 'Dispute Settlement in Trade: Training in Law and Economics' (DISSETTLE), a Marie Curie Initial Training Networks (ITN) Funded under the EU's Seventh Framework Programme, Grant Agreement No FP7-PEOPLE-2010-ITN_264633. Responsibility for the information and views set out in this article lies entirely with the authors.

Puccio, Laura & Erbahar, Aksel. 'Circumvention of Anti-dumping: A Law and Economics Analysis of Proportionality in EU Rules'. *Journal of World Trade* 50, no. 3 (2016): 391–416.

it is the concept of like product narrowly defined that allows circumvention through the transformation of the product in a sufficient way as to fall short of the product scope of the anti-dumping measure.

The fear of such transnational practices undermining the effectiveness of the applied trade remedies provoked the need to equip domestic regulations with further legal instruments: the anti-circumvention provisions. The EU created new provisions within the anti-dumping regulation to deal specifically with anti-circumvention issues. The consequence of positive finding on the circumvention tests is the extension of the anti-dumping duty to circumventing products. These rules allow then the application of trade remedies to products that would fall outside the scope of the trade remedy regulation. We argue that these anti-circumvention rules (AC) should *only* extend trade measures to those goods that are genuinely found to both circumvent and undermine those remedies, meaning the anti-circumvention tests must ensure the *proportional* application of the rules.

Figure 1 shows the evolution of EU's anti-dumping and anti-circumvention investigations and measures, with the number of cases on the left axis. While there is a decreasing trend in anti-dumping investigations there has been an increasing trend in anti-circumvention investigations. AC can go as far as to extend anti-dumping duties to products that were explicitly excluded from the original anti-dumping measure. The reach of the anti-dumping duty can therefore be significantly increased via the anti-circumvention procedure: Table 1, which lists the EU's thirty-two anti-dumping measures that were subsequently targeted by anti-circumvention investigations, shows that the largest anti-circumvention user, the EU, has extended its existing anti-dumping coverage by an additional annual import value of USD 2 billion (in constant 2010 US dollars) via new anti-circumvention measures imposed in 1995–2013. The total anti-circumvention measures increase by 50% the import coverage of the so extended twenty-two original anti-dumping measures.³

Current anti-circumvention provisions for anti-dumping are contained in: Council Regulation (EC) No 1225/2009 of 30 Nov. 2009 on the protection against dumped imports from countries not member of the EU [2009] OJ L 343/51.

This was confirmed in a recent ECJ case (see: Case T-385/11, BP Products North America Inc. v. Council of the European Union, Judgment of 16 Jan. 2014) and is one of the main differences between anti-circumvention provisions in the EU and those in the US (See for the US approach: Ericsson GE Mobile Communications, Inc. v. United States, 60 F.3d 778, 782 (Fed.Cir.1995); Smith Corona Corp. v. United States, 915 F.2d 683, 686 (Fed.Cir.1990)).

The EU's seventy-nine anti-circumvention initiations in 1995–2013 investigate a total of USD 4.6 billion, and the thirty-two anti-dumping measures investigated initially covered USD 6.2 billion (figures are in constant 2010 US dollars). Calculations are based on the import values in the year prior to the initiation of the respective investigation.

of cases 2000 01 AD investigations ·-- · AD measures AC investigations ---- AC measures

Figure 1 EU's AD and AC Investigations and Measures

Source: Anti-circumvention (AC) data is collected by Erbahar from the EU's official journal and the anti-dumping (AD) data is from the Temporary Trade Barriers Database (Bown, 2014).

Table 1 EU's Thirty-Two AD Measures That Are Targeted by AC Investigations

Original Country	Original Product	Original AD Imposition Year	AC Initiation Year	AC Measure Year	Value of Original Imports in Millions of 2010 USD (Initiation, t-1)	Value of AC Imports in Millions of 2010 USD (Initiation, t-1)	Value of AC Imports in Millions of 2010 USD (Initiation, t-1) for Measures Imposed
China	Silicon metal	1990	2006, 2012	2007, 2013	45	21	21
	Disposable lighters	1991	1998(4), 2012	1999(2), 2013	2	32	24
	Certain magnetic disks	1993	1995(9), 1999		7	607	
	Bicycles	1993	1996, 2012(4)	1997, 2013(4)	169	279	279
	Certain tube or pipe fittings of iron or steel	1996	1999, 2004(2), 2005	2000, 2004(2), 2006	9	28	28
	Coumarin	1996	2004(2), 2006(2)	2004(2), 2006(2)	5	4	4

Original Country	Original Product	Original AD Imposition Year	AC Initiation Year	AC Measure Year	Value of Original Imports in Millions of 2010 USD (Initiation, t-1)	Value of AC Imports in Millions of 2010 USD (Initiation, t-1)	Value of AC Imports in Millions of 2010 USD (Initiation, t-1) for Measures Imposed
	Certain ring-binder mechanisms	1997	2003, 2004, 2005, 2007(2)	2004, 2006, 2007	17	12	5
	Glyphosate	1998	2001(2)	2002(2)	11	13	13
	Steel wire rope	1999	2004, 2009(2)	2004, 2010	25	128	107
	Integrated electronic compact fluorescent lamps	2001	2004(3)	2005(3)	88	17	17
	Certain zinc oxides	2002	2002(2), 2005	2003(2)	20	6	0
	Hand pallet trucks and parts	2005	2008	2009	45	12	12
	Stainless steel fasteners and parts	2005	2012(3)	2013	9	177	84
	Certain footwear with uppers of leather	2006	2007	2008	833	133	133
	Certain plastic sacks and bags	2006	2010	2011	479	528	528
	Certain iron or steel fasteners	2009	2010	2011	597	55	55
	Certain molybdenum wires	2010	2011(2), 2012	2012, 2013	10	2	0
	Certain open mesh fabrics of glass fibres	2011	2011, 2012(2), 2013(3)	2012, 2013(4)	131	19	19

Original Country	Original Product	Original AD Imposition Year	AC Initiation Year	AC Measure Year	Value of Original Imports in Millions of 2010 USD (Initiation, t-1)	Value of AC Imports in Millions of 2010 USD (Initiation, t-1)	Value of AC Imports in Millions of 2010 USD (Initiation, t-1) for Measures Imposed
	Certain aluminium foil	2009	2012		173	missing	
Belarus	Polyester staple fibre	1996	1997	1997	28	13	13
Brazil	Malleable cast iron pipe fittings	2000	2002	2003	18	7	7
India	PET film*	2001	2004(2)	2004(2)	18	14	14
	Certain graphite electrode systems*	2004	2007		25	22	
Japan	Electronic weighing scales	1986	1996(2)		missing	23	
	Certain magnetic disks	1993	1995(9)		168	164	
	Television camera systems	1994	1998		1,759	1,081	
Russia	Seamless pipes and tubes of iron or non-alloy steel	1997	2003		35	7	
Singapore	Electronic weighing scales	1993	1996		4	6	
Taiwan	Certain magnetic disks	1993	1995(9), 1999		13	210	
Ukraine	Steel wire rope	1999	2003	2004	3	2	2
	Seamless pipes and tubes	2000	2003		39	20	
USA	Biodiesel*	2009	2010(3)	2011(2)	1,433	972	635
TOTAL					6,216	4,614	2,001

Notes: * indicates that the anti-dumping measure has a simultaneous countervailing duty in place. The figures in parentheses indicate the number of cases (for column four) or measures (for column five) for that year. Import

values correspond to the year prior to the initiation of the respective investigation so that they are not affected by the subsequent measure. Values were converted to 2010 USD for comparison using the US' historical CPI index from the Bureau of Labor Statistics.

Source: Authors' calculations using the anti-circumvention data collected by Erbahar and the Temporary Trade Barriers Database (Bown, 2014) matched to import value data at the HS8 level (WTO-IDB and TRAINS, WITS), and if missing at the HS6 level (COMTRADE, WITS).

There are clearly economic incentives to 'get around' paying anti-dumping duties, such as price differences in different markets creating arbitrage opportunities, which, in the absence of large trade costs, may lead to trade diversion (Viner, 1950), and trade deflection and trade depression (Bown and Crowley, 2006, 2007). These incentives might also lure a potential importer/exporter that is faced with duties to succumb to creative circumvention methods. However, extension of anti-dumping via AC currently follows only domestic rules; it was challenged without great success in a GATT case and has been considered as outside the authority of panels in the China-Autos case. Several countries established their own anti-circumvention procedures. This discretion in electing the rules and procedures to expand application of anti-dumping duties may create a tension between, on the one hand, the necessity to create anti-circumvention provisions to ensure effective application of anti-dumping duties and, on the other hand, the **highly potential protectionist**

Trade diversion refers to the diversion of trade flows from a more efficient exporter to a less efficient one due to granting of preferences. Trade deflection is the deflection of exports from the negatively discriminated exporter to third countries, and trade depression is the depression of exports from the third country to the negatively discriminated exporter.

See J. Viner, *The Customs Union Issue*. Carnegie Endowment for International Peace, New York (1950); C.P. Bown & M. Crowley, *Policy Externalities: How US Antidumping Affects Japanese Exports to the EU*, 22 Eur. J. Political Econ. 696–714 (2006); C.P. Bown & M. Crowley, *Trade Deflection and Trade Depression*, 72(1) J. Intl. Econ. 176–201 (2007).

Japan brought a GATT panel case against EU anti-circumvention rules Regulation on Imports of Parts and Components against the EU in 1988. The GATT panel requested the EU to amend some of its rules (which were indeed amended to comply with the GATT panel decision). While the panel considered anti-circumvention being contrary to the GATT, it only suggested its abolition leaving the final decision to the WTO Contracting Parties. In a recent case, the panel considered the issue outside of its authority because of the still ongoing negotiations on the subject within the WTO (see China-Autos case). See: GATT panel, L/6657, EEC – Regulation on Imports of Parts and Components, BISD 37S/132; WTO Panel, WT/DS339/R/WT/DS340/R and Add.1 and Add.2, China-Measures Affecting Imports of Automobile Parts, upheld (WT/DS339/R) and as modified (WT/DS340/R/WT/DS342/R) by WTO Appellate Body, WT/DS339/AB/R/WT/DS340/AB/R/WT/DS342/AB/R, DSR 2009:I, 119-DSR 2009:II, 625, para. 7.482–7.507. See also: Vermulst & Waer, EC Anti-dumping Law and Practice (Sweet and Maxwell 1996); L. Puccio 20 Years after Marrakesh: Reconsidering the Effects of Preferential Rules of Origin and Anti-Circumvention Rules on Trade in Inputs and Global Production Networks, 5 Eur. Y.B. Intl. Econ. L. (2014).

Among them are Argentina, Australia, Brazil, Colombia, India, Mexico, South Africa, Turkey, and

use of anti-circumvention as a way to increase anti-dumping measures' reach, without WTO interference.⁸

The application to anti-circumvention provisions of the principle of proportionality should avoid such a trade-off and ensure that the rules are not applied in a protectionist way but only to effectively enforce the anti-dumping duty applied. The principle of proportionality was first applied by the ECJ in the Starway case, where the court stated that anti-circumvention could only extend the anti-dumping duty to those goods that genuinely were circumventing the dumping duty, goods that instead were found to have an origin different from the dumping country should be exempted from the extension of the anti-dumping duty. In other words, AC must not be applied indiscriminately to any product coming from the third country, where circumvention was found, but only to those goods effectively engaging in the circumvention. The EU AC provide for three main tests: a like product test, a circumvented trade flow test and an injury and dumping test. We examine, how the EU rules apply the principle of proportionality. In particular, for anti-circumvention measures to be proportional, i.e., to only exclusively pursue the objective of ensuring effective application of anti-dumping duties, the tests employed should both identify those goods that genuinely are engaging in circumvention but also undermine the effectiveness of the anti-dumping duty. To genuinely identify circumvention we need first a clear identification of 'like' product but also of 'like' origin as products subject to dumping have both a product and origin scope. We also need to prove the intent to circumvent, i.e., a change in the trade pattern that does not have any other justification beyond avoiding the anti-dumping. To show that the effectiveness of the anti-dumping provision is undermined, the persistence of dumping must also be assessed. All four elements (like product, like origin, intent and persistent injury) must be positively established in order for anti-circumvention provisions to be proportional.

There is a small albeit thorough literature on the legal rules of anti-circumvention. ¹⁰ Previous legal works focus mainly on the presentation and

⁸ See supra n. 6.

Case T-80/97, Starway v. Council, [2000] ECR II-3099.

See in particular: Van Bael & Bellis, Anti-dumping and Other Protection Laws of the EC (Kluwer Law International 2011); Vermulst and Waer (1996), supra; Yu, Circumvention and Anti-Circumvention Measures – the Impact on Anti-Dumping Practice in International Law (2008) (authors had access only to the limited version on Google E-Book); Ostoni, Anti-Dumping Circumvention in the EU and the US: Is There a Future for Multilateral Provisions Under the WTO, 10 Fordham J. Corp. & Fin. L. (2005); Yu, Circumvention and Anti-Circumvention in Anti-Dumping Practice: A New Problem in China's Outbound Trade, 41(5) J. World Trade (2007); L. Puccio (2013), supra; Vermulst and Waer, Anti-Diversion Rules in Anti-Dumping Procedures: Interface or Short Circuit for the Management of Interdependence?, in Customs and Trade Laws as Tools of Protection: Selected Essays (Vermulst & Graafsma eds, Cameron May Publishing 2005).

evolution of these anti-circumvention provisions¹¹ as well as on their legality with respect to WTO rules.¹² Some studies also compare EU rules to the US rules.¹³ Economic studies on circumvention are mostly related to tariff and fiscal evasion.¹⁴ As mentioned, Bown and Crowley (2006, 2007), and also Brenton (2001), Park (2009), and Prusa (2003) look at the trade-diverting effects of anti-dumping measures.¹⁵ In this paper, we will not take a WTO or a comparative law perspective, but focus exclusively in approaching the question via the proportionality principle as one of the main EU law principle. To our knowledge, this paper is the first attempt to provide a law and economic appraisal of anti-circumvention investigations.

The rest of the paper is organized as follows. Section 2 describes a simple theoretical model that explains the incentives to circumvent anti-dumping duties. Section 3 examines each test used by the EU in anti-circumvention investigations from a law and economics perspective by paying special attention to the proportionality principle. This section also illustrates three case studies using the descriptive statistics from a unique dataset on anti-circumvention investigations constructed by Erbahar. In section 4, we review the *ex-post* proportionality of the measures and examine firm exemptions. Finally, section 5 concludes.

2 ECONOMIC INCENTIVES TO CIRCUMVENT ANTI-DUMPING DUTIES

A newly imposed anti-dumping duty inevitably shrinks the profits of the affected exporting firm, and thus creates an incentive for circumvention. This is most

Van Bael and Bellis (2011), supra.

Vermulst and Waer (1996) and Puccio (2013), supra.

Ostoni (2005), Vermulst and Waer (2005), supra.

The literature in economics on this topic is related to the more developed literature on tariff evasion, which can give some further insight: see, among others, M.J. Ferrantino, X. Liu & Z. Wang, Evasion Behaviors of Exporters and Importers: Evidence from the U.S.-China Trade Data Discrepancy, 86 J. Intl. Econ. 141–157 (2012); R. Fisman & S. Wei, Tax Rates and Tax Evasion: Evidence from 'Missing Imports' in China 112 J. Political Econ. 471–500 (2004); P. Mishra, A. Subramanian & P. Topalova, Tariffs, Enforcement, and Customs Evasion: Evidence from India 92 J. Public Econ. 1907–1925 (2008); L. Rotunno & P. Vezina, Chinese Networks and Tariff Evasion, World Econ. 1772–1794 (2012); L. Rotunno, P. Vezina & Z. Wang, The Rise and Fall (Chinese) African Apparel Exports, 105 J. Dev. Econ. 152–163 (2013); J. Slemrod, Fixing the Leak in Okun's Bucket: Optimal Tax Progressivity when Avoidance Can Be Controlled, 55 J. Public Econ. 41–51 (1994); J. Slemrod, A General Model of the Behavioral Response to Taxation, 8 Intl. Tax & Public Fin. 119–128 (2001); D. Yang, Can Enforcement Backfire? Crime Displacement in the Context of Customs Reform in the Philippines, 90(1) Rev. Econ. & Statistics 90(1) 1–14 (2008).

Philippines, 90(1) Rev. Econ. & Statistics 90(1) 1–14 (2008).

See Bown, C. P. and M. Crowley (2006), supra; Bown, C. P. and M. Crowley (2007), supra; P. Brenton Anti-Dumping Policies in the EU and Trade Diversion, 17(3) Eur. J. Political Econ. 593–607 (2001); S. Park, The Trade Depressing and Trade Diversion Effects of Antidumping Actions: The Case of China, 20(3) China Econ. Rev. 542–548 (2009) and T. Prusa On the Spread and Impact of Antidumping, 34 Can. J. Econ. 591–611 (2003).

clearly explained in Mishra et al. (2008), where the authors model the incentives for a firm to evade tariffs in order to maximize profits. ¹⁶ They specifically look at the Indian tariff reform in the 1980s and 1990s and, in line with their theoretical prediction, find that the extent of duty evasion depends on the level of duties. They also find that this elasticity of evasion with respect to tariff levels declines with the quality of enforcement. ¹⁷ Their framework is readily applicable to our paper as circumvention of anti-dumping duties is closely linked to evasion of tariffs. Here, we summarize the key equations of Mishra et al. (2008) relabelled for an analysis of anti-dumping circumvention in order to show when it makes sense for a firm to circumvent.

After getting hit with an anti-dumping duty, the exporting firm is faced with the following profit maximization problem:

Eq.1:
$$\max \Pi_{\gamma} = M - (1 - \gamma)M * AD - C(\gamma, \mu, \theta),$$

where M is the inelastically exported fixed amount, 18 γ is the fraction of this amount that is circumvented, $(1-\gamma)$ is the fraction of exports that is not circumvented and thus face the ad-valorem duty AD, and C is the function representing the cost of circumvention, which increases with both γ and the probability of getting caught θ . C also increases with μ , which is the strictly positive 'extra' cost of circumvention (in economics terms, μ acts like a cost shifter). Indeed while fiscal evasion can be undertaken without extra costs (beyond the probability of getting caught), circumvention might require substantial additional costs such as changing the physical product characteristics or moving the location of production or shipping through an alternative transport route. Moreover, μ and θ themselves can be written as functions depending on the chosen circumvention practice (call it k). Indeed the three circumvention practices (trans-shipment, slightly modified products and assembly operations) will have different implementing costs changing the fraction of goods that can be ultimately circumvented; these practices will also make it easier or more difficult for authorities to detect circumvention. For that reason, we can add in equation 1, a subscript to μ , γ and θ .

The model in Mishra et al. (2008) is largely based on Slemrod (1994, 2001) and Yang (2008). Supra.

To test this, the authors look at product characteristics such as differentiability that are possibly related to the 'quality of enforcement' – or what we call in this paper as 'the probability of getting caught'.

As Mishra et al. (2008) explain, this assumption is made for simplicity and introducing a variable M subject to certain conditions does not change the implications of the model.

Eq. 2:
$$\max \Pi_{\gamma_k} = M - (1 - \sum_{k=1}^{3} \gamma_k) M * AD - \sum_{k=1}^{3} C_k (\gamma_k, \mu_k, \theta_k).$$

We can now describe our cost function C and to simplify matters, we can specify it as follows:¹⁹

Eq.3:
$$C_k = \mu_k \gamma_k^2 \theta_k^2$$
.

After plugging in our cost equation (eq.3) into the profit-maximizing function (eq.2), we can find the optimal fraction of goods that would be circumvented through each k method. This is given by the first order condition below:

Eq.4:
$$\gamma_k = \frac{M * AD}{2\mu_k \theta_k^2}$$
.

The condition above shows that the marginal cost of circumvention $(2\mu_k\gamma_k\theta_k^2)$ equals the marginal benefit of circumventing (M^*AD) . Note how the incentive to circumvent *increases* with the amount of exports M and the level of duty AD, and *decreases* with the cost shifter μ and the probability of getting caught θ (or the quality of enforcement). Intuitively, this means that an exporter that is hit with a larger duty in an important market will be more likely to evade duties, *ceteris paribus*.

Following Mishra et al. (2008), the following calculation shows that the elasticity of circumvention with respect to the level of duty (i.e., the given change in the amount circumvention for a given change in ad-valorem anti-dumping duty) depends on the cost shifter and the probability of getting caught:

Eq.5:
$$\frac{\delta\delta\gamma_k}{\delta\theta_k\delta AD} = -\frac{M}{\mu_k\theta_k^3} < 0.$$

This shows that the elasticity of circumvention with respect to the duty level *decreases* when the probability of getting caught is larger; in other words, given an increase in the anti-dumping duty applied, the related increase in the fraction of good circumvented will be smaller if the probability of getting caught is larger (similar relation holds for the cost shifter). These results emphasize the importance of the quality of enforcement.

This can be replaced with a number of alternative functional forms that satisfy certain conditions as discussed in Mishra et al. (2008), *supra*. These conditions make sure that the cost of circumvention is (1) positive, (2) increases with γ and θ , and (3) the marginal cost of circumvention increases with γ and θ .

Here, we assume that the sum of γ_1 , γ_2 , and γ_3 is between 0 and 1.

We could tentatively rank the different circumvention practices in terms of their inherent cost and their probability of getting caught. Denote k with 1 for slightly modified products, 2 for trans-shipment and 3 for assembly operations. If the modification of the product can occur without altering the existing manufacturing process, slightly modified products can have the lowest cost of circumvention, followed by trans-shipment (which will have extra transportation and storage costs) and finally followed by assembly operations (which will have production relocation costs). We will then have the following probable relation:

R.1:
$$\mu_1 < \mu_2 < \mu_3$$
.

However, if the modification of the product occurs with very little cost and without the need for extra transportation costs, the probability of being considered a 'like' product to the one subject to anti-dumping is higher, i.e., the probability of getting caught is also higher. The probability of getting caught will be lower for trans-shipment and even lower for assembly operations. This is fairly intuitive: (1) let's assume the slightly modified product has been modified at the least cost and without changing its location of production and shipment, then finding will need to focus on the interpretation of 'like' product alone. The trans-shipment method changes the declared origin of the product through using alternative shipping routes, which has extra trade costs, and thus beyond the finding that goods are 'like' products, the authorities would need to examine the real origin of the product in order to extend the existing duties. The assembly case requires positive finding of minor processing in order to establish circumvention, so even though the initial investment of production relocation is probably the most expensive, it is also probably the most difficult to detect. So we will have the following probable relation that is inversely related to relation 1:

R.2:
$$\theta_1 > \theta_2 > \theta_3$$
.

Considering the relations above and the impact of θ on the elasticity of γ with respect to AD, we can see why the majority of EU anti-circumvention cases initiated in 1995–2013 are trans-shipment (sixty out of seventy-nine), as it is probably the circumvention practice that minimizes the cost of evasion function. At the same time, here we only observe 'discovered' cases, thus creating a potential selection bias.

The remaining cases are 'slightly modified products' (twelve), and 'assembly operations' (twelve). The total number of cases exceeds seventy-nine, as a regulation extending the duty may sometimes account for more than one type.

We can further see whether circumvention is positively correlated with the level of duties and the value of exports. A similar remark as above on the observed circumventing activities and possible selection bias applies here. See Table 2 that shows the difference in duty levels and import values between the anti-dumping measures that are subsequently followed by anti-circumvention investigations, and those that were not.

Table 2 Duty Levels and Import Values in AC versus Non-AC Investigations

	# of Cases (1987–2013)	Ad-Valorem (or Equivalent) Duty		Value of Imports in USD in t-1	
		Mean	Median	Mean	Median
AD measures followed by AC investigations	31	48.0%	39.4%	USD 201 million	USD 25 million
AD measures not followed by AC investigations	317	34.2%	28.4%	USD 183 million	USD 29 million
<i>t-stat</i> for mean differences		2.81***		0.08	

Notes: *** significant at the 1% level. Cases are a subsample of measures that have ad-valorem or equivalent duties specified in the Temporary Trade Barriers Database (Bown, 2014). Value of imports are at the HS8 level (or if missing at the HS6 level) and correspond to the year before the initiation of the investigation (converted to 2010 USD comparison using the US' historical CPI index from the Bureau of Labor Statistics); statistics for value of imports are based on 1989–2013 due to data availability whereas the statistics for duty levels cover the entire 1987–2013 period.

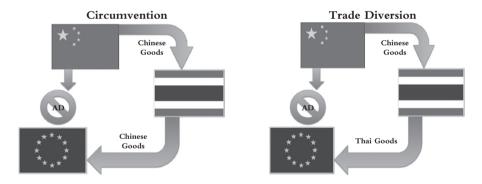
Source: Authors' data collection from the EU's Official Journal combined with the Temporary Trade Barriers Database (Bown, 2014). Import values are from TRAINS and COMTRADE, WITS (2014).

Both the ad-valorem duty levels and the mean value of imports are larger in anti-circumvention investigations, and the difference in duty levels is statistically significant at the 1% level. This might simply be due to import-competing firms tracking higher level of anti-dumping duties more closely rather than exporting (or importing) firms' greater efforts of circumvention when hit with larger duties. Another crucial point is the prevalence of China as the most frequent target in both anti-dumping and anti-circumvention investigations. However, it makes up a larger majority of anti-circumvention cases – perhaps because it is usually hit with higher duties?

We mentioned above that there can be an incentive to circumvent the anti-dumping duty. At the same time, **diversion of trade flows** might appear also

without circumvention simply via a change in the supplier, replacing the country subject to anti-dumping with another supplier(s) market. This trade diversion happens due to the implied preference granted to exporters that are spared by the newly imposed anti-dumping duty:²² the lower the costs of switching suppliers, the smaller the incentives to circumvent. The principle of proportionality, applied to AC, means that only the products circumventing the anti-dumping duty should face the extended duty, while products resulting from a genuine trade diversion should be exempted from the duty. The main legal issue facing AC will be to be able to make this distinction between circumvention and trade diversion. Indeed the two trade patterns (circumvention and diversion) may result in similar trade flows as suggested by the hypothetical cases described in Figure 2 below, which shows both a case of circumvention via trans-shipment and a case of both trade diversion (the China-EU flows are replaced by Thailand-EU flows) and trade deflection (the China-EU flow is replaced by a China-Thailand flow where the Chinese imports cover some of the Thailand's consumption not satisfied by local production that is now exported to the EU).

Figure 2 Trade Circumvention v. Trade Diversion Flows



The main element of distinction between trade flows stemming from circumvention or trade diversion will be ultimately the true origin of the good. Indeed, both trade diversion and circumvented trade flows will appear as changes in trade patterns justified by the imposition of an anti-dumping duty. This point will be important in assessing the EU rules' capacity to distinguish between those two trade flows.

There is a large economics literature on the trade-diverting effects of anti-dumping duties; see, among others Bown, C. P. and M. Crowley (2007); Brenton, P. (2001); Park S. (2009); Prusa, T. (2003), supra.

3 THE LAW AND ECONOMICS OF PROPORTIONALITY IN EU ANTI-CIR CUMVENTION INVESTIGATIONS

3.1 'Like products' and minor processing tests in anti-circumvention investigations

3.1[a] The 'Like Product' Test and Slightly Modified or Modified Products

The application of the proportionality principle entails that the extension of the anti-circumvention duty should only be applied to goods that are actually circumvented. In other words, the product under circumvention investigation must be a 'like' product of the good subjected to anti-dumping duties. As products subject to anti-dumping are defined both in terms of products' characteristics and in terms of origin, we would expect the like product definition to cover both this product and origin dimensions. However, in the case of trans-shipment and slightly modified products, only the product dimension is analysed in the 'like product' test. Assumptions on the true origin of the good are left to the second legal test, the change in trade pattern test, which we analyse in section 3.2.

The 'like product' test in EU AC focuses on product characteristics but it is not to be understood in a narrow sense. These 'like products' are not restricted to products falling under the same tariff classifications – considerations will on the contrary be given to physical characteristics, end use, and distribution channels. In the BP case, the CJEU reaffirmed that classification of goods is not a criteria to define 'like' products in circumvention proceedings. The two blends were declared 'alike' because they both were sold to customers after a similar transformation and had the same end use; thus, they were substitutable. The idea of substitutability was mainly defined as interchangeability and was emphasized in the *Ring-Binder Mechanisms* (RBMs) case: the RBMs investigated did not have

Case T-385/11, BP Products North America Inc. v. Council of the European Union, Judgment of 16 Jan. 2014, paras 94–107.

²⁴ Ibid.

This concept of substitutability and interchangeability is also present in US anti-dumping law and was recently used by the Appellate Body in a Subsidies and Countervailing Duty case (in the Civil Aircraft Case). See: Timken Co v. United States, 913 F. Supp. 580, 584 (CIT 1996); Appellate Body Report, European Communities and Certain Member States — Measures Affecting Trade in Large Civil Aircraft, WT/DS316/AB/R, adopted 1 Jun. 2011, pages 1118–1123.

Civil Aircraft, WT/DS316/AB/R, adopted 1 Jun. 2011, paras 1118–1123.

Council Regulation (EC) No 818/2008 of 13 Aug. 2008 amending Regulation (EC) No 2074/2004 imposing a definitive anti-dumping duty on imports of certain ring-binder

the same rectangular shape, but shared the same essential characteristics and end uses.

3.1[b] From Output to Parts: The Content Test for Assembly Operations

The inclusion of assembly operations is there to ensure that those assemblies do not constitute a mean to circumvent the anti-dumping imposed on the final assembled good. In EU law, assemblies of parts can only be considered a circumvention practice if: (1) the assembled product is 'like' the product subject to anti-dumping duty (the concept of 'likeness' is applied as explained in the previous section) and (2) assembly operations, using parts from the country subject to anti-dumping, is considered insufficient in terms of value added. Following the last substantial transformation concept, very fragmented production process can achieve EU or third country origin with very little value added. Therefore, AC establish two value content tests in order to determine whether assembly operations, stemming from parts originating from the dumping country, are insufficient and should be considered a circumvention practice. These two tests, included under Article 13(2) of the basic anti-dumping regulation, are: (1) the import content test and (2) the value added test.

The import content test provides that imported parts from the dumping country should not account for more than 60% value of total parts. In the *China-Bicycle parts* case, ²⁷ two firms were importing from China circa 60% value of their parts, of which 40% were declared as of Chinese origin. As the two firms failed to provide origin certificates for non-Chinese parts, the Commission disregarded the other proofs submitted on the origin of the 20% remaining parts and considered them Chinese for the purpose of the parts value test. ²⁸ Starway, one of the two companies, initiated proceedings. ²⁹ The court restated that the provisions under Article 13 should apply only to parts *originating* from the country subject to anti-dumping but that the burden of proof on the true origin

mechanisms originating in the People's Republic of China and terminating the investigation concerning the possible circumvention of anti-dumping measures imposed by that Regulation by imports of certain ring-binder mechanisms consigned from Thailand, whether declared as originating in Thailand or not, [2008] OJ L 221/1.

Council Regulation (EC) No 71/97 of 10 Jan. 1997, extending the definitive anti-dumping duty imposed by Regulation (EEC) No 2474/93 on bicycles originating in the People's Republic of China to imports of certain bicycles parts from the People's Republic of China and levying the extended duty on such imports registered under Regulation (EC) No 703/96, [1997] OJ L 16/55.

²⁸ Ibid

²⁹ Case T-80/97, Starway v. Council, supra.

of the parts relied on the firms and not the Commission. The Commission was however not entitled to specifically request certificates of origin to prove the origin of the parts and had to accept any kind of proof deemed sufficient to establish the origin of the parts.³⁰

The second test that needs to be positive for an assembly operation to be deemed a circumvention practice is a value added test according to which the value of the assembly undertaken within the Community or in the third country should account for less than 25% of the total value of the assembled product. Generally, both tests need to be positive in order to conclude that there is circumvention through an assembly operation.³¹ The above tests clearly identify both the 'likeness' of the assembled products as well as 'like' origin of the parts and of the assembled product subject to the anti-dumping.

3.2 The 'Change of trade pattern' and 'Insufficient due Cause...' tests

3.2[a] The Legal Test

The change of trade pattern test compares the EU imports of the product from the country subject to anti-dumping and the EU imports of the product from the country under circumvention investigation. This triangular pattern is the cardinal piece of evidence used to demonstrate the realization of circumvention both under Article 13(1) for trans-shipment and slightly modified product, and under Article 13(2) for assembly operations. Depending on the type of circumvention, investigations look at flows of the 'like' product (for trans-shipment and slightly modified products) or at flows of parts (for assembly operations).

Article 13(1) and 13(2) of the basic anti-dumping regulation.

ii Ibid., paras 104–112.

The following examples, Electronic Weighing Scales (Japan-Singapore, EU) and Electronic Weighing Scales (Japan-Indonesia, EU), show cases where the anti-circumvention was terminated because only one of the two tests for circumvention via assembly operation was proven. As counter-example, in the China-Bicycles case, the failure of one of the test did not bring termination of the anti-circumvention proceeding. See: Commission Regulation (EC) No 984/97 of 30 May 1997, terminating the investigation concerning the circumvention of anti-dumping measures imposed by Council Regulation (EEC) No 993/93 and (EEC) No 2887/93 on imports of certain electronic weighing scales originating in Japan and Singapore, by imports of parts thereof assembled in the European Community and ceasing registration of these parts, [1997] OJ L 141/57; Commission Regulation (EC) No 985/97 of 30 May 1997, terminating the investigation of definitive anti-dumping measures imposed by Council Regulation (EC) No 993/93 on imports of certain retail electronic weighing scales originating in Japan by imports of the same product assembled in and/or transhipped through Indonesia, and ceasing registration of this product, [1997] OJ L 141/61 and Council Regulation (EC) No 71/97, supra.

The Commission needs simply to acknowledge that at the time of the imposition of the anti-dumping measures the EU imports of the product subject to anti-dumping decreased, while after a reasonable period of time after the imposition of the anti-dumping measures imports of the 'like' product under circumvention investigation increased. If the circumvention is achieved through trans-shipment via a third country or final assembly in a third country, the Commission will examine whether parallel to the increase in EU imports from the third country, there was an increase of exports of the 'like' product or of its parts from the country subject to anti-dumping to the third country. The temporal element, i.e., the fact that the change in trade pattern occurred after the imposition of the anti-dumping, is used as the key proof of 'insufficient due cause beyond the circumvention of the measure'. Indeed it is then up to the investigated firms to prove that there was sufficient due cause for that trade pattern beyond the circumvention of the trade remedy measure.

To assess whether circumvention really occurred, the Commission can still consider whether exports from the original country to the third country under investigation were consumed locally.³³ Beyond evidence of absence of local consumption, the Commission has complemented the analysis of the change in trade patterns with considerations regarding the existence of local production facilities ³⁴

3.2[b] The Distinction between Trade Diversion and Circumvention, a Missing Test?

While the 'change in trade pattern' test only gives evidence on the element of intention, it does not give sufficient evidence to distinguish circumvention from trade diversion as the Commission is not obliged to prove the exact origin of the EC imports originating from third countries. In both the case of trans-shipment and of slightly modified products no evidence was requested on the true origin of the goods. The Commission simply infers it from the observed change in trade

Council Regulation (EC) No 388/2008 of 29 Apr. 2008 extending the definitive anti-dumping measures imposed by Regulation (EC) No 1472/2006 on imports of certain footwear with uppers of leather originating in the People's Republic of China to imports of the same product consigned from the Macao SAR, whether declared as originating in the Macao SAR or not, [1998] OJ L 117/1.

See: Commission Regulation (EC) No 799/2000 of 17 Apr. 2000 terminating the investigation concerning the alleged circumvention of anti-dumping measures imposed by Council Regulation (EEC) No 2861/93 on imports of certain magnetic disks (3,5' microdisks) originating in Taiwan and the People's Republic of China by assembly operations in the Community, and discontinuing the registration of imports of microdisk parts introduced by Regulation (EC) No 1646/1999, [2000] OJ L 96/30; Commission Regulation (EC) No 1229/2007 of 19 Oct. 2007 terminating the investigation concerning possible circumvention of anti-dumping measures imposed by Council Regulation (EC) No 1629/2004 on imports of certain graphite electrode systems originating in India, [2007] OJ L 277/18 and Commission Regulation (EC) No 984/97, supra; etc.

pattern, all it needs to prove is that there is insufficient economic rationale for the change of trade pattern and this allows the Commission to utter a presumption on the true origin of the goods and on the existence of circumvention. The main assumption here is that a negative finding on the 'insufficient due cause' test implies that there is trade diversion instead of circumvention (and vice versa).³⁵

Below we give examples on the problem of distinguishing circumvention from diversion using descriptive trade flows statistics as the Commission does in order to assess the 'change in trade pattern' test.

Coumarin (trans-shipment)

The *coumarin* case is a good example of an anti-circumvention case that involves trans-shipment, as depicted in Figures 3a and 3b. The first figure shows the EU's imports of coumarin, an organic chemical that has numerous applications. The EU first imposed an anti-dumping duty on Chinese coumarin in 1996, then imposed anti-circumvention measures on India and Thailand in 2004, ³⁶ and on Indonesia and Malaysia in 2006. ³⁷ The figure shows that the volume of coumarin imported from China fell to almost zero after the measure and was gradually replaced by products coming from India and Thailand. The Commission curtailed this by imposing measures. The effect of the anti-circumvention measure was to bring back the level of imports to the initial rise in Indian production in 2002. This occurred because an exporting producer in India offered a price undertaking³⁸ in accordance with Article 8(1) of the basic regulation.

Indeed, the Commission did spot genuine trade diversion in at least one case; e.g., Commission Regulation (EC) No 465/2006 of 21 Mar. 2006, terminating the investigation concerning the possible circumvention of anti-dumping measures imposed by Council Regulation (EC) No 408/2002 on imports of certain zinc oxides originating in the People's Republic of China by imports of certain zinc oxides consigned from Kazakhstan whether declared as originating in Kazakhstan or not and terminating the registration of such imports imposed by Regulation (EC) No 1289/2005, [2009] OJ L83/6.

Council Regulation (EC) No 2272/2004 of 22 Dec. 2004 extending the definitive anti-dumping duty imposed by Regulation (EC) No 769/2002 on imports of coumarin originating in the People's Republic of China to imports of coumarin consigned from India or Thailand, whether declared as originating in India or Thailand or not, [2004] OJ L 396/18.

Gouncil Regulation (EC) No 1650/2006 of 7 Nov. 2006 extending the definitive anti-dumping duty imposed by Regulation (EC) No 769/2002 on imports of coumarin originating in the People's Republic of China to imports of coumarin consigned from Indonesia or Malaysia, whether declared as originating in Indonesia or Malaysia or not, [2006] OJ L 311/1.

Commission Decision of 3 Jan. 2005 accepting an undertaking offered in connection with the anti-circumvention investigation concerning anti-dumping measures imposed by Council Regulation (EC) No 769/2002 on imports of coumarin originating in the People's Republic of China by imports of coumarin consigned from India or Thailand, whether declared as originating in India or Thailand or not [2005] OJ L 1/15.

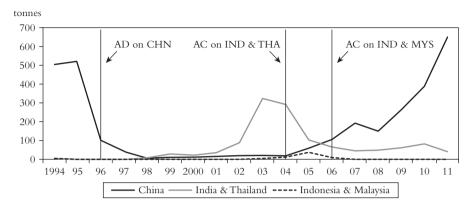
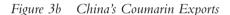
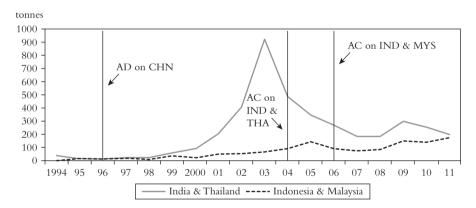


Figure 3a EU's Coumarin Imports





Source: EU's import data for coumarin (HS6: 293221) is from TRAINS and WTO-IDB, WITS (2014). China's export data for coumarin (HS6: 293221) is from COMTRADE, WITS (2014).

After the reduction of the Indian and Thai imports, a small uptick in imports from Indonesia and Malaysia took place, again stopped by the Commission via new anti-circumvention measures. Only then the Chinese exports surge, even though the anti-dumping measures remain in force. Contrast this with Figure 3b that shows Chinese exports of coumarin to third countries.

Note how exports to India and Thailand surged after 2000 only to fall after the EU's anti-circumvention measures. One would not expect these exports to decrease drastically after the EU's measures that target goods coming from India and Thailand. Even though these charts are not enough to prove that there is circumvention, an *ex-post* analysis does indicate that there might be trans-shipment, as the Chinese (or the importers of Chinese goods) seem to be trying alternative routes to ship their goods from before succumbing to export directly and pay the duties.

As a counterfactual, Figure 4 shows a case where the EU imposed an anti-dumping duty on *graphite electrodes*, important inputs that are used to melt scrap iron and steel, from India in 2004.³⁹ Note how the Indian exports are being replaced by Chinese exports – however, as realized by the anti-dumping investigation on graphite electrodes from China initiated in 2010,⁴⁰ this trade pattern is not due to circumvention but possibly due to trade diversion. Furthermore, official trade data shows that there was none or negligible exports of graphite electrodes from India to China in 1996–2011. The increasing pre-2004 trend also indicates that the Chinese might be gaining market share irrespective of the duties on Indian goods. The above example highlights that one would need to consider multiple factors before finding circumvention and therefore econometric analysis would be more effective than descriptive statistics or that in any case more information on finding the true origin of the shipments which is needed to affirmatively assess circumvention.

tonnes 100 80 AD on IND 60 40 20 2000 01 02 03 04 05 06 07 India ---- China

Figure 4 EU's Graphite Electrodes Imports

Source: EU's import data for graphite electrodes (CN8: 38011000) is from WTO-IDB, WITS (2014).

Gouncil Regulation (EC) No 1629/2004 of 18 Sep. 2004 imposing a definitive anti-dumping duty and collecting definitively the provisional duty imposed on imports of certain graphite electrode systems originating in India, [2004] OJ L 295/10.

Announcement (EC) of 17 Dec. 2010: Notice of initiation of an anti-dumping proceeding concerning imports of certain graphite electrode systems originating in the People's Republic of China, [2010] OJ C 343/24.

tonnes 2500 AC on VNM 2000 ✓ AD on CHN AD on THA 1500 1000 500 AC on LAO 1996 97 98 99 2000 01 02 03 04 05 Vietnam Thailand ---- Laos

Figure 5a EU's Ring-Binder Mechanism Imports

Figure 5b China's Ring-Binder Mechanism Exports

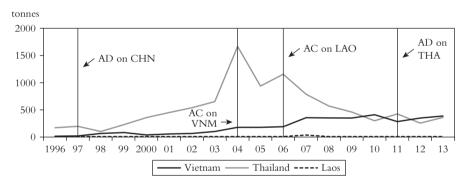
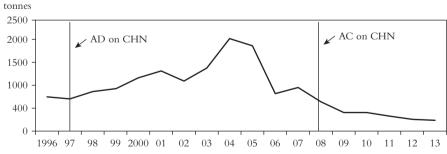


Figure 5c EU's Ring-Binder Mechanism Imports from China



Source: Trade data for ring-binder mechanisms (HS6: 830510) is from COMTRADE, WITS (2014).

Ring-binder Mechanisms (trans-shipment and modification)

The RBMs case is another interesting investigation that involves allegations of both trans-shipment and slight product modification. The EU first imposed an

anti-dumping measure on these products from China and Malaysia in 1997. The Commission initiated three separate anti-circumvention investigations on Chinese trans-shipment via Vietnam, Thailand, and Laos, respectively. Figure 5a shows the EU's imports from these three countries - note how these imports were non-existent until after the anti-dumping measures on Chinese goods.

The first investigation involved imports from Vietnam to which the EU had imposed anti-circumvention measures in 2004. 41 The second investigation targeted products coming from Thailand in 2004, 42 but the investigators could not find circumvention and the investigation was terminated. The third investigation looked at imports from Laos where the Commission extended the measures in 2006 leading to the complete elimination of these imports. 43 Finally, in 2011, the EU initiated an investigation on RBMs from Thailand and imposed anti-dumping measures. 44 Figure 5b shows the other side of the coin and depicts China's exports to these three countries. Note how these exports rise after 1998 for Thailand, and slightly for Vietnam. However, the data does not show a significant increase in Chinese exports to Laos.

In 2007, the Commission began an anti-circumvention investigation on Chinese RBMs that are slightly modified coming from China or Thailand. The measures were imposed on China alone in 2008. We notice first of all that this is a slightly modified case different from the ones we discussed above. The other cases were also cases of trans-shipment (via Thailand, Vietnam or Laos), i.e., the modified product was also presumed to be shipped via a third country. In the case of the modified RBMs from China there is no trans-shipment. It is difficult to see the change in pattern in a graph, as publically available trade data is not disaggregated enough to differentiate slightly modified products since they generally fall under the same CN8 code. Figure 5c, however, shows that, contrary to expectations, Chinese imports rose after the anti-dumping measure in 1997, only to gradually

Council Regulation (EC) No 1208/2004 of 28 Jun. 2004 extending the definitive anti-dumping measures imposed by Regulation (EC) No 119/97 on imports of certain ring-binder mechanisms originating in the People's Republic of China to imports of the same product consigned from the Socialist Republic of Vietnam [2004] OJ L 232/1. Commission Regulation (EC) No 2231/2004 of 23 Dec. 2004 terminating the investigation

concerning the possible circumvention of anti-dumping measures imposed by Council Regulation (EC) No 119/97 on imports of certain ring-binder mechanisms originating in the People's Republic of China by imports of certain ring-binder mechanisms originating in the People's Republic of China by imports of certain ring-binder mechanisms consigned from Thailand, whether declared as originating in Thailand or not, and terminating the registration of such imports imposed by Regulation (EC) No 844/2004, [2004] OJ L 379/68.

Council Regulation (EC) No 33/2006 of 9 Jan. 2006 extending the definitive anti-dumping duty imposed by Regulation (EC) No 2074/2004 on imports of certain ring-binder mechanisms originating in the People's Republic of China to imports of the same product consigned from the

Lao People's Democratic Republic, [2006] OJ L 7/1.

Council Implementing Regulation (EU) No 792/2011 of 5 Aug. 2011 imposing a definitive anti-dumping duty and collecting definitively the provisional duty imposed on imports of certain ring-binder mechanisms originating in Thailand, [2011] OJ L 204/11.

vanish after the anti-circumvention measure in 2008 indicating that there might be circumvention through slight modification under the same CN8 code (albeit not subject to the original duty).

Disaggregated descriptive statistics may help in determining the existence of circumvention activities in the case of slightly modified products as there is no need in these cases to distinguish between trade diversion and trade circumvention. However descriptive statistics on trade flow changes do not contain sufficient information to positively determine the presence of circumvention in cases where trans-shipment is involved (including slightly modified goods that are trans-shipped). The reason for the above is the lack of information provided by these data on the true origin and therefore these data lack the relevant information to distinguish circumvention from other trade flow changes created by the imposition of an anti-dumping.

3.3 The undermining of the remedial effect of anti-dumping and the dumping evidence test

The purpose of anti-circumvention is to ensure the effectiveness of anti-dumping measures. Therefore it is not sufficient to prove that circumvention has occurred, the investigation must also prove that the practice is undermining the remedial effect of the anti-dumping, either in terms of prices or in terms of volumes (but not necessarily both) and the continued dumping practice. This can be seen as a *necessity test* for the extension of the anti-dumping duty.

As the previous test on change of trade pattern already gives data on volumes, this is also used as evidence of injury. Still, often, both criteria (volumes and prices) are mentioned in the final considerations of the Commission. For the price criteria, the reference price used will be the one for the dumped product considered in the *original* dumping investigation. All price assessments (normal values, dumping margin) are made on the basis of the last available data in the original investigation (i.e., this can be the original anti-dumping investigation or its last review).

The case Stainless steel fasteners and parts thereof (China, Philippines-Malaysia-Thailand) raised the issue of whether the original data was not outdated; indeed the original regulation of this case dated back to 2005 while the anti-circumvention investigation took place in 2012. ⁴⁵ Adjustments were then

Council Implementing Regulation (EU) No 205/2013 of 7 Mar. 2013 extending the definitive anti-dumping duty imposed by Implementing Regulation (EU) No 2/2012 on imports of certain stainless steel fasteners and parts thereof originating in the People's Republic of China to imports of certain stainless steel fasteners consigned from the Philippines, whether declared as originating in the Philippines or not and terminating the investigation concerning possible circumvention of anti-dumping measures imposed by that regulation by imports of certain stainless steel fasteners

made to reference prices reflecting the increase in raw materials prices as well as on the remaining sales and manufacturing costs on the basis of the Union consumer price index (CPI).

Adjustments to the original dumping margin may be introduced only when necessary at the discretion of the Commission. Note that the exporting firm will only want to circumvent if it can charge a price that is lower than the new CIF price that includes that duty, ceteris paribus. This means that the firm will almost surely continue 'dumping' through circumvention, although the 'dumping margin' will likely be lower than before due to the added cost of circumvention. In order for the measures to be proportional, the dumping margin of the circumventing good should be defined ex novo and would most probably be less than the originally calculated dumping margin. 46 In the assembly operation cases, problems concerning the proportionality of AC appear in the test assessing the undermining and dumping effect of the product circumventing. In fact, the undermining effect and the dumping tests are assessed on the assembled product, not on parts. In the case of assembly operations established in the EU, the anti-circumvention duty will be imposed on the different parts coming from the country subject to the original anti-dumping duty. In the latter case, the undermining and dumping test are still assessed on the final assembled good, following the presumption that the final good and parts prices move in the same direction and that if dumping occurs in the final good, then it must be related to the use of these imported parts. This questionable presumption allows the Commission to simply use the original data available on the final assembled good. However, production costs of the assembled good include both the actual manufacturing costs (including both parts costs and other fixed and variable costs connected to the manufacturing process) as well as selling and general administrative costs (or SGA). As a result, pricing below costs

and parts thereof consigned from Malaysia and Thailand, whether declared as originating in Malaysia and Thailand or not, [2013] OJ L 68/1.

While we strongly argue that the dumping margin should be redefined ex novo taking into account the new costs. However, the duty actually imposed on the circumventing good could be thought to be higher so as to act as a deterrent for a firm that is considering circumvention. Let us assume a are the profits from exporting to the EU, t is the loss in profits due to the anti-dumping duty, c is the exogenous cost of circumvention, and θ is the probability of getting caught as before. If the firm does not circumvent the anti-dumping, it will have profits equal to the profits a minus the loss due to the anti-dumping duty t. The profits of the firm circumventing will depend on the probability of getting caught and the punishment for it. With probability $(1-\theta)$ the firm is not caught circumventing and profits are equal to the profits a minus the cost of circumvention c. While with probability θ the firm is caught circumventing and its profits are a minus c minus the anti-dumping duty cost t. A straightforward calculation shows that a firm would always try to circumvent as long as $t(1-\theta) > c$, and assuming that c is small enough and θ is less than unity, circumvention is very likely. If there was a stronger 'punishment' for circumvention, such as a punishment cost for circumventing: 2t instead of t (e.g., doubling the anti-dumping duty), then the firm will circumvent if and only if $t(1-2\theta) > c$, meaning that there will be no attempt to circumvent when the quality of enforcement is high ($\theta \ge 0.5$), regardless of other parameters.

(i.e., dumping) can occur even though the parts' prices are not below their respective costs.

4 EX-POST PROPORTIONALITY OF THE MEASURES AND FIRM EXEMPTIONS

We saw earlier that no origin assessment was needed to define like products in the case of trans-shipment and slightly modified products and that the trade pattern test did not provide sufficient information to assess origin of the goods. Firms can however request *ex-post*, following Article 13(4), to be exempted from the extended anti-dumping duty by proving that their exports are not circumventing and have genuinely a different origin from that of the country subject to dumping. The granting of exemptions is fundamental to ensure that the 'proportionality' of the anti-circumvention measure, as framed by the court in the *Starway* case, ⁴⁷ is ensured. Indeed exemption will permit *ex post* to discriminate between firms that actually circumvent and firms that do not.

Exemption requests should be distinguished from requests for undertakings. Firms that were found to circumvent goods can accept or seek undertakings. Undertakings can consist of the maintenance of a certain price level or the imposition of a production threshold (quantitative threshold) in order to correct for the dumping effect. In the coumarin case, 48 the undertaking imposes a quantitative ceiling not on the alleged circumvented Chinese coumarin but on the genuinely Indian produced coumarin. In order to safeguard the 'proportionality' principle of the measure, undertaking should only impose conditions on prices and volumes of dumped circumventing goods and cannot impose any constraints on products that otherwise would be granted exemptions anti-circumvention duty. Indeed, while in the case of circumventing good (assumed to be dumping), the quantitative restriction on export would either increase the price of the good (thus reducing the dumping margin) or reduce the impact of the dumping (via lower volume of exports), for a genuine third country product quantitative restrictions have the same impact of a VER.

Finally, in the case of assemblies, exemption seems to be granted only by showing a decrease in the import of parts from the dumping country.⁴⁹ The

48 Commission Decision of 3 Jan. 2005 accepting an undertaking offered in connection with the anti-circumvention investigation concerning anti-dumping measures imposed by Council Regulation (EC) No 769/2002, supra.

⁴⁷ Case T-80/97, Starway v. Council, supra.

See: Council Regulation (EC) No 171/2008 of 25 Feb. 2008 maintaining Council Regulation (EC) No 71/97 on the extension of the anti-dumping duty imposed on imports of bicycles originating in the People's Republic of China to imports of certain bicycle parts from the People's Republic of China, [2008] OJ L 55/1.

economic consequences of finding assembly-circumvention could then affect both the producer of the final good importing the parts, as well as a reseller of parts. ⁵⁰

5 CONCLUSION

In this paper we presented some reflections on the law and economics of anti-circumvention measures using statistics from a unique dataset on the EU's anti-circumvention investigations constructed by Erbahar. In particular, through a simple model we showed that the introduction of an anti-dumping duty does indeed constitute an incentive for circumvention which might result in continued dumping, albeit with smaller dumping margins due to the extra circumvention cost. To ensure that circumvention does not occur and safeguard the effective application of anti-dumping, AC was enacted to extend the anti-dumping duty to the circumventing products. In fact, the EU had seventy-nine anti-circumvention investigations over the 1995–2013 period, and according to our estimations, has extended its existing anti-dumping coverage by an additional annual import value of USD 2 billion via new AC measures imposed in this period.

Incentives to circumvent is not the only market response to the introduction of an anti-dumping; depending on the cost of circumvention and the volume of circumvention occurring, trade flows can be diverted from the country subject to anti-dumping to a new supplier in a third country. In this study we argued that the most crucial element of an anti-circumvention investigation should be the differentiation between circumvention and trade diversion. Based on our analysis of the EU's anti-circumvention investigations, it is important to emphasize that anti-circumvention should only extend to products that circumvent and not to genuine trade diversion in order to ensure the *proportionality* of the AC. Proportionality can certainly be applied *ex-post* as in the case of exemptions. However, exemptions must be applied consistently to goods (final goods or parts) that can prove their true origin as different from the one of the dumping country or that can prove that the product in question (final good or parts alike) is not dumped.

See as an example of this, joined cases T-74/97 and T-75/97, Büchel v. Council and Commission, [2000] ECR II-3067.