BIS Department for Business Innovation & Skills

ANTI-DUMPING: SELECTED ECONOMIC ISSUES

Trade and Investment Analytical Papers
Topic 18 of 18

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Contents

Anti-dumping: Selected Economic Issues

Summary

Trade Defence measures take the form of Anti-dumping (AD) and Anti-subsidy (AS) measures - both aimed at tackling “unfair trade” - and Safeguards, aimed at providing relief from the impact of fair trade. In the EU, most trade defence measures take the form of Anti-dumping measures.

Although AD affects a relatively small proportion of trade directly, trade figures alone tend to understate its importance. For producers, consumers and exporters involved, AD investigations and the resulting measures can have profound effects and so tend to be controversial.

By the standards of some other countries that impose AD measures, the EU is a fairly restrained user in terms of the number of cases, and the size and duration of measures. Partly this reflects the fact that the EU Regulation is more liberal than is strictly required by WTO law. Despite this, a number of aspects of the conduct of EU AD policy has come in for much criticism. These include the fact that investigations do not distinguish between the various types of pricing behaviour which give rise to dumping, difficulties in isolating the role of dumping in causing injury to the domestic industries and the failure to take full account of all economic interests in assessing the impact of measures. Across a range of these issues, the available economic evidence tends to support the criticisms; shortcomings in the approach to AD cases inflict costs on the EU economic interests, as well as on overseas exporters. In short, the evidence suggests that there is a case for reform.

Introduction

WTO Agreements allow countries to impose temporary import restrictions to combat the effects of both “unfair” trade and unexpected surges of “fairly” traded imports which cause, or threaten to cause, injury to domestic industry. Collectively, these are known as Trade Defence Measures (TDMs).

While multilateral negotiations can take years to influence trade barriers, TDMs can be implemented at relatively short notice, without international agreement, and can have profound effects on individual markets. TDMs can also be controversial. They are therefore an important part of trade policy. This note examines some of the most important economics aspects of TDMs, with a particular emphasis on the use of Anti-dumping measures by the European Union.

What are trade defence measures?

There are three main types of trade defence measures:

Anti-dumping (AD) – measures on imports of goods exported at prices lower than prices of the same good in the domestic market or less than full costs of production plus a reasonable profit.

Anti Subsidy (AS) – measures on imports of goods benefiting from certain types of subsidy [1]

Safeguards (SG) – measures to counter the effects of an unforeseen surge of "fairly" traded imports.

TDMs can be imposed for a limited period only (SGs for four years and AD and AS for five), but AD and AS can be, and often are, renewed for longer periods. Measures can take a number of forms, though in most cases are tariffs. AD and AS are aimed at combating so-called unfair trade and are applied to specific trade partners. In the case of SG measures, there is no suggestion that the trade is unfair in any sense. Rather there is an acknowledgement that the domestic industry needs a breathing space to adjust to the competition posed by fairly traded imports. SGs are therefore applied to all trade partners.[2]

The use of Trade Defence Measures

Table 1 below shows the use of TDMs by the EU and other major WTO members over 1995-2010. In terms of numbers of cases, India is the largest user of TDIs followed by the US, the EU and Argentina. Comparing numbers of cases relative to the value of their imports, developing countries are the most intensive users of TDMs. By this measure, for example, the number of TDMs imposed by Argentina is 36 times higher than the EU or China. However, even this measure is of limited use in judging relative intensity of use as it does not include data on the value of trade covered by TDMs in each country.

[1] Only certain types of subsidy can be the subject of AS actions. There must be a financial contribution by a government or any public body which confers a benefit. Subsidies also have to be Specific (targeted on a particular company or group or companies, industry or region) or Prohibited (a subsidy targets export goods or goods substituting domestic inputs for imports).

[2] As always with trade policy, there are exceptions. For example, there are rules allowing the exemption of developing countries and free trade partners in some circumstances.

Developing countries are also the fastest growing users of TDMs, reflecting the spread in the number of countries adopting Trade Defence legislation and a growing intensity of use.

Table 1 New Trade Defence Measures 1995-2010

	AD	AS	SG (1)	Total	Goods Imports (2)	Ratio (3)
India	450	0	12	462	327	1.4
United States	301	70	6	377	1969	0.2
European Union	**271**	**16**	**3**	**290**	**1991**	**0.1**
Argentina	198	4	4	206	57	3.6
China	145	2	1	148	1395	0.1
Turkey	143	1	12	156	186	0.8
South Africa	128	5	1	134	94	1.4
Brazil	106	7	2	115	191	0.6
Canada	95	28	0	123	402	0.3
Mexico	84	8	0	92	311	0.3
Australia	82	3	0	85	202	0.4
Korea, Republic of	70	0	2	72	425	0.2

Source: WTO

(1) March 1995 to Oct 2010
(2) Merchandise Imports $bn
(3) TDMs per $bn

Why are TDMs Important (and controversial)?

Although TDMs typically affect a small part of trade (in the EU for example, less than 1% of goods imports), they can, nonetheless, be controversial. There are a number of reasons for this.

First, the share of trade subject to TDMs probably understates their true influence. The most obvious reason for this is that the imposition of TDMs tend to depress trade flows. Brown[3] attempts to adjust raw data for this effect. By his adjusted measure, Turkey is the most intensive user of TDIs and the US is the foremost developed country user. According to this measure, EU TDMs affect around 1.6% of trade.

[3] Chad Brown: Taking Stock of Antidumping, Safeguards and Countervailing Duties 1990-2009. World Bank Policy Research Working Paper 5436 Sept 2010

Table 2: Brown's Estimates of Coverage of Trade Defence Measures 2009

Country	Number of HS 06[4] Products Subject to TDMs	Import Share by Count (%)	Import Share by Value (%)
Turkey	273	5.31	3.05
India	308	6.09	2.94
Argentina	139	2.81	2.01
Brazil	78	1.53	1.73
China	46	0.87	1.71
Mexico	58	1.09	0.68
Indonesia	24	0.49	0.68
South Africa	40	0.76	0.25
USA	256	4.72	2.33
EU	137	2.5	1.59
Japan	3	0.06	1.06
Canada	69	1.27	0.64
Australia	31	0.6	0.4
South Korea	39	0.86	0.39

Source: Chad Brown: Taking Stock of Anti-dumping

Second, TDIs can have important "chilling" effects on trade way beyond their direct impact. Even the launch of an investigation can impose costs on companies and can deter trade. Vandenbuscche et al[5] for example found that that in cases where investigations were terminated, imports from the countries subject to the investigation declined by 17%.

AD measures in particular usually involve significant tariffs. The average EU industry MFN tariff is around 4.5%, but it is not uncommon for AD measures to be around 30%, and the highest in excess of 80%. AS measures tend to be lower, but still above average MFN rates.

[4] HS refers to the Harmonised System of Trade Classification. This classifies traded goods at various levels of disaggregation, the most detailed, internationally comparable level of disaggregation is the 6-digit level.

[5] Hylke Vandenbussche, Jozef Konings, Linda Springael: "Import Diversion under European Anti-Dumping Policy" 1999. NBER Working Paper 7340 http://www.nber.org/papers/w7340

Table 3 Approximate EU Average Dumping Duties 2008-10

	Average Duty %*
2010	32
2009	30
2008	30

Source: Simple averages from Council Implementing Regulations . DG Trade Website.

Table 4 Duties in recent EU Anti Subsidy Cases 2008-11 (%)

Biodiesel	**36.0**
PET	**9.0**
Steel Bars	**3.9**
Coated Fine Paper	**8.8**

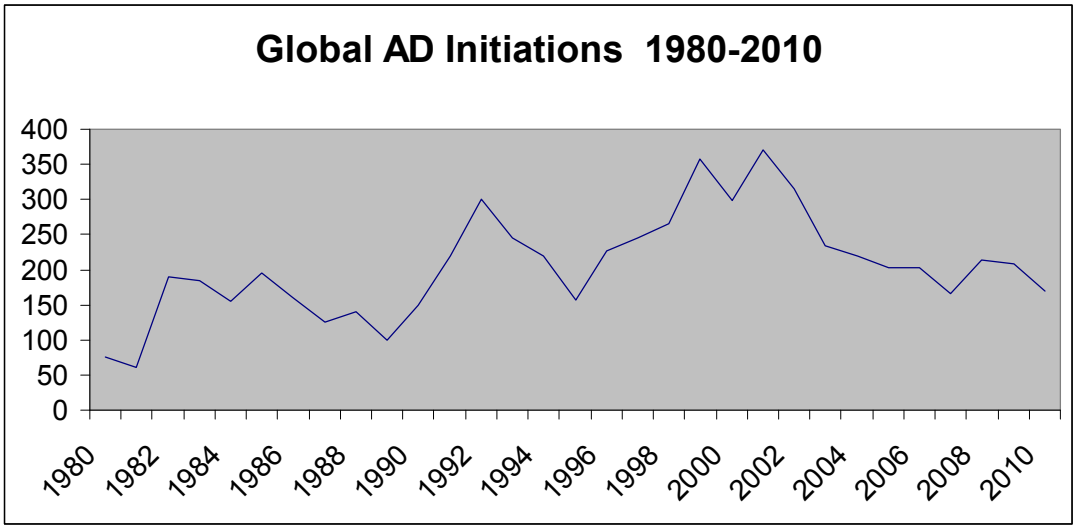
Source: Council Implementing Regulations . DG Trade Website.

Third, AD cases can also be controversial because exporters – and in AS cases the government of the exporting country – are effectively being accused of some form of unfairness. Such accusations are bound to cause frictions in international trade relations.

Fourth, within the importing country, TDMs often involve a clash of interests between producers and users of the imported product. And, increasingly, there can also be conflicts between among producers, with those companies which have outsourced part of their production and thus also have significant import interests, more likely to oppose measures.

Finally, there is a more general concern about the proliferation of AD measures against developing countries. Although the number of TDMs is highly cyclical, there was a long term trend increase between 1980 and 2000. This partly reflects a growing number of developing countries adopting TD legislation.

Chart 1



Source: WTO

For example, 49 countries had AD laws in 1989. By 2000 it was 93. However, since then, activity has eased and the number of cases initiated during the recent financial crisis has been lower than initially feared.

What are the basic requirements to launch a TDM?

The four basic requirements of an AD case are that:

- there should be dumping at a rate above de minimis level;[6]
- the industry submitting the compliant has suffered material injury;
- there is a causal link between the dumping and the injury;
- (in the EU) measures should not be against the public interest.

The requirements of subsidy cases are similar except that there has to be an actionable subsidy[7] rather than dumping. In safeguard cases, there is a need to demonstrate that there has been an unforeseen surge in imports that has caused serious[8] injury to the complainant industry.

The EU's Trade Defence Instruments

A the end of June 2011 the EU had 135 TDMs in place[9]. The vast majority (124 out of 135) of these were AD measures. The EU rarely imposes safeguard measures and currently has no such measures in place. It is also

[6] De minimis levels are set at 2%.

[7] Only some subsides can addressed through anti subsidy actions. The subsidies must involve a financial contribution by a government or any public body and confer a benefit . In addition subsidies must either be "specific" (i.e. limited in availability)t o particular enterprises, industries or regions, or they must be "prohibited" (target export goods or goods using domestic inputs for subsidization.)

[8] Although not defined, serious injury is more serious than material injury.

[9] In the Commission statistics, a TDM against two different countries on one product is counted as two TDMs.

an infrequent user of AS actions. The focus in this paper will therefore be on AD measures, though there will be some discussion of AS measures.

The 124 AD measures affected 68 different products. China was the country most frequently affected by AD measures, featuring in 53 out of the 68 product cases.

Table 5 EU Anti-dumping and Anti Subsidy Measures in Place End June 2011

	Anti Dumping	Anti Subsidy
Number of Products	68	7
Number of Countries	124	11
Of which China	53	1
Extensions[10]	17	1
Extensions to measures originally imposed against China	14	0

Source: DG Trade

The Regulations governing the EU's AD and other TD instruments are drafted to conform with WTO agreements. But, unlike a number of other major WTO members, the EU Regulations go further than is required by WTO agreements in regulating the use of AD and therefore should, in principle, lead to less trade-restricting outcomes.

One example of this is the Union interest test, which is not required by the WTO agreement on AD but which the EU, along with a number of other countries have adopted[11]. Another is the so-called lesser duty rule, which is not required by WTO agreements but is included in the EU AD and AS Regulations. According to this rule, AD duties should not exceed the lower of the dumping margin and injury margin[12]. So for example where dumping is 20% but the duty needed to remove injury is 10%, then the duty should be no more than 10%. Looking at AD cases over the past three years, the impact of this is clear. If duties were imposed at dumping margins, average duties in 2009 would have been 48%. However, because of the lesser duty rule, actual duties imposed averaged 30%.

[10] In some cases, measures imposed against one country are extended to other countries where it appears that exports from the latter are being used to circumvent trade defence measures against the former
[11] Including Canada, Brazil, Paraguay, Thailand and Malaysia[11].
[12] Injury margin is a measure of the price increase needed for the EU industry to earn "normal profits".

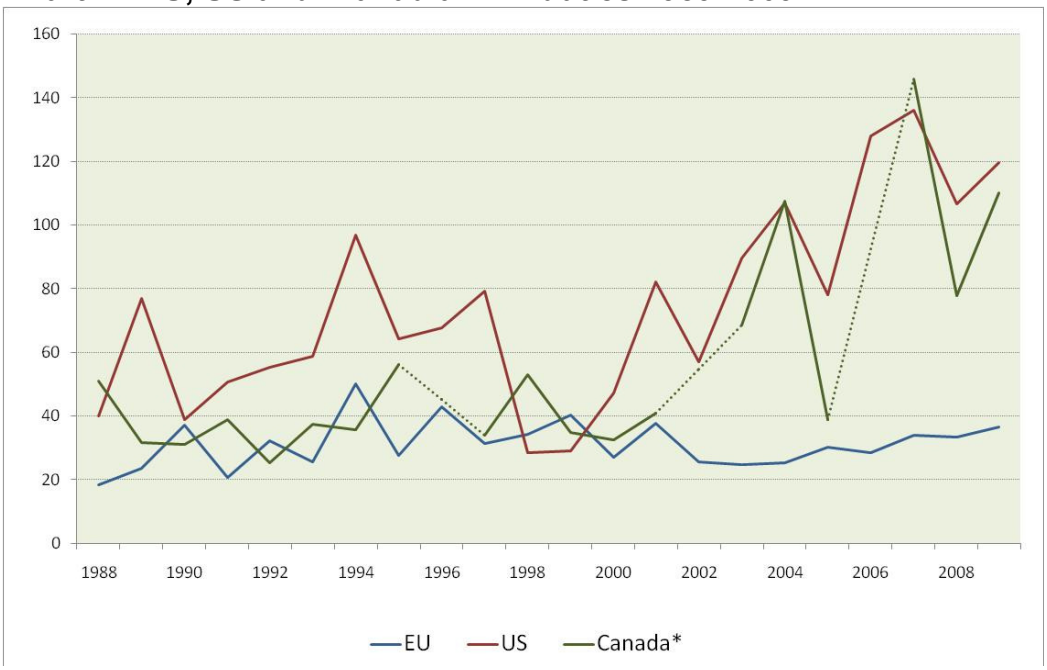
Table 6 Approximate EU Average Dumping Margins and Duties 2008-2010

	Dumping %	Duty %	Ratio
2010	39	32	84
2009	48	30	63
2008	46	30	78

Source: calculations from data taken from Council Implementing Regulations

According to Vandenbuschhe et al[13] the lesser duty rule has been successful in restraining the level and growth of duties in the EU. Comparing cases over the period 1989-2009 the overall average duty applied by the EU was 30%,against 70% for the US and 47% for Canada. Moreover, the maximum duty level registered in the EU was 96.8% imposed in two cases against Japan in 1994 and 2000. For the US the maximum was 386% and in Canada 226%, both imposed against Chinese firms in 2009 and 2007 respectively. Although other factors may explain these differences, the numbers are at least suggestive that the lesser duty rule has been effective in keeping AD duty levels lower than they would otherwise have been.[14]

Chart 2: EU, US and Canadian AD duties 1989-2009



Source: Rovegno and H. Vandenbussche

[13] A comparative analysis of EU Antidumping rules and application
L. Rovegno and H. Vandenbussche Discussion Paper 2011-23

[14] . In an earlier study, Messerlin and Reed (1995) estimated the average rate of anti-dumping duty in the EC to have been nearly 18%,.

The Uruguay Round multilateral trade agreement introduced mandatory limits on the duration of AD measures to a maximum of five years, after which they have to be reviewed (Sunset Reviews) if they are to continue.

Table 7 below shows the average duration of measures in the EU, US, India, Argentina and China (the largest users of AD) between 1995 and 2005. On average, EU measures lasted 74 months, with 44% of cases being renewed at least once. The average duration is lower than the US but higher than in the other countries. The rate of extension of measures beyond five years is lower than in the US, India and China.

Table 7 Duration of Anti-dumping Measures Imposed 1995-2005

	No/ Cases	Average Duration Years	More than 5 Years %
EU	207	6.2	44
US	208	8.3	75
India	274	5.6	49
Argentina	100	4.9	39
China	76	6.1	67

Source: Rovegno and H. Vandenbussche

What are the main problems with the EU approach?

Despite these positive aspects, particularly in comparison with the US, the EU's AD policy has been subject to a number of criticisms. This is a potentially wide-ranging subject, so the approach here will be to focus on some of the key issues where there might be scope for improvements to the EU TDI regime.

- Market Economy Treatment
- Causes of Dumping
- The right to launch an AD case: the definition of a EU company
- Union Interest – Does it receive enough attention?
- Procedural Aspects: the costs and transparency of EU Investigations

Market Economy Treatment

In case involving so-called non-market economies (NMEs)[15], such as China, the Commission sometimes uses another country to approximate the prices or costs of certain exporters[16]. These alternatives are called "analogue" countries, and are chosen on a case by case basis.

Not only is the decision to designate certain economies as NMEs hugely controversial, so too is the choice of analogue countries in individual cases. Choices are regularly criticised as being inappropriate and leading to inflated dumping margins and duties. This is particularly important because, as seen above, China is involved in a high proportion of all EU TDI actions.

The Swedish national Board of Trade looked at cases over 2000-2005 to see which countries had been chosen as analogues. It found that in 40% of cases the US was chosen. In more recent years (2008-2010), the US was the chosen analogue in 35% of cases, Turkey was the second most common choice in another 25% and in 10% of cases it was the EU itself that was used to represent China.

While it is not always straightforward to find exporters from a suitable country to cooperate with AD investigations, these choices often seem inconsistent with most people's perception of an ideal analogue e.g. a country with a similar level of development, endowments and comparative advantage to China. The choices actually made can cast doubt on the validity of the finding of dumping and, ultimately, the justification for measures.

Table 8 Analogue Countries used in EU Anti-dumping Cases 2000-2005 and 2008-10

	Number	%		Number	%
USA	7	35	USA	14	40
Turkey	5	25	Lithuania	3	9
EU	2	10	Mexico	3	9
Canada	1	5	Turkey	3	9
India	1	5	India	2	6
Indonesia	1	5	Indonesia	2	6
Taiwan	1	5	Taiwan	2	6
Thailand	1	5	Brazil	1	3
Norway	1	5	Canada	1	3
			Japan	1	3
			Korea	1	3
			Poland	1	3
			Thailand	1	3
Total	20	100		35	100

Source: Swedish National Board of Trade and Council Implementing Regulations

[15] There is no agreed definition of what constitutes a non market economy. The EU designates certain countries as NMEs (currently China, Vietnam, Kazakhstan, Albania, Armenia, Azerbaijan, Belarus, Georgia, North Korea, Kyrgyzstan, Moldova, Mongolia, Tajikistan, Turkmenistan and Uzbekistan) according to a set of internal criteria. However the set of countries designated as a NME varies from WTO member to member.

[16] In the case of China individual exporters have the opportunity to demonstrate they are free from state interference and therefore have the right to have their own prices and costs, rather than those of a producer from an analogue country, as the basis for the dumping margin.

Although it is difficult to be certain about the causal relationship, because of the difficulty in controlling for all factors which affect dumping margins, the available data does tend to support these concerns, suggesting that the use of analogue countries is associated with higher duties[17].

Table 9 Approximate Average Duties (%) on Cases Against China[18]

	MET	IT	Non MET	MET v non-MET	MET v IT	IT v Non MET
2006-2010 (1)	8	31	43	-35	-23	-12
2000-2005 (2)	11	24	39	-28	-13	-15

Source: 1) Council Implementing Regulations , 2) Swedish National Board of Trade

Causes of Dumping

The existence of dumping – essentially international price discrimination where export prices are lower than domestic prices – implies that international markets are separated by costs (e.g. tariffs or transport costs) which make arbitrage difficult or impossible, and hence allows international price differences to persist. However, beyond this, dumping – as defined by the WTO – can represent a wide variety of pricing behaviour, and economic theory suggests that while some forms of dumping may be undesirable, many are not.

Types of Dumping

The following summarises some of the main types of dumping that have been identified in the literature.[19]

Market expansion dumping

This can arise where an exporter wants to break into a new overseas market and feels the need to cut prices in order to do so, e.g. to overcome the effects of unfamiliarity / uncertainty among consumers or branding and advertising of local suppliers. Economists would usually regard such pricing behaviour as pro competitive.

[17] Some might argue that this is not necessarily a problem with the choice of analogue country, but simply reflects the fact that prices of exporters from non market economies are more likely to be subject to state interference.

[18] IT refers to Individual Treatment. This is an intermediate status between full market economy and non market economy treatment whereby the individual exporter's prices are used, but its domestic costs/prices are based on those in an analogue country.

[19] There have been a number of attempts to distinguish different types of dumping. See for example Robert Willig *Economic Effects of Antidumping Policy in Brooking Trade Forum* 1998, Robert Z. Lawrence, Brookings Institution Press, Washington, D.C. pp. 57-79

Technological dumping

In certain goods costs are high during the early part of a product cycle but gradually fall over time, through learning by doing or so-called dynamic economies of scale – costs fall as the market expands and economies of scale are reaped. DRAMs are an example of such a product. Knowing this, a company may set prices with a view to covering costs and making a profit over the entire life cycle of the product. But in the early stages of the product, its prices will be below costs while in the latter stages they may be above costs. There is nothing inherently anti competitive about such pricing, but despite this, the product will, technically speaking, be dumped during the early part of its life cycle.

Cyclical Dumping

In this case the product in question has high fixed costs and demand varies over the economic cycle. During that part of the cycle where demand is low, producers will have an incentive to cut prices to levels below total costs as long as variable (or avoidable) costs are covered. Technically, they may therefore be dumping during such periods even though their pricing is economically rational and not inherently anti competitive.

Predatory Dumping

An exporter may set out to price its product in such a way as to drive out the competition with a view to establishing a monopoly and raising prices in the longer term. This is generally regarded as anti-competitive and against the interests of consumers (e.g. by domestic competition authorities). Where such pricing occurs in international trade, it may be contrary to the economic interests of the importing country. Because domestic competition authorities may not have jurisdiction over such pricing, AD actions may be the only tool at the disposal of the importing government to tackle such pricing.

Disguised subsidy

In a number of cases, the underlying source of low export prices may be some form of government subsidy. However, for various reasons, companies will prefer to seek redress through the use the anti-dumping instrument rather than the anti-subsidy instrument. An example of this is the use of AD measures to combat low prices of Russian fertilisers such as Ammonium Nitrate which is alleged to benefit from subsidised energy[20]

From an economic perspective, the difficulty is that neither the WTO AD Agreement nor the EU AD Regulation require the Commission to make any distinction between potentially pro and anti-competitive forms of dumping or provide any information on the underlying cause of dumping.

[20] It could be argued that unless subsidy is export contingent, it will not necessarily show up as dumping because the effect of the subsidy will be to depress domestic and export prices equally. However, in practice, various proxies are used to estimate domestic prices in a number of cases, including those involving Non market economies, and where domestic prices are based on "constructed values".

Predation

For example, there is little or no information made available on whether predatory pricing – widely acknowledged to be economically harmful and a type of pricing behaviour against which AD might be justified – might be present in a market. However one analysis of EU AD actions concluded that in around 97% of cases monopolisation through predatory pricing actions would not have been a feasible strategy for exporting firms, and even in the 3% of cases where this conclusion could not be reached it is uncertain that predation was the behaviour underlying dumping. [21]

Hidden Subsidy

Similarly, while AD measures may address some of the symptoms of government subsidy, an AD investigation does not identify the source of the problem, only the effects. Moreover, the fact that AD duties generally exceed anti subsidy duties by a significant margin, suggests that they over-penalise exporters for any subsidies that they may be receiving. Indeed, in a number of EU cases, AD and AS investigations on the same product have been pursued simultaneously and AD measures have been imposed in addition to AS measures. This indicates that AD measures are compensating exporters for something other than or in addition to identifiable actionable subsidies. One obvious solution to this problem is to substitute AS actions for AD actions, particularly where subsidy is thought to be the underlying problem..

Causation

One of the most difficult issues in AD cases is the requirement to establish a causal link between dumping and injury. In most cases, there are a range of factors which contribute to the performance of the domestic industry and may play a role in causing injury. For example, adverse currency movements, recession, and changes in consumption patterns. It is difficult, therefore, to define exactly what constitutes "establishing a causal link" in practice and how, in practice, to take account of factors other than dumping which may be contributing to injury. Another problem is that in many cases, an increase in imports from the country accused of dumping may coincide with injury to the domestic industry, yet may not be the cause of that injury. Indeed, the causation may run the other way. [22]

[21] Bourgeoise, J and Messerlin, P, 1998,'The European Community's Experience',Brookings Trade Forum 1998,
[22] For example, where a domestic industry faces technical problems, or shortages of raw materials, causing production stoppages, there will be a decline in domestic production and possibly a compensating increase in imports to meet unsatisfied demand. The increase in imports is in this case a consequence rather than a cause of the injury. Of course, in theory, the trend in prices should provide some clues as to direction of causation.

Some research has been critical of the EU approach to standards. However, as illustrated by the glass fibre case below, there are genuine difficulties faced by any investigating authority in deciding what role dumped imports played in any injury suffered by import-competing domestic industry Some research, based on a small sample of cases, has been critical of the EU approach standards[23]. However, as illustrated by the glass fibre case below, there are genuine difficulties faced by any investigating authority in deciding what role dumped imports played in any injury suffered by import-competing domestic industry.

Case Study Anti-dumping Measures on Continuous Glass Fibre Products (Certain Continuous Filament) 2011

In March 2011 the EU imposed Anti-dumping duties of between 7.3% and 13.8% on imports of continuous filament glass fibre from China. Like many cases coming soon after the global financial crisis, causation, and the impact of recession in particular, was a major issue in this case.

The Commission investigation period spanned 2006 to Sept 2009 which coincided with the global downturn. Not surprisingly, during that period, sales of EU producers fell sharply. Profitability of the EU industry actually improved between 2006 and 2008, but slumped thereafter from 3.5% in 2008 to -15% in 2009. The problem for the Commission was to decide whether and to what extent dumped imports from China had caused this decline in sales and profitability.

The Table below shows the trends in some of the more important indicators during this period. The numbers speak for themselves.

During Chinese imports rose 2006 to 2008, but declined thereafter. However, during the period when Chinese imports increased, EU profits either rose or declined slightly. During the period when EU profits slumped Chinese imports fell, while consumption fell significantly.

The Commission concluded that Chinese imports were a cause of material injury in this case. The fact that the decline in consumption was quantitatively larger than any increase in imports - over 2006-9 consumption decline by 200kt while Chinese imports increased by 27kt - and coincided more closely with the fall in EU profits, was **not** taken into account in determining the final level of duties imposed.

Injury Indicators in the Continuous Glass Fibre Case

	2006	2007	2008	2009	2006-8	2008-9	2006-9

[23] Cause-Of-Injury Analysis In European Antidumping Actions. Brian Hindley *ECIPE* Working Paper • No. 05/2009

Consumption kt	903	944	937	637		34	-240	-206
Imports kt	71	110	132	98		61	-34	27
EU Sales kt	689	683	654	501		-35	-153	-188
Profits %	0.3	4.7	3.5	-15		3.2	-18.5	-15.3

Source: Council Implementing Regulation

The real problem which this case illustrates is that causation decisions in AD cases are usually binary in nature i.e. yes, dumping has caused injury or no, it hasn't caused injury. Yet often, as this case shows, there are multiple causes of injury.

The EU Regulation is, however, more liberal than required by WTO law in that it provides for lower duties in cases where this would be sufficient to remove injury. Article 7 for example states that the amount of the provisional AD duty shall not exceed the margin of dumping as provisionally established, but it should be less than the margin if such lesser duty would be adequate to remove the injury to the Union industry.

One possible interpretation of, or refinement to, this article could be that duties should do no more than remove **that part of injury caused** by dumping, rather than all of the injury. This might help resolve some of the disagreements about the causation issue. It would, however, require some sort of relative quantification or ranking of the role of individual factors causing injury.

Definition of the EU Industry

In most cases, AD cases arise as a result of a complaint made by a European industry. The launch of an AD investigation requires that the case has the support of companies representing at least 25% of the Union production[24]. However, this begs the question of what defines "Union production" and which companies qualify and which do not. In some cases the Commission exercises its discretion to exclude certain EU-based companies from its definition, depending on the purchasing decisions of that company e.g. whether it has outsourced significant amounts of its production to the country accused of dumping and its relationship with its parent company.

Such decisions can be highly controversial. And the globalisation of companies, in terms of cross-ownership and the growing scale and frequency outsourcing parts of the value chain, is making it increasingly difficult to make judgements about the nationality of companies.[25] Given that there is evidence that, to be successful, companies need to exploit all opportunities

[24] An additional requirement is that these companies account for more than 50% of production of all companies either supporting or opposing the case.

[25] Outsourcing introduces a number of other complications into the assessment of AD cases, such as measuring "injury" in the form of price undercutting. For example, where a complainant EU company (Company A) undertakes all R&D and assembly in-house, its factory prices will reflect the costs of R&D and assembly. However, when another EU based company (Company B) outsources certain basic assembly activities to, for example, China, the price of imports from China will not necessarily reflect R&D costs, and, superficially at least, it will appear as if those imports are undercutting Company A's sales. In reality, however, the relevant comparison is between Company A and Company B's final prices.

that globalisation offers, then any policy which deliberately or inadvertently penalises such companies which outsource will be particularly damaging.

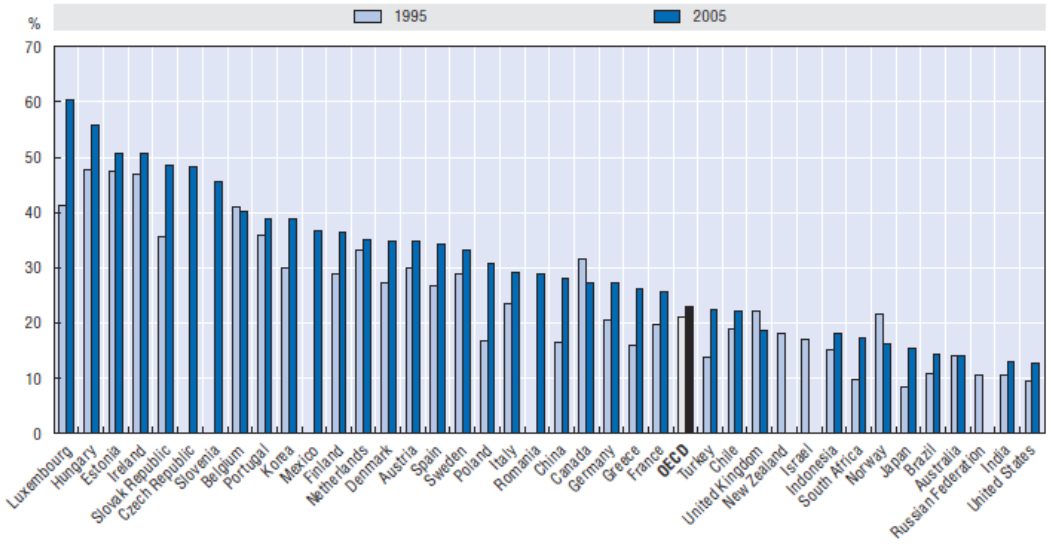
Globalisation Trends

The increasing complexity of trade means that raw trade flows provide a misleading picture of the location of economic activity and, by implication, of national economic interests[26].

Companies increasingly divide their operations across the world, from product design and component manufacturing to assembly and marketing, creating international production chains. Increasingly products are "Made in the World" rather than in any particular country. Attributing the full commercial value to the last country of origin can cloud trade policy debates and lead to misguided, and hence counter-productive, decisions.

Work by the OECD illustrates the growing scale and complexity of so-called global value chains. Production processes have become increasingly fragmented as goods are produced sequentially in stages in different countries. Firms seek to optimise the production process by locating the various production stages across different sites according to the rule of comparative advantage. As a consequence, outsourcing and offshoring of activities have been on the rise.

Chart 4 Import Content of Exports

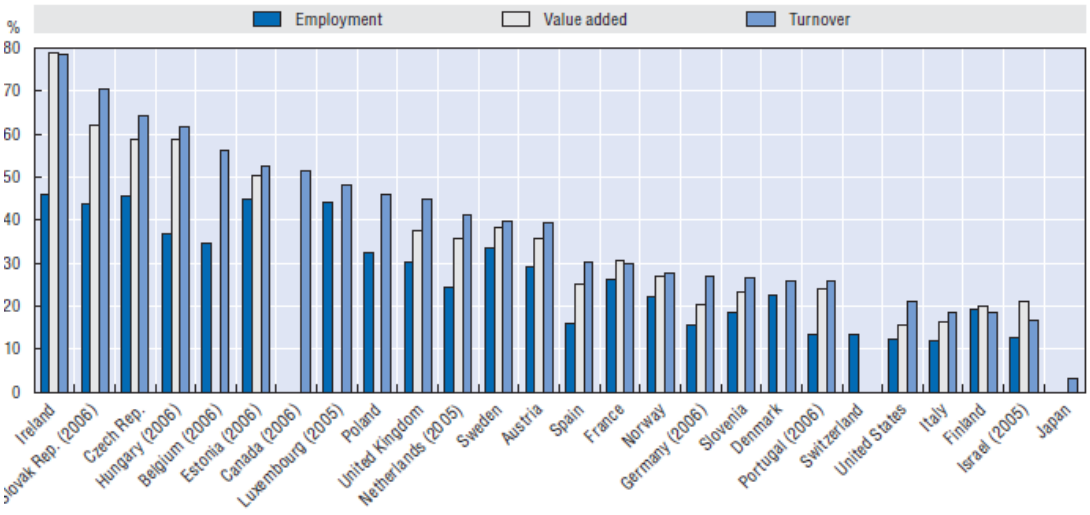


Source: OECD Globalisation Indicators

[26] The joint OECD / WTO initiative to measure trade in value added seeks to promote research and understanding of these complexities and measurement of value-added.
http://www.oecd.org/document/51/0,3746,en_2649_37431_49865779_1_1_1_37431,00.html .

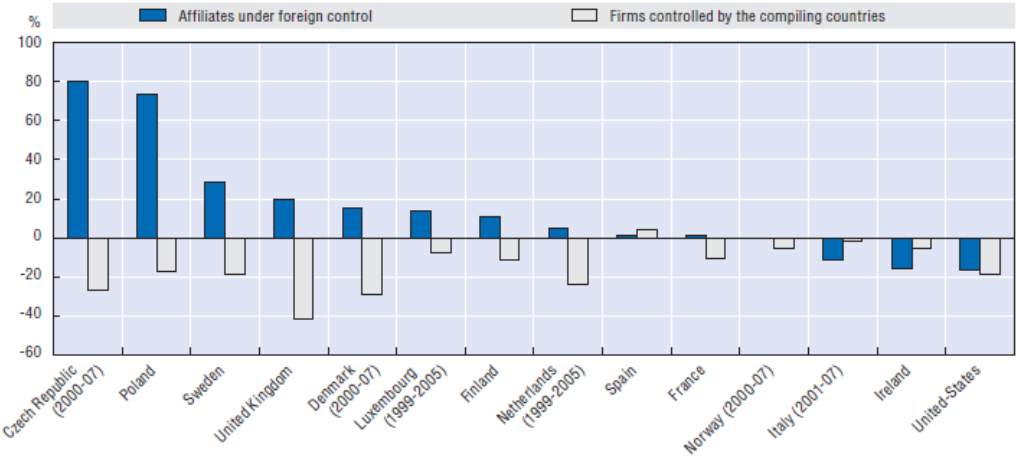
The past decades have witnessed a steady growth in trade of intermediate inputs and in 2006, they represented 56% of trade in goods and 73% of services trade. Correspondingly, the import content of exports has increased in almost all OECD countries, demonstrating the rising import dependency of countries in producing their exports. There is also evidence of a growing importance of offshoring.

Chart 5 Share of foreign-controlled affiliates in manufacturing employment, turnover and value added 2007



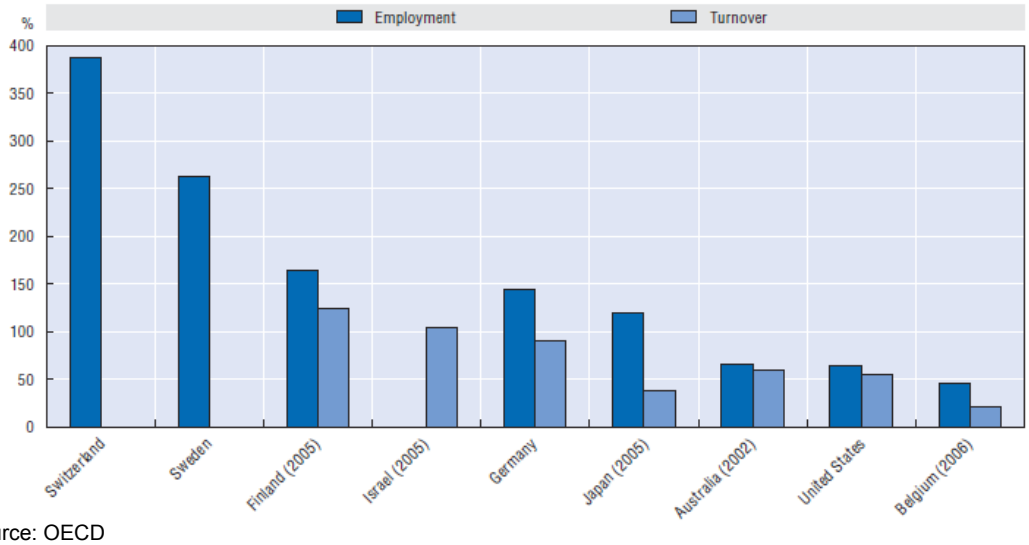
Source OECD

Chart 6: Trends in employment by foreign-controlled affiliates and national firms in the manufacturing sector between 1999 and 2007



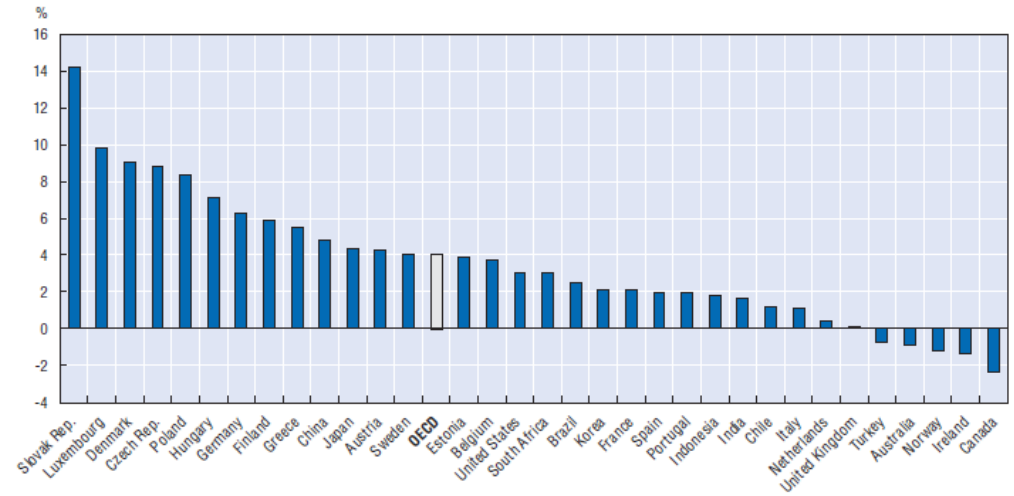
Source OECD

Chart 7: Share of affiliates abroad in the manufacturing turnover and employment of parent companies located in the domestic economy, 2007



Source: OECD

Chart 8: Change in offshoring, by country, 1995-2005



Source OECD

The Benefits of Globalisation

There is also evidence of the positive impact the importance of globalisation to companies, including EU companies. One study[27] uses a large sample of European manufacturing firms to investigate the links between globalisation and firm productivity. It finds that while only a small share of Euro area firms locate affiliates abroad, these firms account for disproportionately large shares of output, employment and profits in their home countries. They have higher survival rates and their productivity growth is also higher. Finally, multinationals with a large number of affiliates abroad perform relatively better than those with a small number of affiliates.

[27] I Kiel Working Paper No. 1413| April 2008 "Characterizing Euro Area Multinationals* Ingo Geishecker, Holger Görg and Daria Taglioni

Table 10 MNEs contribution to Euro Area Domestic Employment, Turnover, Value-Added 2004

	%Firms without Foreign Affiliates	% MNEs	Of which MNEs with Affiliates in more than one location
Number of Firms	97	3	1
Employment	71	29	20
Turnover	60	40	30
Value Added	57	43	33

Source I Kiel Working Paper No. 1413| April 2008 Characterizing Euro Area Multinationals

Table 11 MNEs: Average Number of Foreign Affiliates by Performance Category 2004

	Worst Performing	Middle Performing	Best Performing
Turnover	7	17.6	56.5
Profits	11.2	10.4	61.5
Labour Productivity	9	13.0	57.9

Source: I Kiel Working Paper No. 1413| April 2008 Characterizing Euro Area Multinationals

The OECD argues that, following the international fragmentation of production, the concept of an "industry" has become less and less valid. Given that stages and activities of the production process are located across different countries, competitiveness and comparative advantage might increasingly have to be interpreted in terms of activities instead of industries.

The answer to the question of what defines an EU industry is not straightforward. But increased globalisation has led to some to call for a change in the way the Union Industry is defined. Globalisation also has important implications for the way in which Union Interest is assessed (discussed below).

Union Interest

By including a Union Interest requirement in the EU Regulation, the EU has, in principle, gone further than required by WTO law in trying to ensure that the its TDMs are economically coherent. However many argue that, in practice, the EU still fails to make a distinction between economically harmful forms of dumping and more benign forms. Moreover, many feel that the views of users and final consumers are not given sufficient weight in Union Interest Assessments. For example, a study by the Swedish National Board of Trade described the treatment of Union interest in a sample of 20 cases reviewed as "cursory".[28]

[28] Swedish National Board of Trade: "Treatment of the "Community Interest" in EU antidumping investigations". 2005

One difficulty is that, in most cases, the impact of AD duties on individual users – the focus of Commission investigations – is relatively small in percentage terms, but the aggregate impact summed across all users can still be significant and can still outweigh the aggregate benefits of measures.

Economic Modelling of Welfare Effects

Attempts to estimate the costs and benefits of imposing AD measures suggests the aggregate impact is often negative. For example, Copenhagen Economics[29] looked at four case studies and found in each that the gains to producers were outweighed by losses to consumers by a significant margin.

Table 12 Estimated Impact of Sample of EU AD Measures on EU Producers and Consumers

	Gain to Producer €m	Loss to Consumer €m
Salmon	0.8	55
Bedlinen	8.0	25
TV Sets	20	36
Fertiliser	24	61

Source: Copenhagen Economics

Another study by Nottingham University[30] looked in detail at three case studies of EU AD/AS actions and in two cases derived approximate estimates of the impact of measures on UK welfare. In both cases they concluded that AD/AS measures are likely to have imposed welfare losses on the UK, and the value of these losses was equivalent to 33% and 17% respectively of the UK import bill for these products. Earlier studies of AD in the US by USITC and others also concluded that they resulted in net welfare losses[31].

The results of these studies largely reflects the standard result from economic models that free trade promotes economic welfare and the introduction of tariff or other barriers will impose net economic costs unless their imposition corrects for some form of market failure. The fact that it is difficult to establish a link between AD and correction of market distortions (e.g. subsidies or predatory behaviour discussed above) implies that models will inevitably find that AD measures damage welfare.

[29] Economic Assessment of the Community interest in EU Anti-dumping Cases. Report for the National Agency for Enterprise and Construction August 2005

[30] Lloyd, T., Morrissey, O. and Reed, G. 1998, Estimating the Impact of Anti-dumping and Anti-cartel Actions Using Intervention Analysis, Economic Journal 108, 447: 458-476

[31] US International Trade Commission 1995, The Economic Effects of Antidumping and Countervailing Duty Orders and Suspension Agreements., Investigation No 332344

The Cumulative Impact of Cases

Another factor which is not taken into account in cases is the cumulative impact of AD duties from a number of different cases on a given user or industry. Casual observation of cases suggests that a number of user industries are affected by multiple AD cases. So, even if the impact of any individual case on any given user is insignificant, the cumulative impact of cases over the years may not be. For example, looking at cases over a relatively short period, 2009-2010, a number of industries are affected by multiple cases. The detergent sector was affected by at least three different new cases, while the automotive sector was affected by at least seven.

This suggests that there could be benefit in assessing the cumulative impact of cases as part of any assessment of the Union Interest impact of proposed AD duties.[32]

Table 13 Repeat Users in AD Cases: New Measures 2008-2010

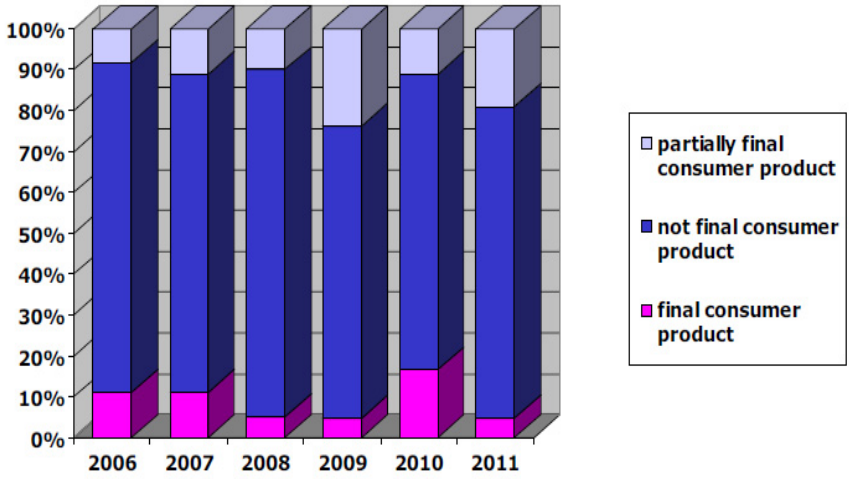
User Industry:	**Automotive**	**Detergents**	**Construction**
Case Affecting the User Industry	Aluminium Road Wheels	Zeolite A Powder	Sodium Gluconate
	Continuous Glass Fibres	Citric Acid	Melamine
	High Tenacity Polyester Yarns	Dihydromyrcenol	Continuous Glass Fibres
	Molybdenum Wires		Seamless pipes and tubes of iron and steel
	Seamless pipes and tubes		Wire rod
	Wire rod		Psc wire strands
	Fasteners		Fasteners
			Welded tubes and pipes or iron or non-alloy steel

Source: Information taken from Council Implementing Regulations . DG Trade Website.

As noted above, one consequence of the increasingly globalised nature of EU economic activity is that AD measures are likely to have more serious implications for EU companies as purchasers of imported materials, components and finished products. And it is clear from the profile of EU cases in recent years that the majority of products subject to AD measures are bought by other industries rather than final consumers.

[32] However, in practical terms, it is not clear whether this could help with the decision to impose measures.

Chart 9 Share of EU AD cases by Type of Product



Source: DG Trade Annual Reports

One OECD study provides an illustration of this point. They simulate the impact of a general tariff increase of 10% affecting all imported intermediates in industries in a uniform way. Not only does this directly (in the short term) lower the value added of countries, but the impact has clearly increased in most countries between 1995 and 2005 due to the larger use of imported intermediates during this period.

Table 14 Simulated decrease of Impact on value added following a uniform 10% tariff increase

	1995	2005
Austria	-2.1	-3.0
France	-1.4	-1.8
Germany	-1.4	-2.1
Italy	-1.7	-2.0
Ireland	-6.1	-6.3
Slovak Rep	-4.1	-6.0

Source: OECD Global Value chains and competitiveness

The difficulties in conducting a comprehensive, rigorous and balanced assessment of the impact of AD measures on Union Interest have long been recognised. And attempts have been made to explore ways in which the Union Interest provisions of the EU Regulation could be improved[33]. It is clear from the above that further consideration should be given to improving the assessment to take account of the full impact of AD measures across all economic operators.

[33] See for example a study on the economic and industrial aspects of anti-dumping policy
Peter Holmes andJeremy Kempton Sussex European Institute
Sei working paper no. 22

The Procedural aspects of TDMs

The procedural aspects of AD investigations also give rise to complaint. Although there have been a number of improvements to these procedures in recent years, companies involved in TDMs still complain about the cost, complexity and lack of transparency of investigations.

Anecdotal evidence from industry suggests that these are serious issues, though there is little systematic evidence available on this question. The Japanese Ministry of Enterprise has argued that defendants in cases spend enormous amounts of labour, time and money to defend themselves. In one case, legal fees alone were in excess of €1m per year[34]. It has also been claimed that Chilean salmon exporters spent in excess of $12m defending a US case. [35]

AD investigations – and indeed rumours about impending cases – creates uncertainty among companies. E.g. when importers work to long lead times and long term contracts, they may hesitate to enter into contracts with exporters if they fear that these products will eventually be subject to ADDs. And as noted above there is evidence that, even the launch of a case can have a depressing effect on trade flows[36].

Built-in procedural delays

Some of the delays are built into the EU legislation. For example, provisional measures, effectively extend the life of AD measures for a period of six months. More importantly, where, at the end of their standard five year term, an EU industry applies for an extension of AD measures through an expiry review, measures are maintained for the duration of that review. Such expiry reviews can last up to fifteen months. Where measures are renewed a number of times, the impact of this procedural requirement on the overall life of a measure can be significant.

For example, an AD investigation on Potassium Chloride was launched in October 1990 and provisional measures were imposed in April 1992. The measures expired in July 2011. This means they were in place for 19 years and three months. However, these measures were only renewed twice, which, given a standard duration of five years, implies that they should have lasted just 15 years. Arguably therefore, procedural issues are responsible for an excess duration of four years and three months. There are a number of other cases where “procedural delays” are significant.

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[34] www.meti.go.jp/english/report/data/gCT9905e.html

[35] Eliminating The Protectionist Free Ride: The Need For Cost Redistribution In Antidumping Cases. Elizabeth L. Gunn*

[36] A study of EC cases launched 1985-90 found that even where an investigation was terminated, imports from the countries investigated declined by around 17%. An earlier study by Staiger and Wolak in the US found that the mere impact of an investigation depressed imports by about half as much as the imposition of measures themselves.

Table 15 Long Running Anti-dumping Cases at June 2011

Product	Initiation	Prov Measures Imposed	Earliest Expected Expiry	Minimum Duration Year	Minimum Duration Month	Excess Duration Year	Excess Duration Month
Potassium Chloride	Oct-90	Apr-92	Jul-11	20	9	5	9
Silcon (Metal)	Feb-89	Oct-90	May-15	26	3	6	3
Tube and Pipe Fittings of Iron and Steel	Feb-94	Oct-95	Sep-14	20	7	5	7
Bicycles	Oct-91	Mar-93	Oct-16	18	7	3	7
Furfuraldahyde	Jul-93	Jan-95	Jul-12	17	6	2	6

- Measures on Potassium Chloride expired in July 2011

Source: DG Trade Website

If AD investigations impose significant resource costs on companies involved in cases, either directly or by increasing uncertainty for business, then the net welfare costs are even higher than suggested by economic models. And even in cases where there is some economic justification for imposing measures, the measures may nonetheless impose net costs once these additional costs are taken into account. Given the lack of systematic independent evidence, this is an area where further research would clearly be valuable.

Conclusions

Trade defence is an important, but often controversial aspect of international trade policy. In the EU, most of the focus of Trade Defence is on Anti-dumping .

Although the EU regularly imposes Anti-dumping measures, it is, by the standards of some other countries, a fairly restrained user in terms of the number of cases, and the level and duration of measures. Nonetheless, EU practice has come in for criticism in a number of respects. These include a failure to distinguish between different forms of dumping, the choice of "analogue" country in cases involving non-market economies, and the way in which causation and Union Interest is assessed.

In a number of cases, the available economic evidence seems to support such criticisms and suggests that it would be in the EU's own economic interests to look again at its conduct of AD cases. And although, inevitably, there can be difficulties in converting these economic criticisms into practical policy changes, there do appear to be changes that could be made to ensure that cases are more focussed on genuine distortions to trade, and that the costs of measures and investigations are minimised.

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