

Economic framework for injury and causation analysis

PREPARED FOR THE ANTI-DUMPING COMMISSION

April 2017

OVERVIEW

Overview

The Anti-Dumping Commission (the Commission) has engaged Frontier Economics to develop an economic framework to assist the Commission in undertaking its assessment of material injury and causation in dumping or subsidy investigations and continuation inquiries.

A finding of material injury and causation is a fundamental element of a recommendation that measures be imposed on goods that have been dumped or subsidised (or both).¹

The economic framework for injury and causation analysis (the framework) has been prepared to improve the rigour of, and evidence base for, the Commission's injury and causation assessment.

Australia's anti-dumping system

Australia's legal framework for injury and causation analysis is contained in the *Customs Act 1901* (the Act)² and the *Ministerial Direction on Material Injury 2012* (Ministerial Direction).

Material injury is not defined in the Act or the Ministerial Direction. Rather, the Act outlines what the Minister (and therefore the Commissioner of the Anti-Dumping Commission (Commissioner)) either may or must have regard to in determining whether the Australian industry has suffered injury caused by the exported goods.³ Some of the key provisions are outlined below and demonstrate that a wide range of factors need to be considered by the Commissioner in making a determination of material injury. Importantly, injury caused by other factors must not be attributed to the exportation of dumped or subsidised goods:

- Subsection 269TAE(1) of the Act outlines factors to which the Minister may have regard. These include the size of the dumping or countervailable subsidy⁴ margins, the quantity of the exported goods and any increase in volumes, the export price of the goods, the difference between the export price and the price of like goods produced by the Australian industry, and the effect of the exportation of the goods in relevant economic factors in relation to the Australian industry.
- Subsection 269TAE(3) of the Act outlines what is meant by the term 'relevant economic factors in relation to the Australian industry' in subsection

Referred to as "dumping or subsidisation".

Unless otherwise specified, all legislative references are to the *Customs Act 1901*.

Exported goods are those dumped or subsidised goods exported to Australia.

⁴ Referred to as "subsidy". Countervailable subsidy is defined in section 269TAAC of the Act.

269TAE(1). These factors include (in summary) quantities of goods manufactured, market share of the Australian industry, capacity utilisation, the value of the goods sold (revenue), the level of profits, return on investment and cash flow; the number of employees, level of wages and terms of employment, and the level of investment in the industry.

• In considering whether the Australian industry has suffered material injury caused by dumped or subsidised goods, the Minister must consider whether injury to the Australian industry has been caused by factors other than dumped or subsidised goods (as required by subsection 269TAE(2A)of the Act). Subsection 269TAE(2A) also provides a non-exhaustive list of such "other factors" including: the volumes and price of like goods that are not dumped or subsidised, contractions in demand for the good, competition between foreign and Australian producers of like goods, developments in technology, and the export performance and the productivity of the Australian industry.

In addition to the provisions set out in section 269TAE of the Act, the Ministerial Direction provides a number of directions the Commissioner must have regard to when considering material injury.

The World Trade Organization's Agreement on Implementation of Article VI of the General Agreement on Tariffs and Trade 1994 (Anti-Dumping Agreement) and Agreement on Subsidies and Countervailing Measures (collectively the WTO agreements) outline the international obligations of investigating authorities and may assist in clarifying the meaning of domestic legislation, including when making determinations on injury and causation.

Injury and causation analysis

The role of the Commissioner and the Commission in relation to the administration of Australia's anti-dumping system includes:

- investigating claims made by Australian industry that they are suffering material injury caused by dumping or subsidisation
- making recommendations in a report to the Minister about whether dumping duties or countervailing duties should be imposed.

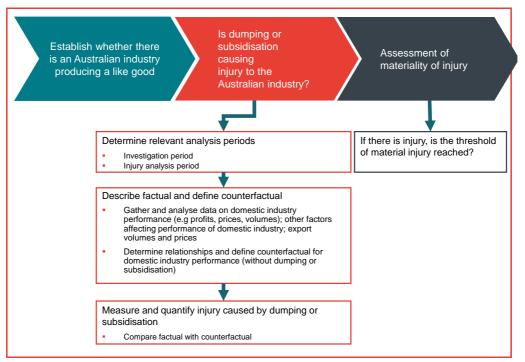
The injury and causation framework identifies a conceptual approach and methods appropriate to determining whether dumping or subsidisation is causing or threatening to cause material injury to an Australian industry, or materially hindering the establishment of an Australian industry. It does not cover every issue or circumstance that may arise in an assessment of injury and causation. Each investigation is different and the analysis of facts must be tailored to the specific circumstances of that investigation.

Overview of the framework

An overview of the framework is provided as Figure 1. This overview emphasises that:

- the injury and causation analysis follows an assessment that there is an Australian industry producing like goods to the exported goods.
- the two key steps in the injury analysis are to:
 - determine what would have happened to the Australian industry producing like goods in the absence of dumping or subsidisation of the identified exported goods and compare it to a situation where dumping or subsidisation has occurred
 - consider whether injury identified as being caused by dumping or subsidisation (if any) meets the threshold of being material.

Figure 1: Overview of injury and causation analysis framework



Source: Frontier Economics

The framework discusses each of these steps following an outline of the relevant legal framework for injury and causation analysis.

Like goods

Establishing that there is an Australian industry producing like goods to the goods under consideration is the starting point for the material injury assessment. The like goods definition determines the scope and focus of the investigation and the

goods that may eventually have duties imposed on them, provided dumping or subsidisation are proven.

Like goods are those goods that are either identical in all respects to the exported goods or, although not alike in all respects, have characteristics closely resembling those of the exported goods.

For the injury analysis to correctly attribute the cause of injury, the analysis should take account of changes in prices and volumes of substitutes for the like goods and exported goods (if any). Therefore, a good understanding of the like goods and the markets in which these goods are sold is essential for this substitution analysis.

Methods for determining whether dumping or subsidisation is causing injury

Injury

As noted, the Act does not define material injury but instead provides a range of factors to which the Minister (and the Commissioner) may have regard. These factors include changes in prices and volumes of exported and like goods, and economic factors relevant to the Australian industry. The central link between the different injury factors is the loss of profits to the Australian industry. For example, the size of dumping or subsidy margins will be relevant to the injury assessment if reductions in prices or volumes, and ultimately revenue and profit, are evident. This loss of profit might also then reduce the ability of the Australian industry to invest. The injury analysis should draw a clear link between the factors causing injury and the impact on the Australian industry through to its impact on profit, and factors resulting from declines in profit such as a loss of investment (if relevant).

Counterfactual analysis

The central feature of the framework is the explicit adoption of the "with and without" or counterfactual approach to the injury and causation assessment.

The counterfactual approach builds on the traditional methods used by the Commission, which have taken a two-stage approach to injury and causation assessment; first, an examination of injury and secondly, an examination of whether there are other causes of that injury (other than dumping or subsidisation). A counterfactual approach is more directed at causation than the traditional approach; by analysing what would happen in the absence of dumping or

The loss of profit is relative to profits without dumping or subsidisation. This is the difference between revenue forgone from output lost due to dumping or subsidisation, and the costs avoided by not producing the lost output.

As in footnote 1, these are relative to outcomes without dumping or subsidisation.

subsidisation, it simultaneously takes into account both the existence of injury and the attribution of dumping or subsidisation in causing that injury.

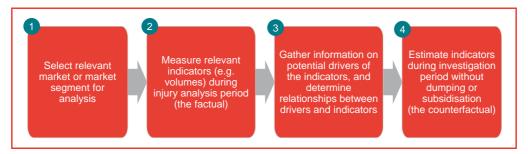
Developing counterfactuals

To apply the counterfactual approach to analysing injury, a factual and counterfactual need to be developed covering each injury indicator relevant to that investigation or continuation inquiry. Injury and causation are determined by how the counterfactual differs from the factual in the "investigation period" (typically 12 months), based on what is observable across the entire "injury analysis period" (which should ideally be for a number of years).

The development of a counterfactual must explicitly consider factors likely to affect performance of the Australian industry producing like goods other than dumping or subsidisation. That is, in determining the counterfactual prices, quantities, revenues and market shares (and other indicators, if relevant), an attempt must be made to identify all relevant market features which influence supply, demand, and the degree of price responsiveness to any change in supply and demand.

The recommended process for the identification of a counterfactual is highlighted in Figure 2. It emphasises that the counterfactual should be built on close examination of actual data relating to the like goods and factors that might influence the performance of the Australian industry other than dumping or subsidisation.

Figure 2: Developing a counterfactual



Testing for injury causation

The framework discusses the use of three methods of causation and injury measurement.

Regression analysis or counterfactual trend analysis are the most appropriate methods to establish the existence and quantum of injury from dumping or subsidisation.

The regression approach implicitly calculates a counterfactual which estimates likely outcomes without dumping or subsidisation, while also taking into account

all other identified factors. It measures the specific or incremental effects of dumping or subsidisation.

A regression approach is the "gold standard" for injury causation analysis. However, there are limitations which will restrict the frequency of its application. A key issue with applying a regression analysis is the number of observations required to achieve results that are robust, or statistically significant.

In practice, the counterfactual trend method will be more commonly used as it will be easier to apply given likely data and timing constraints present in most investigations or inquiries. This method involves the development of a counterfactual with separate elements for each of the key factors that influence profit (or can be applied directly to profit itself). The test for injury and causation is the comparison between the observed or factual case and the postulated counterfactual – supported by evidence and analysis on the likely outcomes in the absence of dumping or subsidisation.

A third (correlation) method can be used to examine relationships between prices and volumes of exported and like goods.⁷ Economic theory suggests that certain relationships should hold between prices and volumes, and these may be tested using data through the injury analysis period. However, because this analysis involves correlations rather than specifically assessing causation, this analysis should be supplemented with other evidence to support a determination that dumping or subsidisation has caused injury. This evidence should rule out explanations other than dumping or subsidisation for a loss of profits.⁸

The materiality of injury

The term "material" is not defined in the Act, nor does it have a specific meaning in economics.

In general terms, injury is more likely to be material where dumping or subsidisation margins are high, and there are large differences between prices, volumes, revenues and profits "with and without" dumping or subsidisation. The Ministerial Direction directs that injury caused must be greater than that normally experienced in the "ebb and flow" of business. This provides a further reference point. However, it is not possible to reduce material injury to a bright line or quantitative test. A case by case approach should be used and this is supported by the Act and the Ministerial Direction.

⁷ This method is most similar to the traditional 'coincidence' approach to injury and causation assessment.

⁸ For example, it might include evidence relating to general economic or market conditions.