Australian Government
Department of Industry, Innovation and Science

Anti-Dumping Commission

ANALYSIS OF STEEL AND ALUMINIUM MARKETS: REPORT TO THE COMMISSIONER OF THE ANTI-DUMPING COMMISSION

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Contents

1 Purpose of this inquiry and key findings 7

1.1 The Minister's request for this analysis 7

1.2 Government's policy context 8

1.3 Key findings 8

1.4 Options for strengthening Australia's anti-dumping system 10

1.5 Scope of the analysis 11

1.6 Conduct of this analysis 11

2 The global market for steel and aluminium 13

2.1 Defining the market 13

2.2 Trends in global demand 14

2.3 Trends in global production 20

2.4 Market outcomes 28

2.5 Conclusion 33

3 Distortions in Asian and global steel and aluminium markets 35

3.1 OECD analysis of the causes of global overcapacity 36

3.2 History of government interventions in steel and aluminium markets 38

3.3 Asian government interventions in steel and aluminium markets 40

3.4 Steel industry: Chinese government interventions 41

3.5 Other Asian steel markets: government interventions 46

3.6 Aluminium industry: Chinese government interventions 50

3.7 Other Asian aluminium markets: government interventions 52

3.8 Conclusion 52

4 Market conditions in the Australian steel and aluminium industries and the economic impacts of dumping and subsidisation 54

4.1 Market conditions in the Australian steel and aluminium industries 54

4.2 Australian industry initiatives to improve competitiveness 56

4.3 Policy reforms to strengthen Australian industries' competitiveness 57

4.4 Economic impacts of dumping and subsidisation on Australian industry 60

4.5 Regional impacts of dumping and subsidisation 66

5 Current trade remedies – international and Australian trends 68

5.1 Overview 68

5.2 International trends in trade remedy investigations and measures 69

5.3 Australian trends in trade remedy investigations and measures 72

6 Effectiveness of measures 77
6.1 What is an effective trade remedy? 77
6.2 Activities that may reduce the effectiveness of trade remedies 77
6.3 Assessment of impact of measures on exporter and importer behaviour 80
6.4 Assessment of impact of measures on Australian industry sales volumes and prices 83
7 Options for reform 92
7.1 Key concerns of domestic steel and aluminium producers 92
7.2 Proposed reforms 93
7.3 Improved investigation processes 95
7.4 Circumvention and compliance reforms 96
7.5 More effective Preliminary Affirmative Determinations 98
7.6 Resourcing implications 100
7.7 Policy reform options proposed by stakeholders 100
Attachment 1: Minister's request to the Commissioner 101
Attachment 2: Summary of priority concerns of domestic steel and aluminium producers 103
Effectiveness of measures 103
Confidentiality and transparency 105
Compliance and circumvention 105
Efficiency and administration 106
Attachment 3: Overview of Australia's trade remedy system 107
What is dumping? 107
What is subsidisation? 107
Dumping or subsidisation must cause material injury to be actionable 107
The form of Australian trade remedies 108
Administration of Australia's trade remedy system 108
What is the connection between government interventions or influence in markets and trade remedies? 108

Abbreviations

$	Australian dollars
the Act	*Customs Act 1901*
ABF	Australian Border Force
ADA	Anti-Dumping Agreement
ADIS	Anti-Dumping Information Service (a function within the Commission)
AIP	Australian Industry Participation
ASX	Australian Stock Exchange
AUD	Australian dollar
the Commission	Anti-Dumping Commission
the Commissioner	Commissioner of the Anti-Dumping Commission
DIBP	Department of Immigration and Border Protection
EU	European Union
FTA	Free trade agreement
GDP	gross domestic product
GFC	Global Financial Crisis
GNP	gross national product
GST	goods and services tax
LME	London Metals Exchange
the Minister	the Minister for Industry, Innovation and Science
NIP	non-injurious price
PAD	Preliminary Affirmative Determination
the Parliamentary Secretary	the Assistant Minister for Science and the Parliamentary Secretary to the Minister for Industry, Innovation and Science
RET	Renewable Energy Target
R&D	research and development
RMB	Chinese renminbi
RUB	Russian rouble
SMEs	small and medium enterprises
STP Act	*Steel Transformation Plan Act 2011*
VAT	value added tax
WTO	World Trade Organization
US	United States
USD	United States dollar

Executive summary

Global steel and aluminium markets are cyclical in nature, reflecting the impacts of economic business cycles on demand and the impacts of the capital-intensive, long-lived and sunk nature of production assets on supply. The global steel industry, for example, has experienced a cyclical downturn at least once every decade since the 1970s.

The Organisation for Economic Development and Co-operation (OECD) has identified ongoing excess capacity as one of the most significant challenges currently facing the global steel industry. The growing gap between global steelmaking capacity and demand has led to deterioration in the financial situation of steelmakers around the world, and raised concerns about the longer-term economic viability and efficiency of the industry.

The OECD has found that excess capacity has been exacerbated in certain regions by structural factors reflecting government interventions, notably government subsidies for the creation of new capacity or the continued operation of inefficient facilities, and continued approvals for new steel facilities.

The situation is similar in the aluminium industry, where government financial support for large aluminium stockpiles has delayed the required supply response to lower demand.

The Anti-Dumping Commission's (the Commission's) analysis has found evidence of market interventions and trade restrictions that influence market behaviours and decision-making by producers in Asian steel and aluminium markets in ways that diverge from competitive market behaviours and normal commercial decisions.

Asian governments are not unusual in intervening in steel and aluminium markets. Many countries, including the United States, European countries, and Australia, have policies to promote the growth, viability, productivity performance and competitiveness of these industries.

However, the nature and extent of Asian government interventions, and the relative magnitude of Chinese production, has meant that these interventions have been major contributing factors—but not the only contributors—to sustained global overcapacity, ongoing excess production, and depressed world prices.

In advocating government actions to address market distortions that underpin sustained global overcapacity, the OECD has highlighted that 'excess capacity in one region can displace production in other regions, thus harming producers in those markets', including through 'unfair trade practices such as dumping'.

The increasing use of trade remedies in all regions around the world has the potential to further displace production, and increase the injury caused by dumping and subsidisation to domestic industries in jurisdictions with less effective trade remedies systems. It is important therefore that the Australian trade remedies system is as effective and efficient as possible to ensure that Australian industries can compete on a level playing field.

While Australia's anti-dumping system is generally effective in addressing proven cases of dumping and subsidisation, the Commission has identified a number of ways to further strengthen the system.

A strong and effective anti-dumping system will support other government policy measures implemented to strengthen the competitiveness of Australia's steel and aluminium industries and to support their adjustment to changed market conditions.

The Commission proposes to implement a set of reforms to improve the efficiency of the Commission's investigations and anti-circumvention inquiries, and the effectiveness of the form of measures the Commissioner of the Anti-Dumping Commission (the Commissioner) recommends in his reports to the Minister for Industry, Innovation and Science (the Minister).

These operational reforms are to:

- implement a new investigations model that improves the timeliness, quality and evidence base for the Commissioner's decisions and recommendations on dumping and subsidisation matters—to be implemented for all new investigations from 1 July 2016
- adopt a more active, risk based approach to address proven circumvention activities, including through:
    - retrospective implementation of anti-circumvention measures (to the date of initiation of the inquiry)
    - sufficiently broad modifications to the goods description to address proven circumvention methods
- implement a stronger whole of government approach to compliance, including enhanced collaboration between the Commission and the Department of Immigration and Border Protection (DIBP)
- further improve the timeliness and effectiveness of Preliminary Affirmative Determinations (PADs), including by taking a more measured approach to the form of duties and application of the lesser duty rule at PAD stage
- enhance the market intelligence capability of the ADIS to conduct targeted research and market analysis, support investigations, strengthen the evidence-base for the Commissioner's decisions and recommendations, and pro-actively identify issues relevant to the effectiveness of the trade remedies system
- strengthen access to and use of international information by developing international information sharing protocols
- strengthen access to and use of Australian industry expertise in investigations by engaging an independent steel and aluminium industry expert to provide technical and market advice to the Commission.

Australian steel and aluminium producers have proposed a number of policy reforms to address their priority areas of concern. Some of these would require legislative change. The Commission considers that these options could be considered by the Minister during the policy process for developing the second tranche of policy reforms.

1 Purpose of this inquiry and key findings

Key points

- The Anti-Dumping Commission has prepared this report to assist the Commissioner of the Anti-Dumping Commission in preparing his response to a request by the Minister for Industry, Innovation and Science for an economic analysis of Asian steel and aluminium markets and a brief on options for improving the efficiency of investigations and the effectiveness of measures in addressing dumping and circumvention.
- The Commission has identified evidence of government interventions and trade restrictions that influence market behaviours and decision-making by producers in Asian steel and aluminium markets in ways that diverge from competitive market behaviours and commercial decisions.
- The Commission's analysis supports a finding that the impacts of economically inefficient market interventions in Asia have amplified, and are likely to have extended the duration of, the current cyclical global downturn and the resulting difficult operating conditions faced by the Australian steel and aluminium industries.
- The Commission has identified a number of operational measures that will improve the efficiency of anti-dumping investigations and the effectiveness of measures:
  - implement a new investigations model that improves the timeliness, quality and evidence base for decisions and recommendations
  - adopt a more active, risk-based approach to address proven circumvention, including through ensuring retrospective implementation of anti-circumvention measures and sufficiently broad modification of the goods description to address proven circumvention activities
  - implement a stronger whole of government approach to compliance with anti-dumping and countervailing measures
  - further improve the timeliness and effectiveness of Preliminary Affirmative Determinations, including by taking a more measured approach to both the form of duties and application of the lesser duty rule at PAD stage
  - enhance the market intelligence capability of the Commission's Anti-Dumping Information Service to support investigations and the pro-active identification of issues
  - strengthen access to and use of international information and Australian industry expertise in investigations.
- The Commission has also outlined in this report the concerns raised by industry as priorities for the Minister's second tranche of policy reforms. The Commission recommends that further work be undertaken on the proposed industry reforms including through wider stakeholder consultation and an examination of the implications of any reforms for the work of the Commission and other parts of government.

1.1 The Minister's request for this analysis

On 17 February 2016, the Minister for Industry, Innovation and Science wrote to the Commissioner of the Anti-Dumping Commission and asked him to undertake an economic analysis of Asian steel and aluminium markets and the impact of global overcapacity and market distortions on the growth and viability of the Australian steel and aluminium sector. The Minister asked that the Commissioner's analysis be conducted through the Anti-Dumping Information Service (ADIS) within the Commission, with assistance from other areas in the Minister's department.

The Commissioner was asked to provide a brief to the Minister by 4 April 2016 (see attachment 1 to this report).

The Minister's request to the Commissioner stated that the analysis should:

- identify trends in dumping and circumvention behaviour in steel and aluminium markets
- improve the efficiency of investigations of potential dumping and circumvention, and
- inform any recommendations (to the Minister or to the Parliamentary Secretary as the Minister's delegate) on the most effective form of measures where there is evidence of dumping and circumvention activities.

The Commissioner directed the Commission to prepare this report to assist him in preparing his response to the Minister's request.

1.2 Government's policy context

Australia's trade remedies system operates within the context of the government's overall economic strategy to strengthen incentives for innovation and create business growth, employment and global competitiveness. The government's National Innovation and Science Agenda is a key element of supporting Australian businesses transition to the new economy. The government's Industry Innovation and Competitiveness Agenda supports the implementation of the government's objectives of transitioning businesses to areas of competitive advantage and facilitating innovation and growth.

These Agendas are implemented through a whole of government approach which ensures coordination of policies to achieve the government's objectives.

Industry policy has an important role in contributing to these Agendas by enabling growth and productivity for globally competitive industries through a range of policy actions.

The government's policy actions in support of trade liberalisation and more open global markets, such as through free trade agreements with Australia's trading partners, also play a key role in supporting the government's Agendas.

Australia's trade remedies system operates within the framework established by the World Trade Organization (WTO). This framework forms an integral element of a free and open global trading system. Most developed countries and many developing countries also operate trade remedies regimes.

The purpose of Australia's trade remedies system is to remedy material injury caused to Australian industries by dumped and subsidised imports and give Australian industries the opportunity to compete with imports on a level playing field. This does not mean that the system does, or should, have the effect of shielding Australian industries from vigorous competition. Strong competitive pressures give industries incentives to continually improve their productivity performance and strive to best meet their customers' needs.

1.3 Key findings

The Commission's analysis has found evidence of market interventions and trade restrictions that influence market behaviours and decision-making by Asian steel and aluminium producers in ways that diverge from competitive market behaviours and normal commercial decisions (set out in chapter 3 of this report).

Asian governments are not unusual in intervening in steel and aluminium markets. Many countries—including the United States, European countries, Russia, India, Brazil, and Australia—have policies to promote the growth, viability, productivity performance and competitiveness of these industries.

Policy responses to the structural adjustment required to address global overcapacity, and to pursue environmental objectives, are increasingly being implemented in many countries.

However, the nature and extent of Asian government interventions, and the relative magnitude of Chinese production, has meant that these interventions have been major contributing factors—but not the only contributors—to sustained global overcapacity, ongoing excess production, the build-up of large stockpiles (especially aluminium), and depressed world prices. The main forms of assistance to Asian steel and aluminium industries have included:

- subsidisation of the costs of inputs used in making steel and aluminium products, such as raw materials, power, and land
- tax rebates and export taxation arrangements
- sustained support for loss-making state-owned enterprises
- cheap finance for investments in steel furnaces and aluminium smelters
- financial support to maintain large stockpiles, especially of aluminium.

While Asian governments have in recent years announced policies to reduce overcapacity and rationalise their steel and aluminium industries, a number of factors suggest that the process of structural adjustment is likely to be prolonged. For example, the Chinese Government's desire for a 'soft landing' for the economy has resulted in the continuation of policies that have contributed to overcapacity, excess production and large stockpiles.

The Commission has found evidence of significant negative impacts on global and Australian steel and aluminium industries (described in chapter 2 of this report) from economically inefficient market interventions in Asia and other regions:

- Due to continuing global over-production of steel and aluminium products, the required supply response to a slowdown in global demand for these products has not occurred. The ongoing significant global over-supply has depressed steel and aluminium prices, resulting in prolonged difficult trading conditions for steel and aluminium producers generally, including in Australia.
- Investments in new Asian steel and aluminium production facilities has continued but the planned closure of inefficient high-cost production facilities has not yet occurred. Net investments in increasing production have prolonged the current global supply glut by delaying the normal supply response to lower demand.
- Asian government subsidisation of input costs and support for loss-making state-owned enterprises has resulted in unsustainably low export prices. The Australian industry cannot compete on a level playing field with dumped and subsidised Asian exports.

The Commission recognises the cyclical nature of supply and demand in global steel and aluminium industries. It is not government policy that trade remedies should insulate Australian industries from cyclical downturns or from vigorous competition.

In undertaking this analysis, the Commission observed a range of actions being taken by the Australian steel and aluminium producers to reduce costs and improve their competitiveness (such as by developing innovative, value-added products and expanding their export markets). These actions (which are discussed in chapter 4 of this report) are expected to assist the Australian industries weather the current cyclical downturn, as well as improve their ongoing ability to respond to competitive pressures including those resulting from the emergence of China as a major global steel producer.

The Commission's analysis supports a finding that economically inefficient market interventions in Asia and other regions have amplified, and are likely to have extended the duration of, the very

difficult operating conditions faced by the Australian industries as a result of the current cyclical global downturn. This finding is supported by analysis by the Organisation for Economic Co-operation and Development (OECD), which has highlighted that:

> governments influencing commercial decisions in the steel sector—whether for economic development purposes or to meet other policy objectives—can lead to inappropriate investment decisions and increase the challenges facing the global steel sector, particularly when they contradict market signals.[1]

In the absence of trade remedies, the Australian steel and aluminium industries would be faced not just with the challenges of responding to changing market circumstances but with the adverse impacts of these market interventions.

1.4 Options for strengthening Australia's anti-dumping system

As demonstrated in chapter 3 of this report, economically inefficient market interventions in Asia and other regions have exacerbated the current difficult trading conditions for Australia's steel and aluminium industries beyond those resulting from a normal cyclical downturn in those industries.

In advocating government actions to address market distortions that underpin sustained global overcapacity, the OECD has highlighted that 'excess capacity in one region can displace production in other regions, thus harming producers in those markets', including through 'unfair trade practices such as dumping'.[2]

The increasing use of trade remedies around the globe (outlined in chapter 5 of this report) has the potential to further displace production, and increase the injury caused by dumping and subsidisation to domestic industries in jurisdictions with less effective trade remedies systems. It is important therefore that the Australian trade remedies system is as effective and efficient as possible to ensure that Australian industries can compete on a level playing field.

The Commission has assessed the effectiveness of Australian anti-dumping and countervailing duties, using available data and taking into account information provided by stakeholders (see chapter 6 of this report). While Australia's anti-dumping system is generally effective in addressing proven cases of dumping and subsidisation, the Commission has identified a number of ways to further strengthen the system (and these are discussed in detail in chapter 7 of this report).

The Commission will implement a series of operational reforms to improve the efficiency of its investigations and the effectiveness of the form of measures:

- implement a new investigations model that improves the timeliness, quality and evidence base for the Commissioner's decisions and recommendations on dumping and subsidisation matters—to be implemented for all new investigations from 1 July 2016
- adopt a more active, risk based approach to address proven circumvention activities, including through:
    - retrospective implementation of anti-circumvention measures (to the date of initiation of the inquiry)
    - sufficiently broad modifications to the goods description to address proven circumvention methods
- implement a stronger whole of government approach to compliance, including enhanced collaboration between the Commission and the Department of Immigration and Border Protection (DIBP)

[1] OECD, *Evaluating the Financial Health of the Steel Industry*, DSTI/SU/SC(2015)12/FINAL, 2016, p. 6, http://www.oecd.org/sti/ind/Evaluating-Financial-Health-Steel-Industry.pdf.

[2] OECD, 'Excess capacity in the global steel industry: The current situation and ways forward', 2015, p. 4.

- further improve the timeliness and effectiveness of Preliminary Affirmative Determinations (PADs), including by taking a more measured approach to the form of duties and application of the lesser duty rule at PAD stage
- enhance the market intelligence capability of the Commission's ADIS to conduct targeted research and market analysis, support investigations, strengthen the evidence base for the Commissioner's decisions and recommendations, and pro-actively identify issues relevant to the effectiveness of the trade remedies system
- strengthen access to and use of international information by developing international information sharing protocols
- strengthen access to and use of Australian industry expertise in investigations by engaging an independent steel and aluminium industry expert to provide technical and market advice to the Commission.

Some of these measures have resourcing implications. The timing for the Commission's implementation of these reforms will therefore depend, in part, on sufficient funding being available or the capacity to re-direct funds from lower-priority activities. There will also be resourcing implications for DIBP.

During industry consultations, stakeholders have identified further priority areas of concern (see attachment 2 to this report). The Commission has summarised these concerns and stakeholder views on potential policy reform options (some of which would require legislative change) for consideration by the Minister in developing the second tranche of policy reforms. This will allow for detailed assessment of policy options, appropriate consultation, and consideration of options' resource implications.

1.5 Scope of the analysis

As directed by the Commissioner, the scope of the Commission's analysis in this report is limited to the Commissioner's powers and functions under the *Customs Act 1901*.

As such, the Commission's analysis did not include a comprehensive assessment of broader economic or market effects beyond the steel and aluminium industries. However, the results of indicative economic modelling undertaken by the Commission's specialist economic consultant are included in this report to give some broader context.

In addition, the focus of the Commission's analysis is on the impacts of dumping and subsidisation on the Australian industries that are affected by these trade practices, and the effectiveness of trade remedies in addressing these impacts. Broader upstream and downstream impacts fall outside the scope of this analysis and are not therefore examined in this report.

1.6 Conduct of this analysis

This analysis was led by the ADIS, which was established within the Commission to provide targeted economic analysis of trends and trading behaviours across markets. ADIS analysis and market intelligence will also strengthen the evidence base for the Commissioner's decisions and recommendations. Other areas of the Commission contributed to the ADIS analysis for this report.

The Commission has worked closely with other areas of the Department of Industry, Innovation and Science to draw on their economic, market analysis and policy expertise and knowledge of Australian, Asian and global steel and aluminium industries. The Commission used information on trade flows obtained from DIBP.

The Commission engaged an economic consultant (Cadence Economics) to undertake specialist quantitative analysis and to analyse the impacts of government interventions in steel and aluminium markets in causing market behaviours to diverge from those characterising competitive markets.

During the course of the analysis, the Commission conducted targeted industry consultation, including seeking information and evidence to inform the Commission's assessment of market behaviours in Asian and global steel and aluminium markets and the impacts on the Australian steel and aluminium industries. The Commission also sought evidence on circumvention activities, compliance concerns, and views on potential reforms to improve the efficiency and effectiveness of Australia's anti-dumping system.

The Commission was unable to consult more widely in the time available to prepare this report. However, the Commission has taken into account relevant information and views submitted by a range of interested parties in representations to the Minister, in submissions to the Commission and other areas of the Department, through the International Trade Remedies Forum (ITRF), and submissions to other relevant inquiries and reviews including:

- the House of Representatives Standing Committee on Agriculture and Industry inquiry into Australia's anti-circumvention framework in relation to anti-dumping measures
- the Senate Estimates Economic References Committee inquiry into the future of Australia's steel industry
- the Productivity Commission's 2016 research study on *Developments in Anti-Dumping Arrangements*.

Information obtained during the course of the Commission's investigations and inquiries in respect of steel and aluminium products has also been taken into account where relevant to the Commission's analysis of steel and aluminium markets.

2 The global market for steel and aluminium

Key points

- Steel and aluminium markets have undergone substantial change over the past decade. In the lead up to the Global Financial Crisis (GFC), demand for steel and aluminium products reached unprecedented levels, supported by rapid investment in new infrastructure in China.
- The resulting high prices and margins for steel and aluminium products prompted large investments in increasing production capacity in steelmaking and both aluminium smelting and extrusions. In some countries, government market interventions added to commercial investment incentives and led to substantial capacity increases, including projects that are still in the pipeline.
- As a result of the GFC, a subsequent slowdown in global economic activity and an acceleration of China's economic transition (from investment-led growth to being more consumption-based), demand for steel and aluminium products has slowed significantly. While global steel and aluminium production has also fallen, the slowdown has been less than for demand, resulting in excess production, lower prices and large stockpiles. Aluminium demand has recently shown signs of recovery.
- Excess capacity—a problem that afflicts the steel industry during every downturn in the business cycle—is a significant issue for the sector. The growing gap between global steelmaking capacity and demand has led to deterioration in the financial situation of steelmakers, and raised concerns about the longer-term economic viability and efficiency of the industry. Despite this, new investment projects continue in many parts of the world.
- Australia's experience has been quite similar to the rest of the world. High demand from the Australian construction and heavy manufacturing sectors resulted in higher demand for steel and aluminium in the lead up to the GFC, but this growth has slowed considerably.
- The Australian industries are facing considerable competition from overseas markets. Australian producers are generally higher cost by global standards. The new global capacity that has recently been developed uses progressively more efficient production processes, and the cost of producing steel has decreased in real terms over the last decade.

This chapter provides a short overview of global developments in world crude steel and primary aluminium markets over the past decade. It examines how the drivers of global demand have changed over that period and how global supply has responded.

2.1 Defining the market

Steel and aluminium products come in a range of forms, sometimes differing in quality, function and process. Not all of the available data is able to differentiate between these nuances. It is important to be precise about what these data limitations are and what the data are referring to.

When referring to Australian Bureau of Statistics (ABS) data for example, industry definitions are drawn from the Australian and New Zealand Standard Industrial Classification (ANZSIC) groups and classes or Australian Harmonized Export Commodity Classification (AHECC) groups. However, data for traded products from the World Steel Association are based around chapters 72 and 73 of the Harmonised System.

This section defines the Australian steel and aluminium manufacturing industries for the purposes of this report.

Unless otherwise indicated, the Australian steel manufacturing industry only includes crude steel, which is steel in its first solid (or usable) form before being further worked. This includes the following ANZSIC classes.

- Iron Smelting and Steel Manufacturing (2110)
- Iron and Steel Casting (2121)
- Steel Pipe and Tube Manufacturing (2122)

These groups and classes were chosen because crude steel and the closely related first transformation products, such as steel alloys, galvanised steel, rolled steel and seamless steel tubes, are the main outputs of these units using unprocessed raw materials as the primary input. The next stages of the steel supply chain, on the other hand, use first-transformation steel products as their primary input to production.

The World Steel Association applies a similar definition. It defines crude steel as steel in its first solid (or usable) form. This includes ingots, semi-finished products (billets, blooms, slabs), and liquid steel for castings.

For the purpose of this report, the Australian aluminium industry only includes primary aluminium. Primary aluminium is aluminium tapped from electrolytic cells or pots during the electrolytic reduction of metallurgical alumina (aluminium oxide). It thus excludes alloying additives and recycled aluminium. The industry includes the following ANZSIC classes.

- Aluminium Smelting manufacturing (2132)
- Aluminium Rolling, Drawing, Extruding (2142)

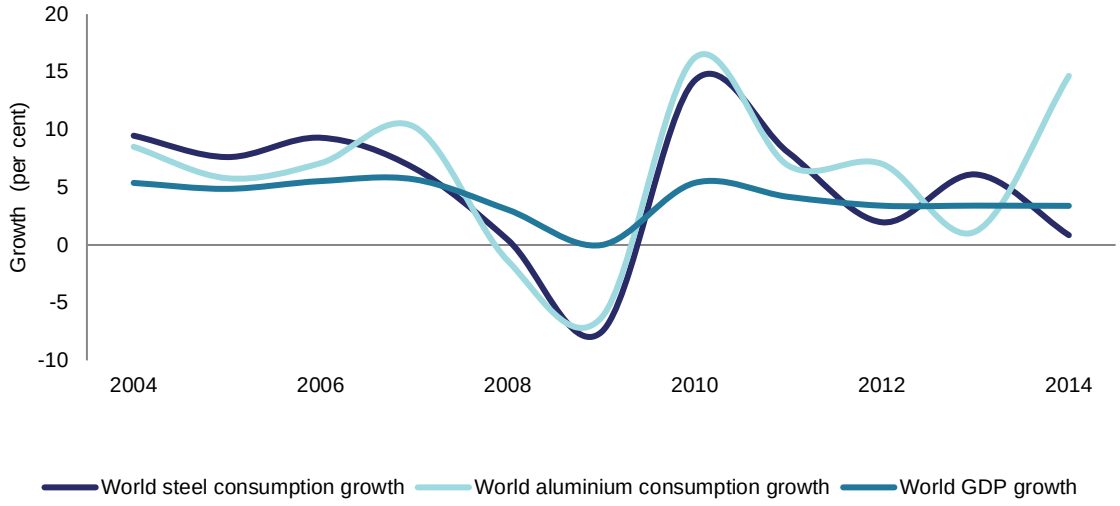
Similarly, data from the World Bureau of Metal Statistics and AME only includes primary aluminium.

2.2 Trends in global demand

Steel and aluminium products are used in a wide range of activities across the economy, particularly in the construction and manufacturing sectors. In the lead up to the Global Financial Crisis (GFC), demand for steel and aluminium reached record levels. Steel consumption has been stagnant since then whereas aluminium consumption growth accelerated in 2014.

Global steel and aluminium consumption is closely linked to economic activity. For example, steel is a key intermediate input for major infrastructure projects, construction and heavy manufacturing. As demand for these types of activities increases, so does the demand for steel. Figure 2.1 maps global economic activity against steel and aluminium consumption over the past ten years. There was strong demand in the lead up to the GFC and weak demand thereafter (apart from a temporary bounceback in 2010). Interestingly, global aluminium consumption in recent times seems to deviate from this trend, increasing to near 15 per cent, despite no corresponding increase in world GDP growth.

Figure 2.1: World growth in GDP, steel consumption and aluminium consumption, 2004 to 2014



Sources: World Steel Association; World Bureau of Metal Statistics; International Monetary Fund.

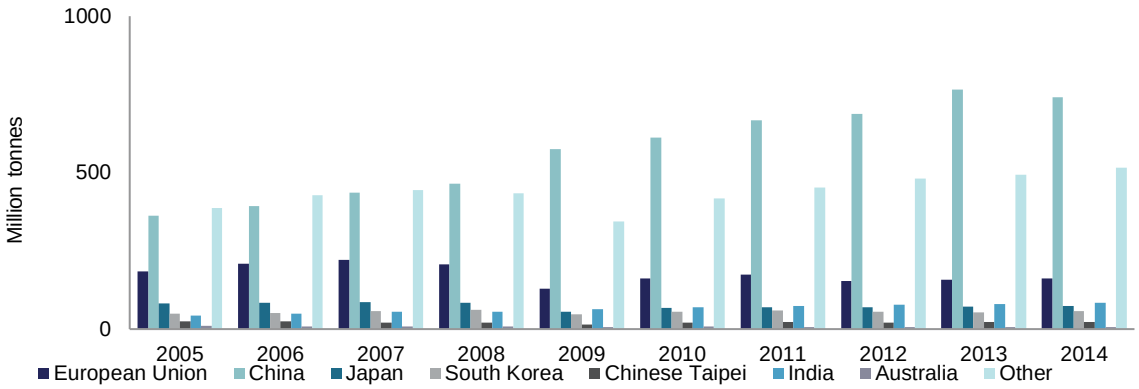
This section outlines how the demand for steel and aluminium products has changed over the last decade, globally and in Australia.

2.2.1 Global steel consumption

Global steel consumption has increased over the past decade by nearly 50 per cent (around 522 million tonnes). Most of the growth in the demand for steel products has come from China. In 2005 China accounted for 32 per cent of global steel consumption; its share had increased to 45 per cent by 2014. China's demand has been driven by greater urbanisation and the related investment in new housing and water, energy and transport infrastructure.

Figure 2.2 illustrates that steel consumption growth has not been constrained to China, with higher steel consumption recorded in South Korea, India and Chinese Taipei. Conversely, consumption in some major developed economies including Europe, Japan and Australia declined, reflecting weak activity in both the construction and manufacturing sectors. Australia is a relatively small player in world steel markets, accounting for only 0.3 per cent of global steel consumption in 2014.

Figure 2.2: Selected steel consumers, 2005 to 2014



Source: World Steel Association; Department of Industry, Innovation and Science.

2.2.2 Demand for steel products in Australia

In Australia more than 60 per cent of steel products are purchased by three industries. These are:

- Construction (41.2 per cent)
- Structural metal product manufacturing (16.0 per cent)
- Specialised and other machinery and equipment manufacturing (5.6 per cent)

Combined, these industries purchased $12.4 billion of iron and steel manufacturing inputs in 2012-13. Most of the other industries that purchase steel inputs are in the heavy manufacturing and mining sectors. Table 2.1 presents more information on the major consumers of steel products.

Table 2.1: Top three industries purchasing iron and steel manufacturing products by value, 2012–13

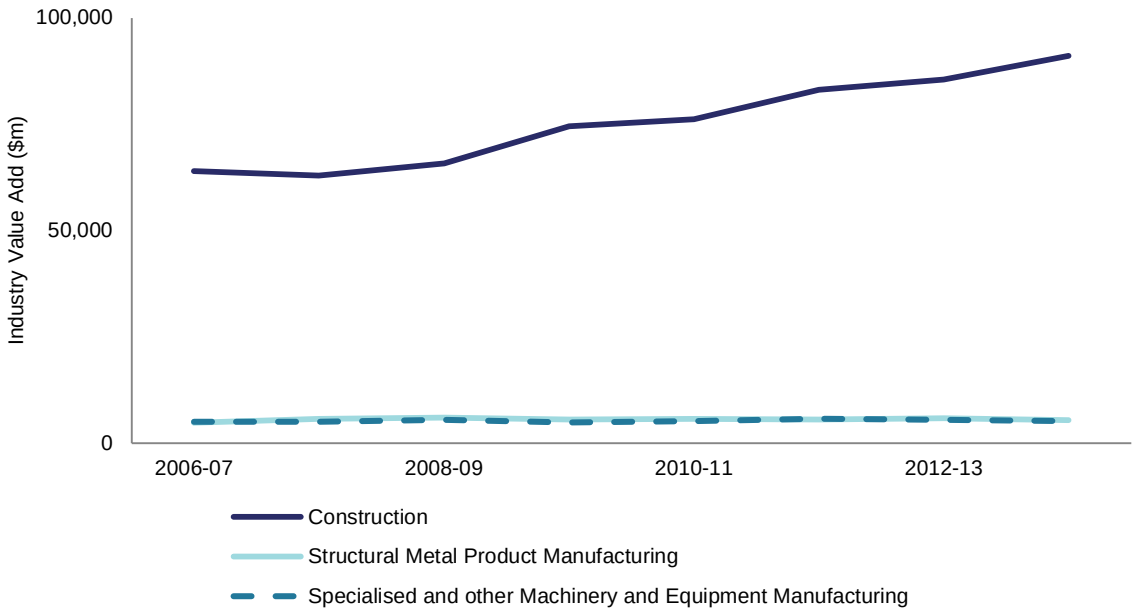
Industry	*Steel supply ($ millions)*	*Share of steel input (per cent)*	*Import supply ($ millions)*	*Import share of supply (per cent)*
Construction	8,119.6	41.2	2,433.5	30.0
Structural Metal Product Manufacturing	3,158.0	16.0	641.8	20.3
Specialised and other Machinery and Equipment Manufacturing	1,113.2	5.6	402.5	36.2
Top three industries by value	**12,390.8**	**62.8**	**3,477.8**	**28.1**

Notes: Industries that have the highest demand, by value, for Iron and Steel Manufacturing products. Construction is the combination of Construction Services, Heavy and Civil Engineering Construction and Residential Building Construction.

Source: ABS, Australian National Accounts: Input-Output Tables, 2012-13 cat. no. 5209.0.55.001.

As steel is an intermediate product, the demand for steel products in Australia is driven by demand for these services. Figures 2.3 and 2.4 below illustrate how these three sectors have grown over time in terms of output and employment. The construction industry, which is the main consumer of steel products, has grown at 6.7 per cent a year for the past five years in terms of Industry Value Add. Over the last decade, employment in the industry has grown from around 660,000 persons to nearly 830,000.

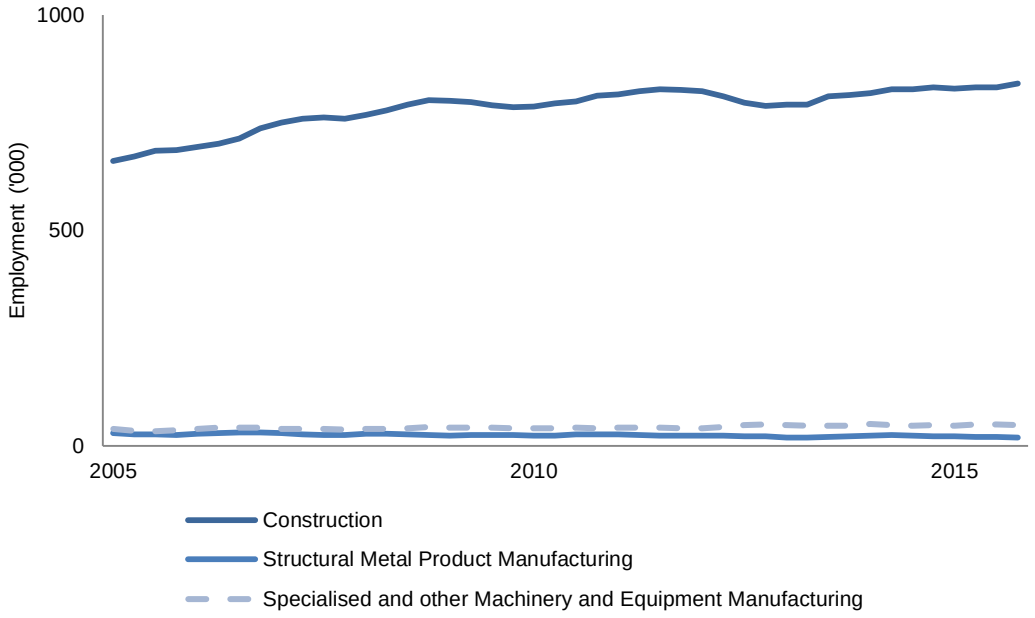
Figure 2.3: Industry Value Add for top three industries purchasing iron and steel Manufacturing products, by value, 2006-07 to 2013-14



Notes: Construction IVA is the summation of Construction Services IVA, Heavy and Civil Engineering Construction IVA and Residential Building Construction IVA. Residential Building Construction is a 3-digit ANZSIC class; the sectors IVA was derived by applying 3-digit employment proportions to the respective 2-digit IVA figures. Manufacturing IVA was published at the 3-digit level between 2010–11 and 2013–14. Manufacturing 3-digit IVA proportions for 2010-11 were applied to manufacturing 2-digit IVA figures for the years 2006–07 to 2009–10.

Sources: ABS, Australian Industry, 2013–14 cat. no. 8155.0; ABS, Labour Force, Australia, Detailed, Quarterly, Nov 2015 cat. no. 6291.0.55.003.

Figure 2.4: Employment for top three industries purchasing iron and steel Manufacturing products, 2005 to 2015



Note: Construction employment is the summation of Construction Services, Heavy and Civil Engineering Construction and Residential Building Construction.

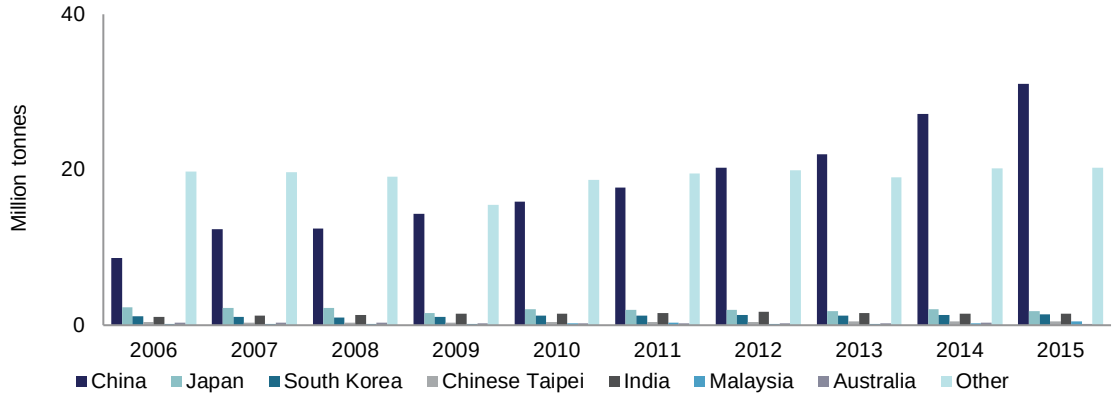
Source: ABS, Labour Force, Australia, Detailed, Quarterly, Nov 2015, cat. no. 6291.0.55.003.

2.2.3 Global aluminium consumption

Aluminium has a broad range of uses. It is primarily used in the manufacturing of automobiles, packaging and construction, and is also used in electrical applications, machinery and consumer durables.

Figure 2.5 shows the growth in consumption over the past decade. Over this period total aluminium consumption increased by 23 million tonnes—a 68 per cent increase. Most of this growth was from China, which currently accounts for more than half of the world's consumption. Over the past decade China's consumption more than doubled, an increase of 22 million tonnes.

Figure 2.5: Selected aluminium consumers, 2006 to 2015



Source: WBMS; Department of Industry, Innovation and Science.

2.2.4 Demand for aluminium in Australia

Similar to the steel industry, purchase of aluminium products is highly concentrated. The basic non-ferrous metal manufacturing industry purchased 40.4 per cent of aluminium products in 2012–13, followed by structural metal product manufacturing with ten per cent. Table 2.2 presents more information on the major consumers of aluminium products.

Table 2.2: Top three industries purchasing aluminium products by value, 2012–13

Industry	*Aluminium supply ($ millions)*	*Share of aluminium of input (per cent)*	*Import supply ($ millions)*	*Import share of supply (per cent)*
Basic Non-Ferrous Metal Manufacturing	938.2	40.4	149.4	15.9
Structural Metal Product Manufacturing	232.9	10.0	125.2	53.7
Specialised and other Machinery and Equipment Manufacturing	147.5	6.3	59.4	40.3
Top three industries by value	**1318.6**	**56.7**	**333.9**	**25.3**

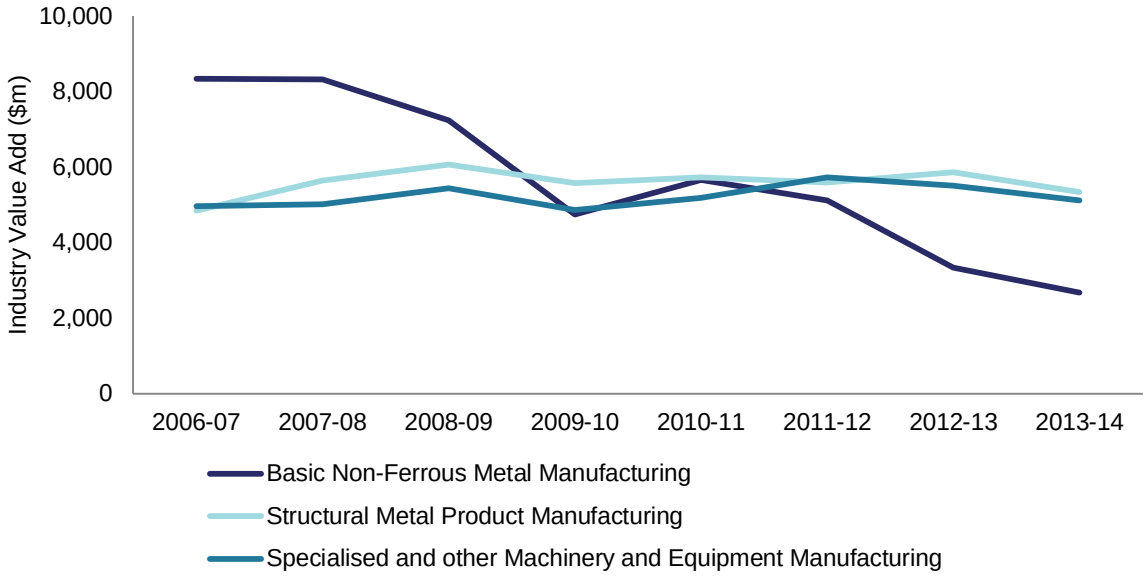
Note: Industries that have the highest demand, by value, for aluminium products.

Source: ABS, Australian National Accounts: Input-Output Tables, 2012-13 cat. no. 5209.0.55.001.

Also like steel, aluminium is an intermediate product and the demand for aluminium products is derived from these major consuming industries. Figures 2.6 and 2.7 illustrate how these three

sectors have grown over time in terms of output and employment, respectively. While employment numbers have remained largely constant, the value of output produced by these industries has generally declined.

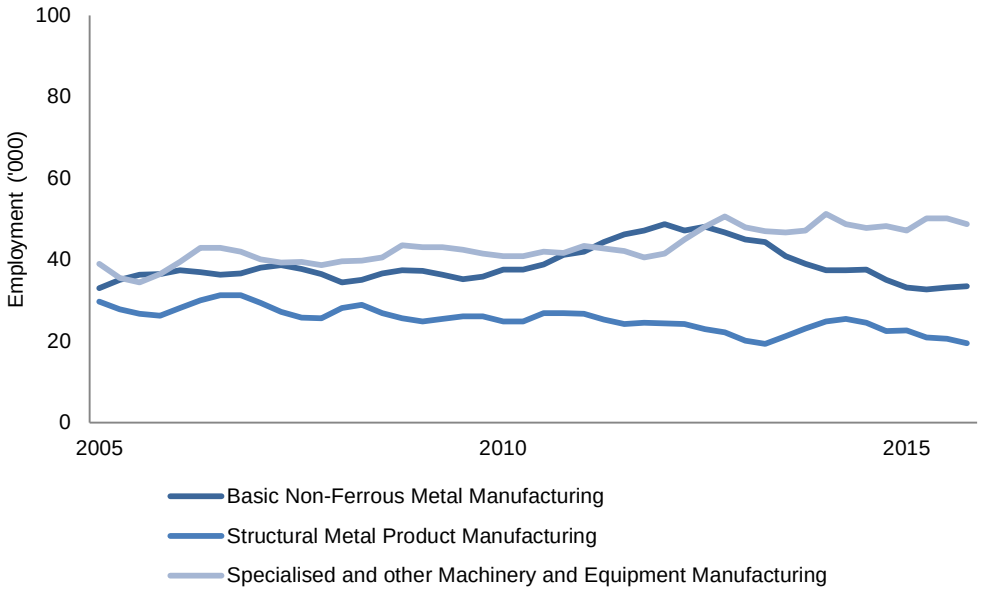
Figure 2.6: Industry Value Add for top three industries purchasing aluminium products, by value, 2006–07 to 2013–14



Notes: Manufacturing IVA was published at the 3-digit level between 2010–11 and 2013–14. Manufacturing 3-digit IVA proportions for 2010-11 were applied to manufacturing 2-digit IVA figures for the years 2006–07 to 2009–10.

Sources: ABS, Australian Industry, 2013–14 cat. no. 8155.0.

Figure 2.7: Employment for top three industries purchasing aluminium products, 2005 to 2015



Source: ABS, Labour Force, Australia, Detailed, Quarterly, Nov 2015, cat. no. 6291.0.55.003.

Australia is the fourth largest exporter of aluminium in the world. The main markets for Australia's aluminium exports include Japan, South Korea, Chinese Taipei and Thailand.

2.3 Trends in global production

Two decades ago, the world produced 752 million tonnes of steel. Most of this production took place in Europe, Japan and the United States. By 2005 production had increased by 52 per cent, and by 2015 production had increased by 122 per cent. The vast majority of this increased production occurred in China.

A similar story exists in the aluminium sector. Global aluminium production has increased by 170 per cent over the past two decades—again, mostly due to an increase in Chinese production.

This section outlines recent developments in global steel and aluminium production, and the position of the Australian industry.

2.3.1 Global steel production

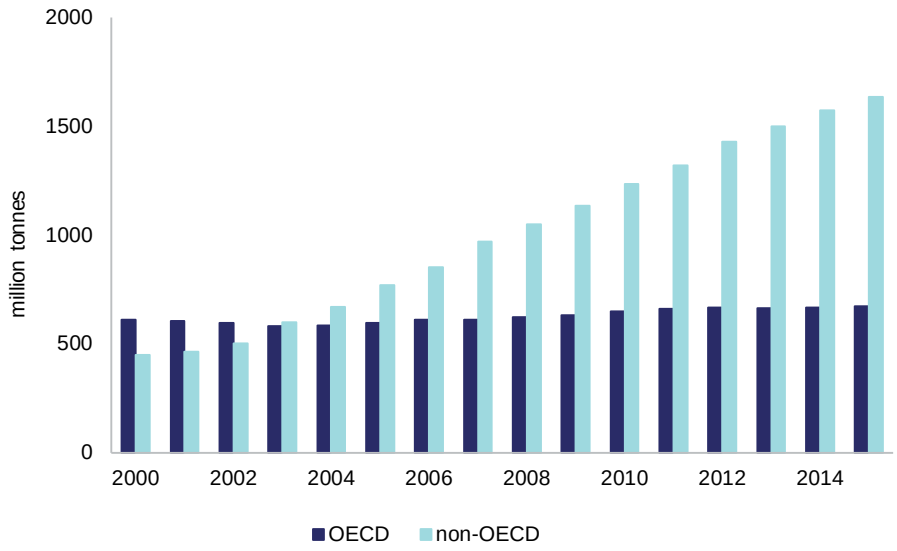
In 2014 China was the world's largest producer of crude steel, producing 823 million tonnes or 49 per cent of global production. The European Union represented ten per cent of global production, while Japan represented 6.6 per cent and the United States represented 5.3 per cent. Australia produced 4.6 million tonnes of crude steel in 2014, or 0.3 per cent of global production.

China's steel production has grown at a rapid pace over the past decade. Between 2004 and 2014, China's crude steel production grew at an average annual rate of 12 per cent. Prior to 2006, China was a net importer of crude steel. In 2005 Ukraine, Russia and Japan were the world's largest net exporters of crude steel. Since then, China has become the world's largest net exporter of crude steel. In 2014 China's net exports of crude steel were 82 million tonnes, more than double that of the next highest, Japan, at 38 million tonnes.

Consistent with the growth in global demand, the lead-up to the GFC saw significant investment in new steel production capacity. The global steel industry's capacity to produce steel has increased rapidly since the early 2000s. Most of the growth in steel production capacity has occurred in non-OECD economies. This growth was driven by increasing construction and manufacturing activity and the related investment in infrastructure, which is necessary for the economic development of emerging economies.[3] In general overcapacity is when production capacity exceeds demand. In 2015 non-OECD countries accounted for 80 per cent of total production capacity, increasing from 22 per cent in 2000 (see Figure 2.8).

[3] OECD (2015a)

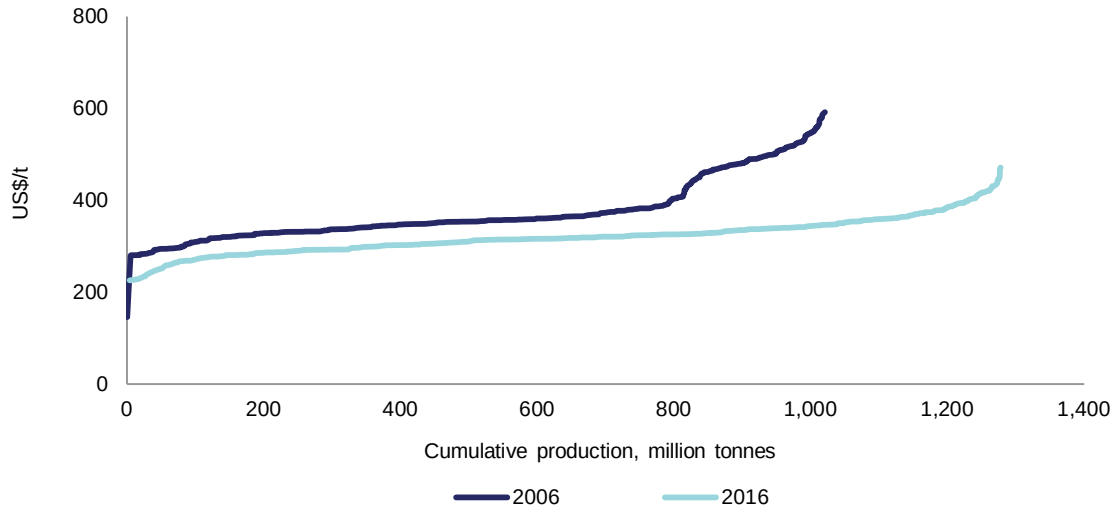
Figure 2.8: World steel production capacity: OECD vs Non-OECD, 2000 to 2015



Source: OECD (2015b) - http://www.oecd.org/sti/ind/steelcapacity.htm

As would be expected, much of the new capacity used more efficient production techniques. Figure 2.9 shows the shift in the industry's cost curve over time. In real terms, the costs of producing steel are lower today than a decade ago.

Figure 2.9: Steel cost curve, real dollars, 2006 and 2016



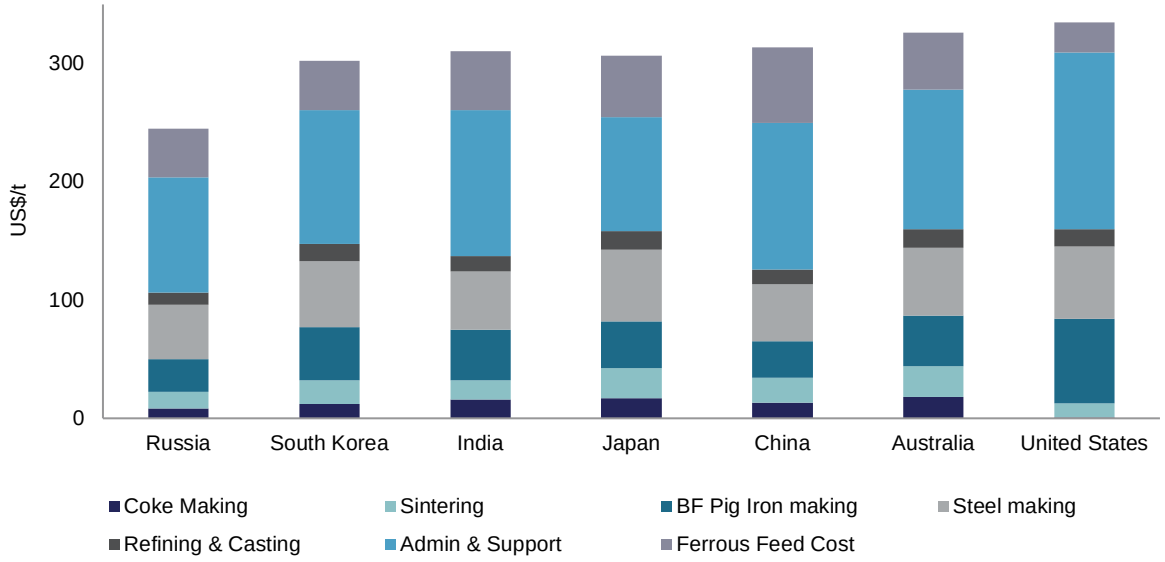
Source: AME Group; Department of Industry, Innovation and Science.

Figure 2.10 illustrates the variation in cost (US$ per tonne) for each steel producing country. On average, Russia is the lowest cost producer, followed by South Korea and India—although there are notable differences in the costs of production within a country. The United States and Australia are the higher cost producers on average.

In 2015 the cash cost (excluding depreciation) of producing a tonne of crude steel in Australia was 11 per cent lower than in India and five per cent lower than the United States. However, steel was four and 16 per cent cheaper to produce in China and Japan respectively, than in Australia. Over the last decade the average cost has fallen at approximately the same rate for India, Australia and China.

These costs have not been adjusted for any cost impacts from government interventions in steel markets.

Figure 2.10: Cost components for steel production, 2015



Source: AME; Department of Industry, Innovation and Science.

2.3.2 Australian steel production

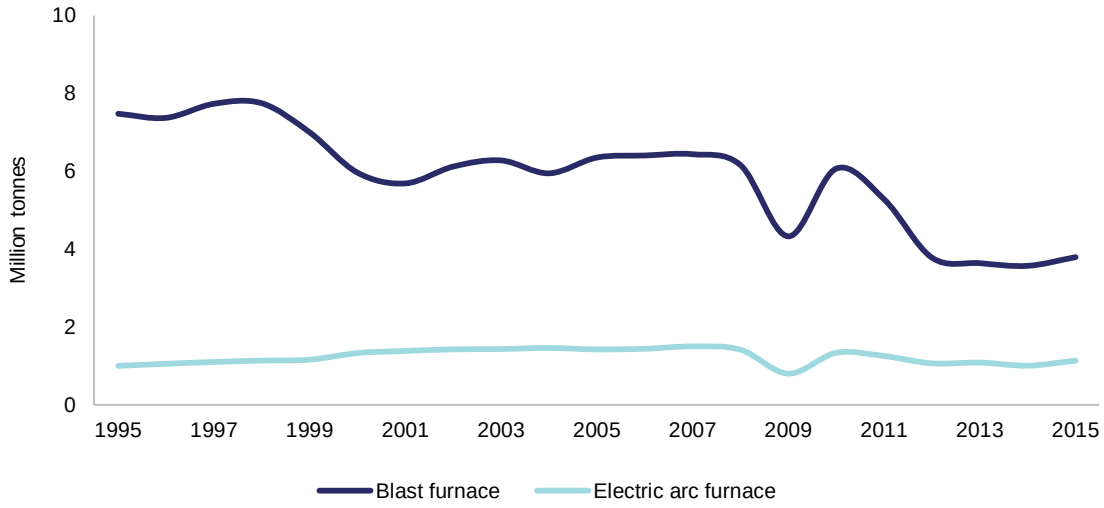
Figure 2.11 shows Australia's crude steel production over the last two decades. Australian crude steel output was 7.6 million tonnes in 1980, reaching a peak of 8.9 million tonnes in 1998. Australian steelworks produced 7.3 million tonnes in 2010. The volume of Australian crude steel production has fallen in recent years, to be approximately 4.9 million tonnes in 2015.[4]

Total Australian crude steel output accounted for approximately 0.3 percent of world output in 2015.

Industry Gross Value Add (IGVA) has been declining at an annual rate of 6.4 per cent for the past five years. The sector's IGVA for 2014-15 is estimated at $5.5 billion—about 5.5 per cent of the manufacturing sector's output. This is down from $7.6 billion in 2009-10.

[4] World Steel Association.

Figure 2.11: Australian crude steel production, 1995 to 2015



Source: Company reports

The Australian steel manufacturing industry comprises 33 thousand workers. The sector is dominated by two major producers: Arrium Mining and Materials (Arrium) and BlueScope Steel (BlueScope). Combined, these two companies employ around ten thousand workers.

Arrium and BlueScope were both formerly part of the BHP Group. Arrium was spun out of BHP in 2000 and listed on the Australian Stock Exchange (ASX) originally as OneSteel. BlueScope Steel was demerged from BHP Billiton and listed on the ASX in 2002. BlueScope's Port Kembla steelworks opened in 1928, using coal from the region's coal fields and iron ore from South Australia. Arrium's Whyalla steelworks opened in 1941, using iron ore from South Australia and coal from New South Wales. Both of these steelworks remain connected to downstream steel fabrication and distribution networks Australia-wide. However, the volume of steel produced at these two integrated steelworks has fallen in recent years. A summary of Arrium and BlueScope's current production capacity is presented in the Table 2.3.

Table 2.3. Summary of Australia steel producers

Company	***Major Product Type***	***Product Description***	***Output Capacity***
Arrium	Steel long products	Hot-rolled structural bars, rail and sleepers	2.5 Mt
BlueScope	Steel flat products	Hot-rolled coils	2.6 Mt

Source: Company annual reports

Outside of BlueScope and Arrium, the industry is represented by a large number of small to medium businesses. In the iron smelting and steel sector, more than half of the firms employ less than 20 people and fewer than 20 per cent of businesses generate over $2 million in revenue annually. In the steel pipe and tube manufacturing sector, it is estimated less than ten per cent of firms in the industry employ 20 staff or more.

In the lead-up to the GFC, production and employment was relatively stable. However since 2010, production and employment have been in steady decline. Table 2.4 shows total (full- and part-time)

employment in the steel manufacturing industry was above 40,000 between 2006 and 2011, but since 2012 has remained below 40,000. The fall in employment between 2011 and 2015 was about 26 per cent, compared with 12 per cent for manufacturing over the decade. Steel production employment as a share of total manufacturing employment has consequently fallen since 2012.

Table 2.4: Total steel employment ('000), 2006-2015

Industry	*2006*	*2007*	*2008*	*2009*	*2010*	*2011*	*2012*	*2013*	*2014*	*2015*
Basic ferrous metal manufacturing	42.6	40.2	44.7	38.1	40.8	42.7	34.0	33.6	37.4	31.5
Basic ferrous metal product manufacturing	2.9	2.2	4.1	2.8	2.3	2.7	2.2	2.0	2.3	2.3
Total	**45.5**	**42.3**	**48.8**	**40.9**	**43.1**	**45.4**	**36.2**	**35.7**	**39.7**	**33.8**

Notes: Based on four quarter averages. Steel employment is the summation of basic ferrous metal manufacturing and basic ferrous metal product manufacturing employment levels.

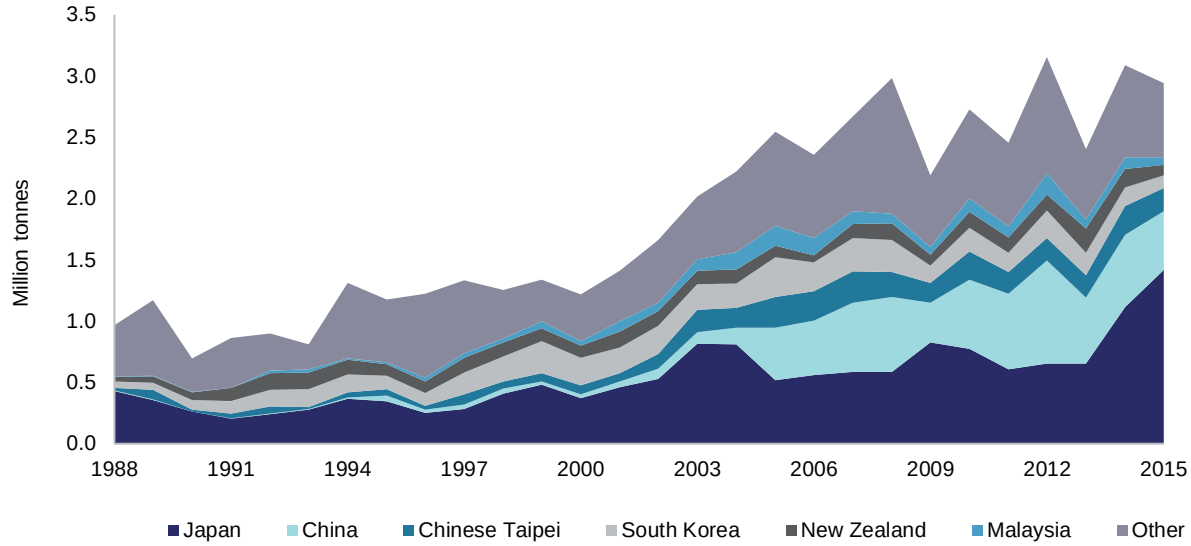
Source: ABS, Labour Force, Australia, Detailed, Quarterly, Nov 2015, cat.no. 6291.0.55.003, EQ06.

The Australian steel manufacturing industry has been significantly impacted by policy reforms over the past few decades. Phased reductions in imported steel tariffs and the floating of the Australian dollar have exposed steel manufacturers to direct competition from overseas markets and fluctuations in exchange rates. Further market liberalisation, including Free Trade Agreements (FTAs) with China, Japan and South Korea, have provided Australian producers with better access to important markets, increasing two-way investment and reducing import costs for Australian businesses and consumers.

Local production of steel products has generally been unable to meet local demand. Each year, around two to three million tonnes of steel are imported. In 2014 imports of steel accounted for 56 per cent of total steel consumption, and were worth around $4.5 billion. This has been generally increasing since 2000.

As shown in Figure 2.12, the supply of imports from all sources has grown significantly since 2000. Total imports continued to grow over the past decade, increasing from 2.5 million tonnes to 2.9 million tonnes over this period. The majority of Australia's steel imports come from Japan (48.3 per cent), China (16.3 per cent) and Chinese Taipei (6.4 per cent). Imports from China are now significantly higher than they were in 2003. While Japan has been a major source of imports over the years, imports from Japan have spiked over the last few years. The major sources of imports are presented in Figure 2.12.

Figure 2.12: Australian steel imports, 1988 to 2015



Notes: Approximately 30 per cent of Australia's steel import volumes data is confidential (with no information on country of origin). This data has been proportionally reallocated to each country.

Sources: ABS, International Trade, Australia, cat. no. 5465.0.

2.3.3 Global aluminium production

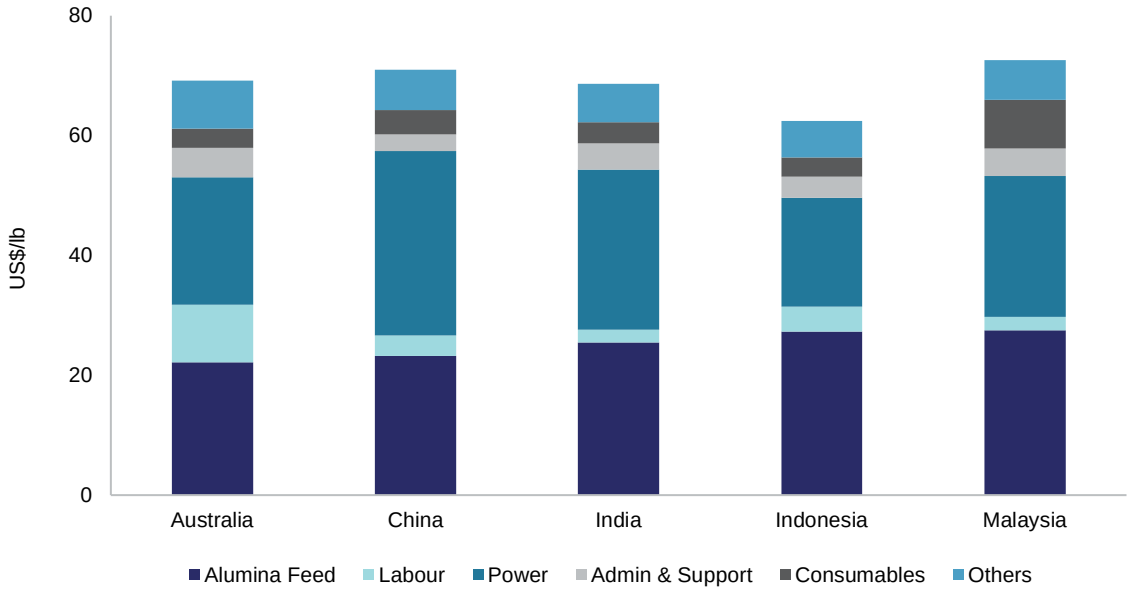
In 2014 China was the world's largest producer of primary aluminium (excluding recycled aluminium), producing 27 million tonnes or 52 per cent of global production. Russia represented seven per cent of global production, Canada five per cent and the United Arab Emirates four per cent. Australia produced 1.7 million tonnes of aluminium in 2014, approximately three per cent of global production.

Like steel, China's aluminium production has grown rapidly. In 2004 China produced 6.7 million tonnes of aluminium, an average annual growth rate of 16 per cent over the decade to 2014.

Although China is the world's largest producer and consumer of aluminium, it is not a major exporter or importer of aluminium (although it does export value-added products such as extrusions). In 2014 Russia was the world's largest exporter of aluminium, exporting 3.8 million tonnes, or 18 per cent of world exports. The world's largest importer in 2014 was Japan, which imported 2.8 million tonnes, or 13 per cent of the world's total imports.

Figure 2.13 charts the six main cost categories for primary aluminium production: alumina feed, labour, power, administration and support, consumables and others. Australia has lowest unit cost for alumina feed but has the highest unit cost for labour. China has the highest unit cost for power and lowest unit cost for administration and support. Aggregated unit costs for Australia, China and India are similar, and higher than the unit cost of Indonesia and lower than the unit cost of Malaysia.

Figure 2.13: Cost components for aluminium production, 2015

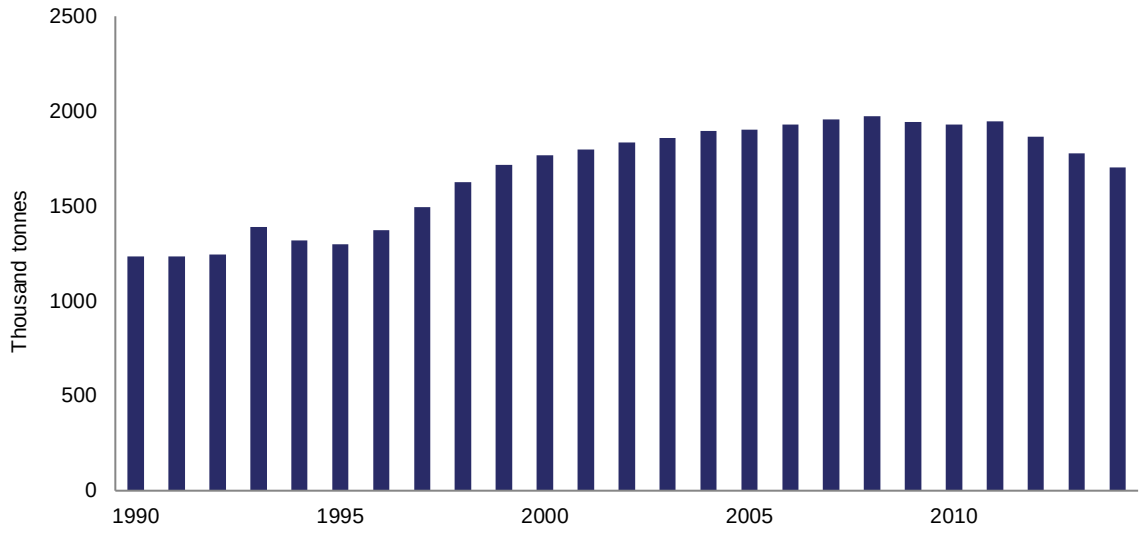


Source: AME; Department of Industry, Innovation and Science.

2.3.4 Australian aluminium production

Total Australian aluminium production accounted for around three per cent of world output in 2014, approximately 1.7 million tonnes. The volume of Australian primary aluminium production has fallen in recent years due to the closure of two smelters and increased aluminium recycling. Australia's aluminium production over the last two decades is reported in Figure 12.14.

Figure 12.14: Australian primary aluminium production, 1990 to 2014



Source: Department of Industry, Innovation and Science.

Aluminium's IGVA in 2014-15 is estimated at around $700 million. The sector has been in decline over the last five years, falling at an average annual rate of 10.2 per cent.

The Australian aluminium sector comprises 11 thousand workers. The industry's major players are Rio Tinto Plc–Rio Tinto Limited (Rio Tinto), Aloca of Australia (Aloca), Capral Limited (Capral) and G James Australia Pty Ltd (G James). Each of these firms specialises in either aluminium smelting or aluminium rolling, drawing and extruding.

- ***Aluminium smelting***—Australia's largest smelted aluminium producer is Rio Tinto. It has holdings in the Boyne smelter in Queensland, the associated Gladstone power station, the Tomago smelter in New South Wales and Bell Bay smelter in Tasmania. The importance of energy (in particular, electricity) to the Aluminium Smelting industry is highlighted by Boyne Island participants' purchase of the Gladstone power station in the early 1990s. Any electricity not required by the Boyne Island smelter is sold back into the Queensland power grid.

  Aloca is another major Australian aluminium smelter. The firm operates the Portland smelter in Victoria. The smelter is owned by Alcoa (55.0 per cent), the Chinese International Trust Investment Corporation (22.5 per cent) and the Marubeni Corporation (22.5 per cent). Smelter capacity is about 358,000 tonnes of aluminium per year, with 197,000 tonnes attributed to Alcoa. A large proportion of the aluminium produced in the Portland smelter is exported. In early 2013, Alcoa and the Victorian Government reached agreement on new contractual arrangements for electricity supplied to the Portland smelter. The Victorian Government purchases electricity and then on-sells it to Portland. This contract expires in 2016, after which Alcoa will purchase electricity at spot prices from the National Electricity Market (NEM).

- ***Aluminium rolling, drawing and extruding***—Capral is an Australian publicly listed company that derives the majority of its revenue from manufacturing aluminium products. Capral is the country's largest extruder and distributor of aluminium products, with five manufacturing sites across Australia. The company's manufacturing operations run eight extrusion presses from plants located in Bremer Park (Queensland), Penrith (New South Wales), Campbellfield (Victoria), Angaston (South Australia), and Canning Vale (Western Australia). Capral supplies aluminium products and systems for the architectural, residential and industrial markets. Over the past decade, the company has moved from producing a wide range of aluminium fabrications to focusing on the production of rolled and extruded products such as sheets, rods and wires.

  G James is a privately owned family company and one of the largest manufacturers of building and housing peripherals in Australia. The company operates in the industry through its subsidiary company, G James Extrusion Co Pty Ltd. The subsidiary is involved in the extrusion of standard geometric, proprietary, structural and marine-certified aluminium products. Additionally, the company stocks sheet, plate, coil and tread-plate products.

Table 2.5 shows the decline in aluminium employment since 2006. Over the decade to 2015, aluminium employment has fallen by 39 per cent, compared to 12 per cent for manufacturing employment. In 2006 aluminium employment accounted for 1.8 per cent of all manufacturing employment, and its share had declined to 1.3 per cent in 2015.

Table 2.5: Total aluminium employment ('000), 2006-2015

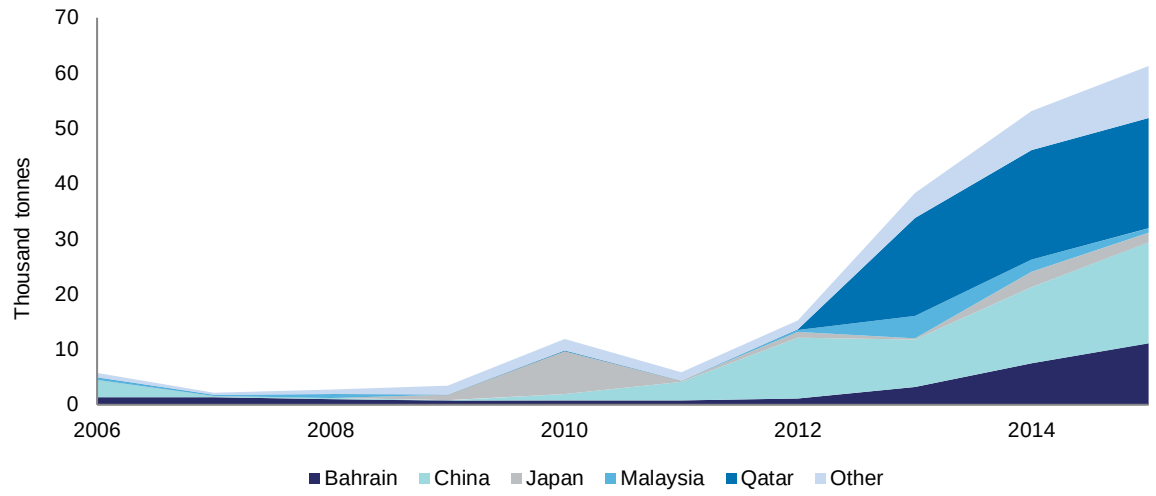
Industry	*2006*	*2007*	*2008*	*2009*	*2010*	*2011*	*2012*	*2013*	*2014*	*2015*
Aluminium Smelting	12.6	11.8	11.9	10.6	10.8	10.9	11.0	9.9	8.6	7.1
Aluminium Rolling, Drawing, Extruding	6.0	5.5	4.4	3.7	4.4	5.1	4.8	3.2	3.2	4.3
Total aluminium	**18.6**	**17.3**	**16.2**	**14.3**	**15.2**	**15.9**	**15.7**	**13.0**	**11.8**	**11.4**

Notes: Based on four quarter averages to November 2015. Aluminium employment was derived by applying the 2006 and 2011 Census 4-digit employment proportions to the Labour Force Survey 3-digit employment levels.

Sources: ABS, Labour Force, Australia, Detailed, Quarterly, Nov 2015, cat.no. 6291.0.55.003, EQ06; ABS, 2011 Census of Population and Housing (TableBuilder extract); ABS, 2006 Census of Population and Housing (TableBuilder extract).

Australia is the fourth largest exporter of aluminium in the world. As a result, Australia is a relatively small importer of aluminium, importing around 61 thousand tonnes in 2015 (figure 2.15). Imports accounted for around 20 per cent of consumption in Australia during this period and were worth $511 million. Despite being a small importer, imports have increased markedly since 2010–11.

Figure 2.15: Australian aluminium imports, 2006 to 2015



Sources: ABS International Trade, Australia, cat. no. 5465.0.

The majority of Australian aluminium imports come from Qatar (33 per cent), followed by China (29 per cent) and Bahrain (18 per cent). The supply of imports from the Middle East has grown rapidly since 2011–12, rising from 1.2 thousand to 31 thousand tonnes over this period.

2.4 Market outcomes

The net effect of changes in demand and supply over the past decade have manifested in three key ways. First, global prices for both steel and aluminium have weakened since 2010. This is a consequence of weak demand, particularly for steel, and significant investments in increasing productive capacity.

Second, margins, which are linked to global prices, describe the difference between costs of production and revenue. As expected, steel and aluminium production margins declined during the GFC, recovered during the commodity boom of 2010-2014, and have remained in general decline since.

The third factor relates to utilisation and stockpiling. Utilisation rates—the rate at which productive capacity is employed—have fallen since the GFC, while at the same time stockpiles of steel and aluminium have grown. It is not costless to exit either the steel or aluminium markets, since both industries require significant sunk investment. Consequently, it may be more efficient to slow production in the short term (while maintaining capacity), especially when demand is expected to recover in the near future.

Each of these points is discussed in turn below.

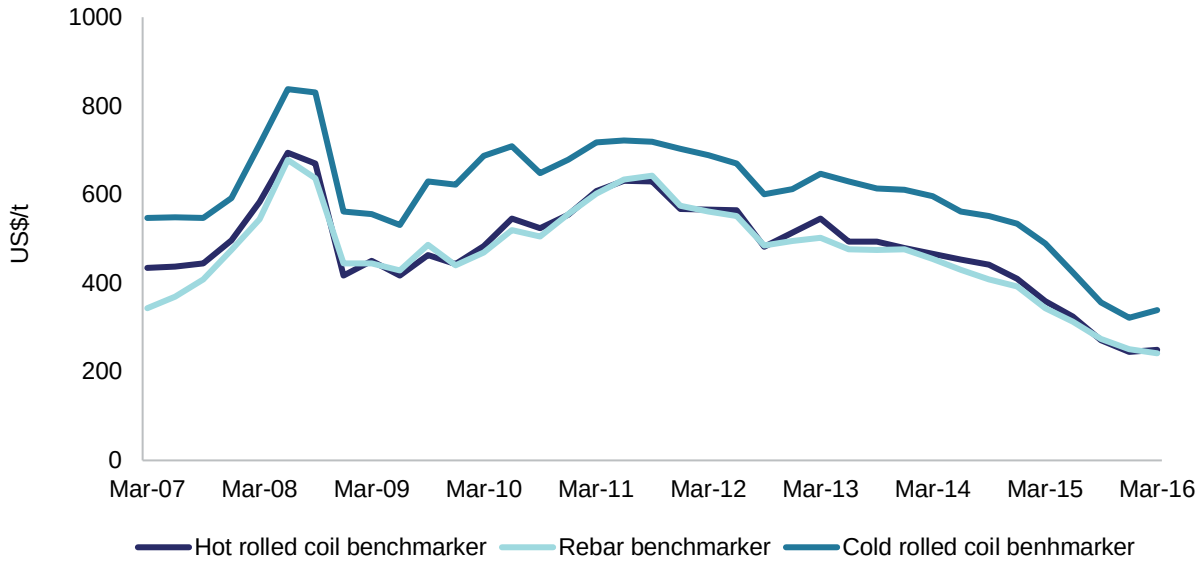
2.4.1 Prices

As with any market, prices are the main mechanism through which steel demand and supply are able to find balance.

Global prices for steel are presented in Figure 2.16. World steel prices rose sharply and peaked just before the GFC. This reflected the massive increase in demand for steel that resulted from the rise of the Chinese economy—it is worth noting that China's economic rise has been an unprecedented economic event in its magnitude and impact on the global economy. Meeting this massive increase in the demand for steel required significant inputs of raw materials—a feat that was not possible in the absence of significant investments in mining infrastructure across the globe. While the mining sector caught up with this demand, this put temporary pressure on commodity prices to rise and so too the price of steel.

Following the downturn during the GFC, prices were relatively high from 2010-2014 due to continued growth in China. Since 2014, the combined effects of the significant slowdown in economic growth (including in China), weak steel demand and falling raw material prices have placed downward pressure on steel prices. For example, lower oil prices are having important effects on demand and prices for specific steel products used in the oil and gas industry. While global steel production has slowed, it has not slowed as much as steel demand. As a result, steel prices have continued to decline, reaching a new low in 2015.

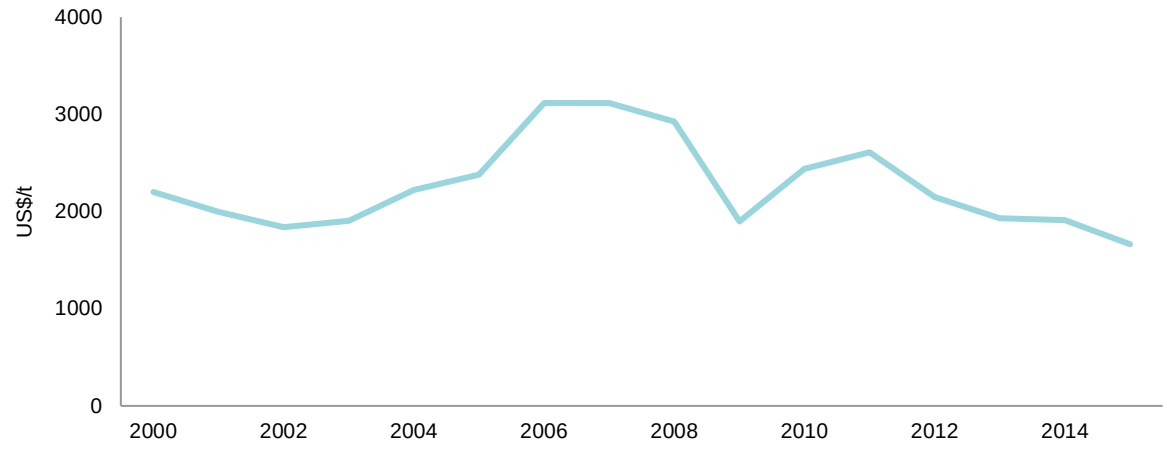
Figure 2.16: World steel prices, March 2007 to March 2016



Source: Metal Bulletin; Bloomberg.

After a steady increase in the lead-up to the GFC, primary aluminium prices have been in general decline since 2006 (except for a short recovery in 2010 and 2011 in the wake of the GFC). In 2015 a tonne of aluminium cost less than it did in 2000. Global aluminium prices are shown in Figure 2.17.

Figure 2.17: World primary aluminium prices, 2000 to 2014



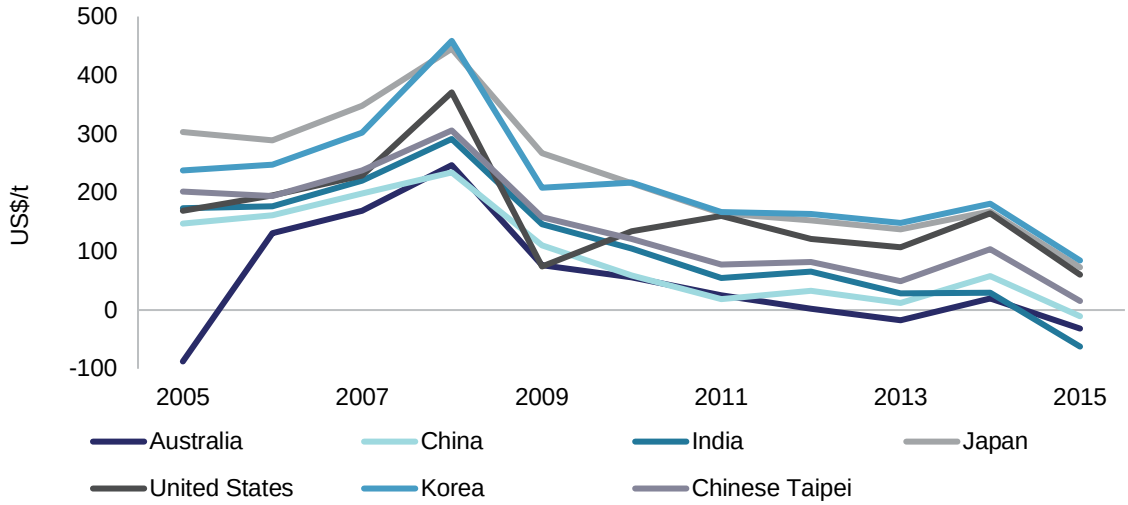
Source: Bloomberg.

2.4.2 Margins

Weak earnings have led to a decline in the steel industry's profitability over the last few years, with little recovery expected in the near future.

Figure 2.18 presents simple margins for major steel producing nations over the period 2005-2015. These margins have been calculated using average industry cost data for each country. Margins have been in general decline since 2008. In 2015 margins in a number of countries—including Australia, China and India—were negative suggesting that the average costs of production were above average revenues. Notably, while margins in each country have declined over this period, Australia has typically operated with some of the lowest margins each year. This reflects a combination of high costs and sluggish demand. Japan, South Korea and the United States typically enjoy the highest margins.

Figure 2.18: Margin of steel production, per tonne of steel produced, 2005 to 2015



Notes: Production margins are total revenue per tonne minus total production costs before credit per tonne. Total production costs before credit incudes cash costs and depreciation.

Source: AME Group.

Similar to Figure 2.18, Figure 2.19 presents simple margins for major aluminium producing nations over the period 2005-2015. Again, these margins have been calculated using average industry cost data for each country. Aluminium production margins declined during the GFC and are yet to return to pre-recession levels. In 2015 the United States had the only negative margin, suggesting the average cost of production was above average revenue. However, as evident in Figure 2.19, China, Australia and India had relatively low margins in 2015. In 2015 China had the lowest positive margin of US$7.56 per tonne, after being negative in the preceding few years. Qatar and Russia typically enjoy the highest margins each year. Australia's margins have typically fallen in the middle of the range in most years.

Figure 2.19: Margin of aluminium production, per tonne of aluminium produced, 2005 to 2015

Source: AME Group

2.4.3 Utilisation and inventories

Although demand for steel grew at double-digit rates over much of the past 15 years, the last few years have seen a significant easing in expansion rates and reducing utilisation rates for steel production. This has reflected the slowing in Chinese economic growth, especially in 2015, and the rebalancing of the Chinese economy towards more consumption-driven growth instead of investment-driven growth.

Overcapacity in the steel industry is a major issue that emerges every time there is a downturn in the economic cycle. The OECD has highlighted the cyclical nature of the steel industry, commenting that:

> Several steel crises have been observed over the past several decades, with at least one crisis having occurred every decade since the 1970s. These crises have been associated with broader regional and global economic recessions.[5]

In the short run, overcapacity can be managed through high inventories and low profitability. In the long run however, this cannot be sustained and would lead to plant closures amongst the least efficient firms.

[5] OECD, *Evaluating the Financial Health of the Steel Industry*, DSTI/SU/SC(2015)12/FINAL, 2016, p. 17, http://www.oecd.org/sti/ind/Evaluating-Financial-Health-Steel-Industry.pdf.

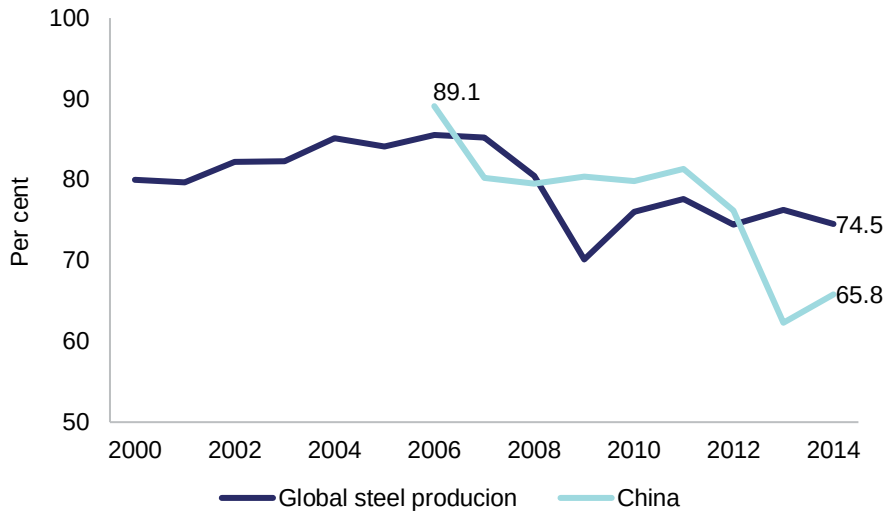
The OECD has noted that the market's current levels of excess capacity have been exacerbated by certain 'government steel policies includ[ing] continued government subsidies (notably subsidies for the creation of new capacity or the maintenance of inefficient capacities) and continued approvals for new steel facilities'.[6] In the OECD's view, the solution is:

> to allow market mechanisms to work properly and avoid measures that artificially support steelmaking capacity. Of particular importance for governments will be to work towards removing market distorting policies such as subsidies that promote the emergence of new capacity or delay the closure of failing companies, eliminating trade and investment barriers that slow the restructuring that is needed for the industry, allowing market-based investment decisions in the steel sector, and ensuring that new plants are subject to standards that protect the environment and uphold worker safety.[7]

Chapter 3 of this report sets out in some detail the evidence that the Commission has been able to obtain, within the time it has had available to prepare this report, on the market distorting policies and other government interventions referred to by the OECD.

Figure 2.20 reports utilisation rates for Chinese and global steel production. Globally, utilisation rates progressively crept towards 85 per cent up to 2008, but have since fallen to below 75 per cent.[8] Chinese utilisation rates—for which data is only available since 2006—have progressively fallen over this period. In 2014 the Chinese utilisation rate was 65.8 per cent.

Figure 2.20: Steel production utilisation rate, 2000 to 2014



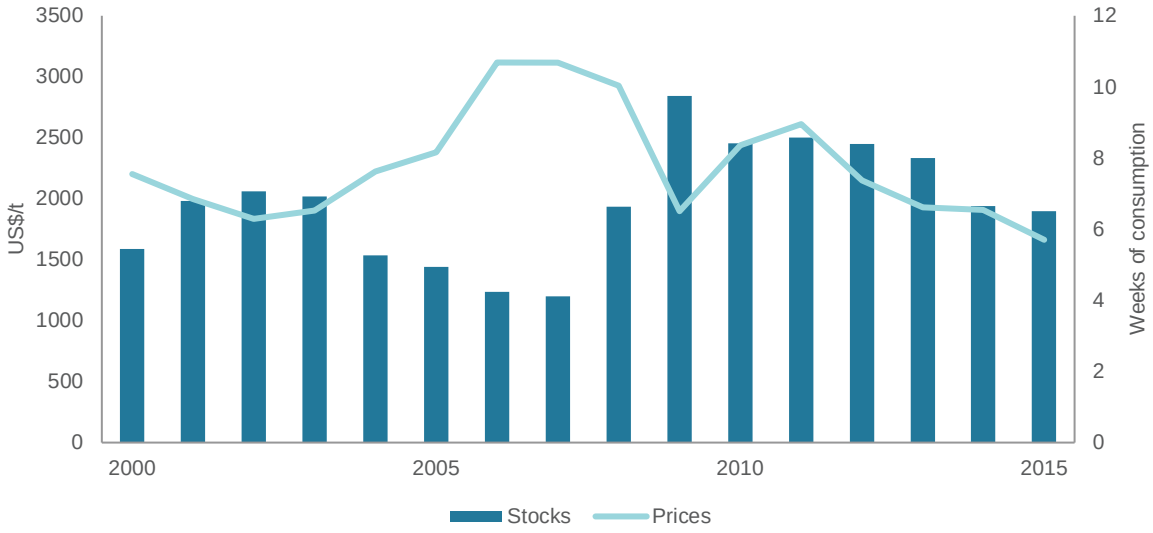
Source: OECD (25b); Li (2015); Department of Industry, Innovation and Science.

As can be seen in Figure 2.21, the movement of aluminium prices in the short term is correlated with the size of inventories. In traditional commodity cycles, commodity prices tend to rise when inventories decrease and conversely drop when inventories increase. The relationship appears not

[6] OECD, 'Excess capacity in the global steel industry: The current situation and ways forward', 2015, p. 5.
[7] ibid., p. 6.
[8] It may not be economic for the steel industry to run at full capacity, even when pricing is attractive and companies appear to be maximising their output. During the peak of the pre-crisis price upturn in the first half of 2008, for example, monthly global capacity utilisation did not rise above 91 per cent. Seasonal factors as well as the need to occasionally close down operations to refurbish steel plants and add new facilities tend to reduce the effective capacity of steel mills.

to have applied for aluminium in recent years. However, other data, such as from Harbor Aluminium, shows global inventories increasing, or stabilising at a high level, in recent years.

Figure 2.21: Annual aluminium prices and stocks, 2000 to 2015



Source: Bloomberg and WBMS.

2.5 Conclusion

Both the steel and aluminium markets have undergone substantial change over the past decade. In the lead up to the GFC, demand for steel and aluminium products reached unprecedented levels, supported by rapid investment in new infrastructure in China. China's consumption of steel grew each year by an average of ten per cent up until 2013; aluminium consumption grew an average 18 per cent a year.

The increase in demand contributed to significant increases in producer margins. Between 2005 and 2008, producer margins in South Korea, the United States and Australia each more than doubled. Elsewhere margins increased by more than 50 per cent.

High demand and high margins encouraged large-scale investment in new capacity. China, a net importer of steel as late as 2006, is now the world's largest producer, and its production has increased at an average annual rate of 12 per cent. China became the world's largest net exporter over this period and now exports more than double that of Japan, the next largest exporter of steel.

Similar to steel, China now produces more than half of all primary aluminium production in the world. Most of this production is for domestic consumption, with China being neither a major importer nor exporter of primary aluminium.

While prices and margins would have been expected to return to more "normal" levels once global capacity caught up with demand, the GFC, a subsequent slowdown in global economic activity and an acceleration of China's economic transition (from investment-led growth to being more consumption-based) has resulted in prices and margins falling below "normal" long-term (underlying) levels.

Prices for steel and aluminium are today around half of their pre-GFC peaks which has reduced margins and increased the financial pressure on producers. In some cases, producer margins are negative. Inventories remain at high levels and steel utilisation rates, which were as high as 85 per cent or more pre-GFC, are now much lower at 75 per cent.

Excess capacity—a problem that afflicts the steel industry during every downturn in the business cycle—remains a significant issue for the sector. The growing gap between global steelmaking capacity and demand has led to deterioration in the financial situation of steelmakers, and raised concerns about the longer-term economic viability and efficiency of the industry. Despite this, there continues to be new investment projects in many parts of the world (see chapter 3 for more detail).

Australia's experience has been quite similar to the rest of the world. High demand from the Australian construction and heavy manufacturing sectors resulted in higher demand for steel and aluminium in the lead up to the GFC, but this growth then slowed considerably.

The increase in demand for steel in Australia was partly met by increased production, but more so by higher imports. Steel imports increased by about 50 per cent, while Australian production only increased marginally. Japan remains the largest source of steel imports into Australia, but imports are increasingly being sourced from other markets, China in particular. Notably, Australia did not historically import aluminium in significant quantities prior to 2011, with imports totalling less than 5,000 tonnes. Since then imports of aluminium have steadily increased, reaching 61,000 tonnes in 2015.

The Australian steel and aluminium industries are facing considerable competition from overseas producers. Australian producers are generally higher cost by global standards. The new global capacity that has recently been developed uses progressively more efficient production processes, and the cost of producing steel has decreased in real terms over the last decade.

Global steel and aluminium markets are now in a state where capacity has well outstripped demand. The price and production responses outlined above are short term responses that would be consistent with movements in the business cycle. However, if the imbalance between supply and demand is structural and remains over the medium to long term—as is expected in steel—then greater adjustments will be required and this will necessarily mean the closure of some capacity. Producers with limited operational scale and high cost producers are likely to be most vulnerable.

3 Distortions in Asian and global steel and aluminium markets

Key points

- As discussed in chapter 2, global steel and aluminium industries commonly experience economic cycles and over-shooting of production capacity as a result of general business cycles. However, the Commission's analysis supports a finding that economically inefficient market interventions have amplified, and are likely to have extended the duration of, the current cyclical downturn.
- OECD analysis has found that a major factor contributing to capacity imbalances in the steel industry, in addition to market downturns, are government interventions and other market-distorting practices.
- Government interventions in aluminium and steel manufacturing industries have occurred, to varying degrees, at various times in many countries, including Australia. Reasons for these interventions often include encouraging investment, self-sufficiency and local employment opportunities. More recently, interventions have increasingly been directed at pursuing environmental objectives and structural adjustment policies.
- Asian governments are not unusual in intervening in steel and aluminium markets. However, the nature and extent of previous and, in some cases, continuing Asian government interventions, and the relative magnitude of Chinese production, has meant that these interventions have been major contributing factors—although not the only contributors—to sustained global overcapacity, ongoing excess production, the build-up of large stockpiles (especially aluminium), and depressed world prices.
- Many of the policies adopted by Asian governments, particularly in China, would meet the OECD's definition of being market distorting in that they have the effect of sustaining ongoing overcapacity by supporting the building of new capacity or keeping inefficient facilities in operation.
- Bringing global capacity into balance with demand is unlikely to occur in the near-term, in part because government interventions continue to support new capacity investments and delay the closure of inefficient plants. The OECD considers that the outlook for the steel industry has weakened significantly and that adjustment pressures are growing significantly. It has cautioned that government interventions that lead to more market distortions would eventually create even more severe adjustment challenges in the longer term.

This chapter draws on information and analysis from Commission investigations into allegations of dumping and subsidisation of steel and aluminium products,[9] information and analysis by the Canada Border Services Agency (CSBA)[10] and the United States Department of Commerce,[11] reports

[9] Anti-Dumping Commission, Statement of Essential Facts No. 300: Alleged Dumping of Steel Reinforcing Bar Exported from The People's Republic of China, February 2016; Report No. 198: Dumping of Hot Rolled Plate Steel Exported from The People's Republic of China, Republic of Indonesia, Japan, The Republic of Korea and Taiwan, and Subsidisation of Hot Rolled Plate Steel Exported from The People's Republic of China, September 2013; Report No. 263, Review into Anti-Dumping Measures: Aluminium Road Wheels Exported from the People's Republic of China, September 2015; Statement of Essential Facts No. 301: Alleged Dumping of Steel Rod in Coils Exported from The People's Republic of China, February 2016.

[10] Canada Border Services Agency (CSBA), Statement of Reasons: Concerning the final determinations with respect to the dumping of 'Certain Concrete Reinforcing Bar Originating in or Exported from The People's Republic of China, The Republic of Korea and The Republic of Turkey'; and the Subsidising of 'Certain Concrete Reinforcing Bar Originating in or Exported from The People's Republic of China'; and the terminations of the investigation with respect to the Subsidising of 'Certain Concrete Reinforcing Bar Originating in or Exported from The Republic of Korea and The Republic of Turkey', December 2014.

produced by the Organisation for Economic Co-Operation and Development (OECD),[12] information supplied by Australian industry, information from industry journals and from publicly available information sources, and supplementary information compiled by Cadence Economics.

While the Commission has sought to identify and analyse a broad range of global and Asian government interventions in steel and aluminium markets, its analysis has been limited by difficulties in accessing the necessary data and information within the timeframe for this report. The Commission's ADIS will continue to undertake research and analysis to improve its market intelligence and understanding of market conditions and government interventions in global steel and aluminium markets.

3.1 OECD analysis of the causes of global overcapacity

As described in chapter 2 of this report, the global steel and aluminium markets are currently characterised by significant overcapacity, excess production, low prices and low average profitability. While steel is a cyclical industry, the OECD has noted that 'the current downturn is of particular concern given its depth and length', suggesting that it appears 'perhaps worse' than the cyclical downturn experienced from 1997 to 2002.[13]

The OECD has identified excess capacity as one of the most significant challenges currently facing the global steel industry. In 2015, the OECD's Directorate for Science, Technology and Innovation published an analysis of 'Excess capacity in the global steel industry: The current situation and ways forward'. This analysis identified two main reasons for excess capacity—cyclical market downturns and government interventions and other market distortions. OECD comments on the causes of global overcapacity are reproduced in the text box in this section.

The OECD Steel Committee[14] is leading a work program that aims to improve the economic viability of the global steel industry and help reduce trade frictions among trading partners. As well as monitoring capacity developments, the Committee is examining government policies and their effects on global excess capacity to reach a common understanding of the impacts of various policies and to identify appropriate policy approaches to address excess capacity. [15] The OECD has highlighted the need for governments to:

- remove market distorting policies such as subsidies that promote investment in new capacity or delay the closure of failing companies
- eliminate trade and investment barriers that slow industry restructuring
- allow market-based investment decisions
- ensure new plants are subject to standards that protect the environment and worker safety.[16]

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[11] US Department of Commerce-International Trade Administration, *Global Steel Trade: Structural Problems and Future Solutions*, Report to the President, July 2000; and investigations reports.
[12] See for example, OECD, 'Excess capacity in the global steel industry: The current situation and ways forward', 2015,http://www.oecd.org/sti/ind/excess-capacity-in-the-global-steel-industry.pdf; *Evaluating the Financial Health of the Steel Industry*, DSTI/SU/SC(2015)12/FINAL, 2016, http://www.oecd.org/sti/ind/Evaluating-Financial-Health-Steel-Industry.pdf; *Steel Market Developments, Q4 2015*, 2016, http://www.oecd.org/sti/ind/Steel-market-developments-2015Q4.pdf.
[13] OECD, *Evaluating the Financial Health of the Steel Industry*, DSTI/SU/SC(2015)12/FINAL, 2016, p. 26.
[14] The OECD Steel Committee is a forum for governments to address the challenges facing the steel industry, and identify political solutions to encourage open and transparent markets for steel. See http://www.oecd.org/sti/ind/steel.htm.
[15] OECD, 'Excess capacity in the global steel industry: The current situation and ways forward', 2015.
[16] ibid., p. 4.

OECD comments on reasons for global excess capacity

The main factors that contribute to capacity imbalances in the steel industry include market downturns, but also a number of government interventions and other market-distorting practices. … for most steel mills, it is normal to have periods of under-utilised capacity. When demand and prices of steel fall, profit-maximising firms should reduce production … Profits will tend to be lower because the firms still have to pay for their fixed assets, including their under-utilised steelmaking furnaces and rolling facilities. If the situation persists over time, however, then firms operating under normal market conditions would try to minimize their fixed costs by scaling back on capacity, thus making excess capacity a short-run phenomenon. History has nevertheless demonstrated that the adjustment process can be long and arduous in the steel industry, with some regions experiencing extended periods of excess capacity.

On the one hand, this can be due to high exit barriers, namely the costs of closure that discourage rapid adjustments in capacity. … In the face of market uncertainty firms may choose to delay exit rather than incur such costs. Expectations about future market conditions may also be contributing to current excess capacity; for example, steelmakers in some countries are investing heavily today in new steel production facilities in anticipation of much higher demand several years from now.

On the other hand, excess capacity that persists over time can also be indicative of government actions that hinder adjustments that would normally occur in competitive markets. Due to the importance and strategic nature of the steel industry to many national economies, a tendency during market downturns is to preserve the capacity of the industry, in order to alleviate unemployment and other social problems that would otherwise occur due to capacity closure. In addition, in some large net steel-importing regions, governments are also interested in moving towards greater "self-sufficiency" in steel production in order to reduce their dependency on imports. … despite current market conditions, a large number of new projects are taking place, which will increase global crude steelmaking capacity significantly in coming years.

… recent discussions at the OECD Steel Committee have suggested that in some regions excess capacity reflects temporary factors related to the business cycle while in other cases it reflects structural factors connected to government interventions. Specific concerns related to government steel policies include government subsidies (notably subsidies for the creation of new capacity or the maintenance of inefficient capacities) and continued approvals for new steel facilities. Governments have also noted that trade related measures, constraints on foreign investment, and the activities of government financial agencies are also contributing to global excess capacity and creating difficulties for the industry in addition to weak market conditions. And finally, policy measures which discourage "optimal" exit of the least productive plants may also contribute to excess capacity.

Source: OECD, 'Excess capacity in the global steel industry: The current situation and ways forward', 2015, p. 3, http://www.oecd.org/sti/ind/excess-capacity-in-the-global-steel-industry.pdf.

The OECD and the Belgian authorities are organising a High-Level Symposium on Excess Capacity and Structural Adjustment in the Steel Sector, to take place on 18 April 2016 in Brussels. The focus of the Symposium will be on promoting structural adjustment in the steel industry and reducing excess capacity by removing distortionary government policies and supporting industry restructuring.[17]

In placing priority on reducing market distortions that underpin sustained global overcapacity, the OECD has expressed concern that 'excess capacity in one region can displace production in other regions, thus harming producers in those markets', including through 'unfair trade practices such as dumping'.[18]

[17] http://www.oecd.org/sti/ind/steel-excess-capacity-structural-adjustment.htm

[18] OECD, 'Excess capacity in the global steel industry: The current situation and ways forward', 2015, p. 4.

The OECD has also noted that some government policies, such as policies to promote efficient industry restructuring or assist workers displaced from these industries, 'can be useful tools' to address the problem of global overcapacity and promote greater stability in global steel markets.[19]

3.2 History of government interventions in steel and aluminium markets

Government interventions in aluminium and steel manufacturing industries have occurred, to varying degrees, in many countries at various times. Reasons for these interventions include encouraging investment, self-sufficiency and local employment opportunities. More recently, interventions have increasingly been directed at pursuing environmental objectives and structural adjustment policies.

This section briefly outlines examples of past and current interventions by governments in Australia, the United States, Europe, Russia, and Brazil. The examples are intended to be illustrative, rather than to provide a comprehensive summary of interventions in these jurisdictions. Asian market interventions are discussed in the rest of this chapter.

3.2.1 Australia

In Australia, previous government policy measures provided assistance to support the development and viability of the steel and aluminium industries. For example, during the 1960s and 1970s, the Australian steel industry was protected by high tariff barriers. Australia has significantly reduced tariffs across-the-board since then. In the 1980s, structural adjustment assistance (through the Button Steel Plan) was provided to assist the industry adjust to stronger competition.

Current policies focus on promoting structural adjustment, productivity improvements, innovation and strengthening Australia's competitiveness. Other policy measures aim to provide a level playing field for Australian industries in competing with imports, including through government procurement policies. Chapter 4 of this report (section 4.3) outlines current government policies and programs that apply to the Australian steel and aluminium industries.

There is currently one trade remedy investigation, initiated by the United States, against an Australian steel producer, Bluescope.

3.2.2 United States

During past cyclical downturns in the steel industry, the US government has adopted policies to protect its steel industry from import competition. For example, in 1968 voluntary restraint agreements (VRAs) were put in place, followed by the Trigger Price Mechanism (TPM) during the 1970s, and additional VRAs from 1982 to 1992. VRAs required foreign exporters to limit exports to a preset market share, while the TPM was designed to penalize exporters selling below cost.[20]

In the current downturn, US steelmakers and aluminium product producers been actively sought trade remedies (see chapter 5). The government has provided Trade Adjustment Assistance for steel workers displaced as a result of production cutbacks and plant closures.[21] Steel production in the United States fell 8.8 per cent in 2015 as several mills reduced output or idled furnaces in response to the market downturn.[22]

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[19] ibid., p. 1.
[20] 'Steel industry', *International Encyclopedia of the Social Sciences*, 2008, www.encyclopedia.com
[21] T Stewart, E Drake, J Wang, S Bell, and R Scott, 'Surging steel imports put up to half a million US jobs at risk', Briefing paper 376, Economic Policy Institute, May 2014.
[22] OECD, *Steel Market Developments, Q4 2015*, 2016, p. 12.

3.2.3 Europe

In the early 1980s, steel capacity utilisation fell as investments in new production facilities outstripped demand growth. National governments provided subsidies to prevent plant closures and potential job losses in regions where unemployment was already high. Some previously-privatised steel producers were re-nationalised. Subsequently, structural adjustment policies and programs to assist displaced workers were implemented to reduce excess capacity and employment, particularly in Germany, France and the United Kingdom.

Significant restructuring took place in central and eastern European steel industries in the context of their EU accession in 2004 and 2007. The existing European member governments determined that accession would be conditional on privatisation and downsizing of central and eastern European steel companies, with the objective of preventing overproduction and a decline in steel prices in south-eastern Europe.[23]

Further plant closures and job losses have occurred as a result of the current cyclical downturn. OECD figures indicate that production in the EU fell by 1.8 per cent in 2015, mainly due to output declines in the United Kingdom, Italy and France, against almost flat production in Germany and positive growth in Poland. Steel output in the UK declined by a steep 10.4 per cent in 2015, reflecting plant closures in the latter part of the year. The Italian steel industry is in a serious recession, with steel output declining by 7.1 per cent in 2015, marking the fourth consecutive year of contraction. French output fell by 7.2 per cent in 2015.[24]

European countries have been subject to trade remedy investigations, with a number currently ongoing, including in the Ukraine (2), United Kingdom (2), Italy (2), European Union (1), the Netherlands (1), and Slovenia (1).[25] Turkey is subject to seven anti-dumping and countervailing investigations, five of which were initiated by the United States.[26] The Commission is not aware if claims of government intervention are factors in these investigations and will monitor the outcomes.

3.2.4 Russia

Prior to the dissolution of the Soviet Union in 1991, Soviet central planners had placed high priority on building the Soviet Union's steelmaking capacity, including through subsidised energy and raw material inputs.

After 1991, the steel industry was privatised and some capacity reductions occurred. However, over the 1990s, the Russian government and most steel firms resisted the required extensive restructuring of the remaining excess capacity, and closures of inefficient plants, that would have led to large job losses. State-controlled input suppliers continued to supply inputs to the steel industry at discounted prices, particularly for gas and electricity, freight, and coal (which was directly subsidised by the Russian government). Other metal producers also benefited from below-cost input prices. In addition, steel producers (like other companies) bartered their products, failed to pay their bills or taxes, and continued to operate while insolvent.[27]

As part of its accession to the WTO in 2012, the Russian government reduced tariffs on a range of industrial products including steel, reduced import fees and charges, and streamlined import procedures. It also reduced export duties on ferrous scrap (used in steel production). However,

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[23] V Trappman, 'Steel in the European Union in the wake of the global economic crisis', pp. 355-375 in B Galgoczi, J Drahokoupil and M Bernaciak, *Foreign Investment in Eastern and Southern Europe after 2008: Still a lever of growth?*, ETUI, Brussels, 2015.

[24] OECD, *Steel Market Developments, Q4 2015*, 2016, p. 12.

[25] Bracketed numbers refers to the number of ongoing investigations.

[26] Case statistics sourced from Platts World Steel Review 30 March 2016, p. 16.

[27] US Department of Commerce-International Trade Administration, *Global Steel Trade: Structural Problems and Future Solutions*, Report to the President, July 2000, pp. 37-64.

some inputs to the steel and aluminium industries, such as natural gas, continue to be priced for the domestic market at below the export price.[28]

In addition, steelmakers are often funded by government banks, sometimes with state guarantees. In 2014, VTB Bank issued a long-term RUB 1.2 billion loan to BVK Limited (part of Konar Group, a Russian-Italian joint venture project), as a part of the Russian government's import substitution plan for steel.[29]

In December 2015, the US Department of Commerce made a preliminary finding of countervailable subsidisation of certain cold-rolled steel flat products imported from Russia.[30] At present there are ten ongoing investigations into steel exports from Russia, seven of which are anti-dumping investigations and three are countervailing. Investigations have been initiated by the European Union, the United States, Canada, Mexico, Turkey and Thailand.[31]

3.2.5 Brazil

Over the 1990s, Brazil's steel sector was largely privatised and this increased the role of market forces. But the domestic steel market continued to be insulated from competition through: market segmentation, cross-ownership and cooperative pricing among the three major flat steel producers; and import barriers in the form of tariffs, import taxes, and non-transparent import procedures. As a result, steelmakers were able to maintain high domestic prices which could be used to support low export prices.[32]

The Commission is not aware of any significant government policies or programs to increase existing domestic production capacity. The National Bank for Economic and Social Development (BNDES), which provides long-term financing for the country's development, cut its investments in the steel sector by 33.6 per cent from 2007-2010 and expected a further decline to 2015.[33]

In December 2015, the US Department of Commerce made a preliminary finding of countervailable subsidisation of certain cold-rolled steel flat products imported from Brazil.[34] At present there are six ongoing investigations into steel exports from Brazil, four of which were initiated by the United States.[35]

3.3 Asian government interventions in steel and aluminium markets

Asian governments are not unusual in intervening in steel and aluminium markets. However, the nature and extent of Asian government interventions, and the relative magnitude of Chinese production,[36] has meant that these interventions have been major contributing factors—although

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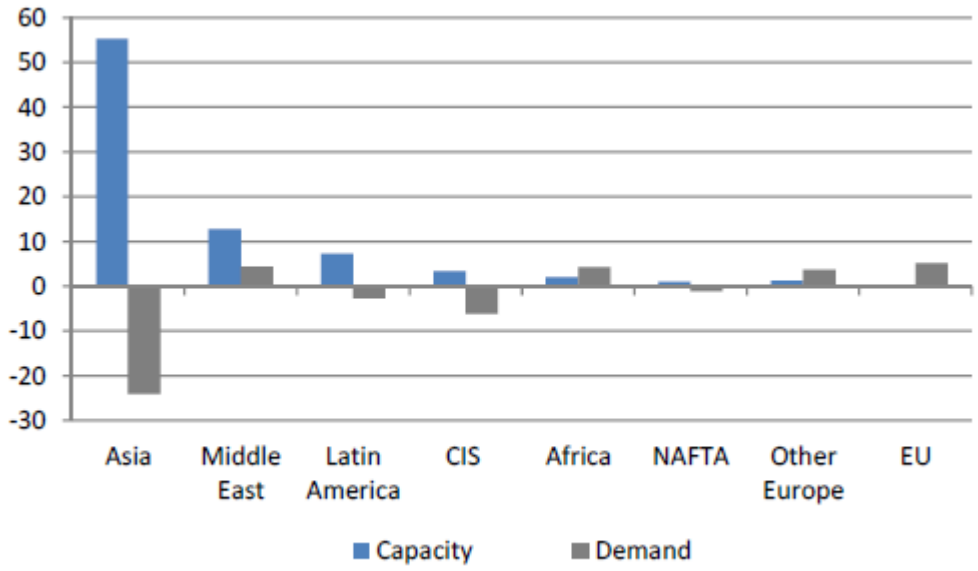
[28] United States Trade Representative, *2015 Report on the Implementation and Enforcement of Russia's WTO Commitments*, December 2015, www.ustr.gov.
[29] 'VTB expands partnership with Konar Group', June 2014, www.vtb.com/group/press/news/releases/392694.
[30] US Department of Commerce-International Trade Administration, Fact Sheet, www.enforcement.trade.gov/download/factsheets/factsheet-multiple-cold-rolled-steel-flat-products-cvd-prelim-1.
[31] Sourced from Platts World Steel Review 30 March 2016, p. 16.
[32] US Department of Commerce-International Trade Administration, *Global Steel Trade: Structural Problems and Future Solutions*, Report to the President, July 2000, pp. 37-38, 98-106.
[33] National Bank for Economic and Social Development, *Perspectivas de investimento Na Indústria: 2012 – 2015,* 19 April 2012, http://www.bndes.gov.br/SiteBNDES/export/sites/default/bndes_pt/Galerias/Arquivos/conhecimento/visao/Visao_100.pdf.
[34] US Department of Commerce-International Trade Administration, Fact Sheet, www.enforcement.trade.gov/download/factsheets/factsheet-multiple-cold-rolled-steel-flat-products-cvd-prelim-1.
[35] Sourced from Platts World Steel Review 30 March 2016, p. 16.
[36] As noted in chapter 2 of this report, China is now responsible for around half of all the steel and aluminium produced in the world, and is a major exporter of steel products.

not the only contributors—to sustained global overcapacity, ongoing excess production, the build-up of large stockpiles (especially aluminium), and depressed world prices.

Many of the policies adopted by Asian governments would meet the OECD's definition of being market distorting in that they have the effect of sustaining ongoing overcapacity by supporting the building of new capacity or keeping inefficient facilities in operation. The impact of such policies in Asia is shown in Figure 3.1, which compares how imbalances between steelmaking capacity and steel consumption in different regions changed over 2015 and 2016. The largest widening of the imbalance was in Asia. Further, Asian state-owned enterprises are financing most of the new investments in expanding state-owned crude steel production capability world-wide.[37]

Figure 3.1: Steelmaking capacity and steel consumption changes by region in 2015 and 2016 (total volume change in mmt)



Source: OECD calculations in *Steel Market Developments, Q4 2015*, 2016, p. 21, http://www.oecd.org/sti/ind/Steel-market-developments-2015Q4.pdf.

The rest of this chapter analyses the evidence on government interventions in steel and aluminium markets in Asia. Given the size and significance of China as a producer of steel and aluminium, and as an exporter of steel, the Commission's main focus has been on understanding the situation in China. While the Commission has also sought to identify and analyse other Asian government interventions in steel and aluminium markets, its analysis has been limited by difficulties in accessing the necessary data and information within the timeframe for this report.

The Commission will continue to monitor the work of the OECD Steel Committee and conduct its own research and analysis to improve its market intelligence and understanding of market conditions and government interventions globally and in the Asian region.

3.4 Steel industry: Chinese government interventions

The Chinese Government has played a central role in the development of the Chinese steel industry over an extended time period.

[37] OECD, 'Public financial support for new investments in the global steel industry' (Work in progress), DSTI/SU/SC(2015)2, 78th Steel Committee Meeting, Paris, France, May 11, 2015.

A 2014 CBSA report noted that the Chinese Government classified the 'Iron and Steel Industry' as a 'fundamental or pillar' industry.[38] As such, the Chinese Government has been heavily involved in directing and controlling the structure, composition, growth and financial viability of the steel industry through numerous plans and directives,[39] subsidy programs, taxation arrangements and the significant number of state owned steel companies, and the National Development Reform Commission's (NDRC) responsibility for approving all large steel projects.[40]

More information on these interventions is set out below.

3.4.1 Chinese Government subsidies and tax concessions

The Commission has found evidence of a range of different subsidies and tax concessions provided by the Chinese Government to the Chinese steel industry, including:[41]

- subsidisation of raw inputs (such as coal and electricity)
- land use tax deductions
- tariff and value-added tax (VAT) exemptions on imported materials and equipment
- preferential tax policies for enterprises with foreign investment
- preferential tax policies for specific regions
- preferential tax policies for high and new technology enterprises
- special support funds for non-state-owned enterprises.

These subsidies and tax concessions reduce the operating costs of Chinese steel enterprises, confer a competitive advantage through the ability to offer steel products at lower prices, and increase the profitability of steel production.

By altering the VAT rebates or export taxes applied to steel exports, the Chinese Government has altered the relative profitability of different types of steel exports and of exports compared to domestic sales. This has changed steel producers' relative incentives to sell steel products in domestic compared to export markets. Through these mechanisms for altering the relative supply of particular steel products in the domestic market, the Chinese Government has been able to influence the domestic price for those products.

For example, in January 2015, the Chinese Government reduced the VAT rebate on steel products containing boron, which accounts for around 40 per cent of exports.[42] While these VAT rebates have

[38] CBSA, 2014, p 14.

[39] For example, the National Steel Industry Development Policy (2005), Blueprint for the Adjustment and Revitalisation of the Steel Industry (2009), Notice of Several Opinions on Curbing Overcapacities and Redundant Constructions in Certain Industries and Guiding the Healthy Development of Industries (2009), 2011-2015 Development Plan for the Steel Industry (2011), Guiding Opinions on Pushing Forward Enterprise Mergers and Acquisitions and Reorganisation in Key Industries (2013), Directory Catalogue on Readjustment of Industrial Structure (Version 11) (2013 Amendment), Steel Industry Adjustment Policy (2015 Revision). Some of these plans and directives cover other key industries as well as the steel industry.

[40] CBSA, 2014, p. 17.

[41] Anti-Dumping Commission, 2013, Report Number 198: Dumping of Hot Rolled Plate Steel Exported from the People's Republic of China, Republic of Indonesia, Japan, The Republic of Korea and Taiwan and Subsidisation of Hot Rolled Plate Steel Exported from The People's Republic of China, pp. 41-43; Australian Customs Service, 2013, Report Number 193: Alleged Subsidisation of Zinc Coated Steel And Aluminium Zinc Coated Steel, pp. 40-41.

[42] Department of Industry and Science, *Resources and Energy Quarterly*, March 2015, p. 24.

been reduced, they remain in place for other additives such as chromium.[43] Such rebates increase the profitability of alloyed steel products compared to non-alloyed products.

The Chinese Government also influences the domestic price for steel products through the application of export taxes on Chinese billets, which accounts for a significant proportion of the cost of steel fabricated products. For example, 80 to 85 per cent of the total production cost of steel such as rod in coils is accounted for by the cost of billets.[44]

Previous investigations by the Commission found evidence of export taxes and export quotas on a number of key inputs in the steel making process including coking coal, coke, iron ore and scrap steel.[45] The Commission found that these measures would keep input prices artificially low and create significant incentives for exporters to redirect these products into the domestic market, increasing domestic supply and reducing domestic prices to a level below what would have prevailed under normal competitive market conditions.

The extent to which lower raw material prices would have a depressing effect on domestic Chinese steel prices will depend on the degree to which lower input costs are passed through into prices and the degree to which steel producers are able to retain the lower raw material costs in the form of increased profit. Where lower input costs are able to be retained as increased profit, this would increase steel producers' incentives to expand production.

From 1 January 2016, the Chinese Government's planned change to the export tax on steel was to take effect, reducing from 25 per cent to 20 per cent for steel billet and 10 per cent for pig iron.[46] This was expected to improve returns to Chinese steel producers, reducing the pressure on the industry to cut capacity and making exporting relatively more attractive.

3.4.2 Chinese Government involvement in strategic enterprises

The Chinese Government maintains significant interests in a number of major Chinese steel producers. As a 'fundamental or pillar' industry, the Chinese Government retains a minimum of 50 per cent equity in the principal enterprises. State-owned steel producers constituted a majority of the top ten steel producers in China and accounted for a significant share of total steel production and capacity.[47] Through its involvement in these companies, the Chinese Government is able to exert significant influence over the Chinese steel industry.

The importance of these state-owned steel producers is reflected in the Chinese Government's Guiding Opinions on Pushing Forward Enterprise Mergers and Acquisitions and Reorganisation in Key Industries (2013) document, which calls for the top ten steel producers to further consolidate control over Chinese steel production and hence increase their influence over domestic steel markets.

While there is limited transparency about the operations of Chinese state-owned corporations, the Commission understands that these companies can receive loans at less than commercial rates, that dividend policies can be set to pursue government objectives and that extended periods of loss-

[43] Metals Insight, 14 May 2015, p. 4.
[44] Anti-Dumping Commission calculations.
[45] Anti-Dumping Commission, 2013, Report Number 198: Dumping of Hot Rolled Plate Steel Exported from the People's Republic of China, Republic of Indonesia, Japan, The Republic of Korea and Taiwan and Subsidisation of Hot Rolled Plate Steel Exported from The People's Republic of China, pp. 41-43.
[46] http://finance.yahoo.com/news/chinas-export-tax-cuts-could-worsen-global-steel-082427033--business.html
[47] CBSA, 2014, p. 14. World Steel Association figures. In 2010, eight of the largest ten Chinese steel producers were state owned; these companies included Hebei Steel Group; Baosteel Group; Ansteel Group; Wuhan Steel Group; Shougang Group; Maanshan Steel; Tianjin Bohai Steel; and Benxi Steel Group. In 2013 the top steel companies accounted for 45 per cent of total Chinese crude steel production.

making may be tolerated—all of which reduce the normal commercial pressures for companies to operate efficiently and for poorly performing firms to cut back or cease operations.

The OECD has found that China's steel industry has one of the lowest operating margins compared not only to the steel industries of many other economies but also relative to other domestic industries. China's steel industry is ranked 85th out of 94 Chinese service and manufacturing sectors, but is last amongst all domestic manufacturing industries.[48] As noted in chapter 2 of this report, average margins for Chinese steel producers were were negative in 2015. The Commission notes that low and negative margins have been recorded despite the subsidies and tax concessions outlined in section 3.4.1 above.

The weakening of normal commercial pressures on state-owned corporations may also lead to investments that would be unlikely to meet commercial rate of return criteria. These corporations' investment decisions may instead be directed towards implementing the objectives of the Chinese Government's planning directives. Examples include the involvement of Chinese state-owned steel companies in projects which have either been recently commissioned or are under development, despite the magnitude of global and Chinese overcapacity. These projects include: Anshan Iron & Steel's Bayuquan Steelworks (6.5 million tonnes per annum (mtpa), Liaoning Province, commissioned 2008); the Shougang Jingtang United Iron & Steel's Steelworks (Hebei Province, commissioned 2010); and the Fangchenggang Steel Company Limited (Wuhan Iron & Steel Group) Steelworks (9.2 mtpa, Guangxi Province, commissioned September 2014).[49] Significant Chinese steelworks with a focus on flat products currently being developed or planned include: Baosteel's Zhanjiang steelworks (Guangdong Province, expected commissioning in 2016); the Baotou Iron & Steel steelworks (5 mtpa, Inner Mongolia); and the Chongqing Iron & Steel (Chongang) and POSCO signed Investment MOU (USD 3.3 billion, signed July 2014).[50]

3.4.3 Chinese Government plans and directives for the steel industry

The nature and extent of the Chinese Government's influence within the Chinese steel industry is demonstrated by the major themes and objectives of its series of plans and directives for the industry (summarised in the text box below).

The Commission considers that Government interventions to develop the Chinese steel manufacturing industry have contributed to the current production overcapacity relative to domestic demand, as have government policies and programs to control the steel industry, stabilise the economy and support employment during the 2009 GFC.

The Commission notes that the emphasis of more recent Chinese Government plans and directives is on promoting the orderly restructuring and reorganisation of the Chinese steel industry to address the issue of persistent overproduction and excess capacity.

China's 13th Five Year Plan, covering the period 2016-2020, was endorsed at the National People's Congress held in March 2016. Detailed plans for each region and major industry are expected to be released later this year. The Five Year Plans for steel and aluminium are expected to be released around the middle of 2016.

Media summaries of the 13th Five Year Plan[51] report that it maintains the Government's focus on reform, including reducing excess capacity and improving environmental performance The Plan also targets the maintenance of relatively solid economic growth of 6.5 to 7 per cent per annum.

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[48] OECD, *Steel Market Developments, Q4 2015*, 2016, p. 17.

[49] OECD, Excess Capacity in the Global Steel Industry and the Implications of New Investment Projects, OECD Science, technology and Industry Policy Papers, No. 18, OECD Publishing, 2015, p. 15.

[50] ibid.

[51] A final translated version of the 13th Five Year Plan was not publicly available at the time of writing this report.

If implemented according to the indicated timeframes, the Chinese Government's policies would reduce overcapacity in the steel industry over time. However, the Commission considers that the Chinese Government's desire for a 'soft landing' for the economy, its economic growth and employment objectives, and evidence of continued state-sponsored investment in steel production facilities suggest that the significant structural adjustment in the Chinese steel industry is unlikely to occur in the near-term.

Themes and objectives of Chinese government plans and directives for the steel industry

National Steel Industry Development Policy (2005): Structural adjustment of the Chinese steel industry; industry consolidations through mergers and acquisitions; regulation of technological upgrading to new standards; Government supervision and management.

Blueprint for the Adjustment and Revitalisation of the Steel Industry (2009): Domestic market stability; control of total steel production output and elimination of backward capacity; enterprise reorganisation and greater industry concentration; technical transformation and technical progress; guidelines for steel industry layout and development, steel product mix and product quality; iron ore import stability and 'rectifying' the market order; development of domestic and overseas resources.

2011-2015 Development Plan for the Steel Industry (2011): Increased mergers and acquisitions to create larger, more efficient steel companies; minimum capacity requirements to reduce the number of small steel producers; restrictions on steel capacity expansions; upgrades of steel industry technology; greater emphasis on high-end steel products; relocation of iron and steel companies to coastal areas.

Guiding Opinions on Pushing Forward Enterprise Mergers and Acquisitions and Reorganisation in Key Industries (2013): Top ten companies to account for 60 per cent of production; three to five major steel corporations with core competency and international impact; six to seven steel corporations with regional influence; steel corporations to participate in foreign steel companies' mergers and acquisitions.

Steel Industry Adjustment Policy (2015 Revision): Upgrades to product mix; rationalization of steel production capacity; lift in capacity utilisation rates to 80 percent by 2017; guidance for market exit; industry consolidation; orientation and oversight of mergers and reorganizations; improved organisational structures; Government supervision and administration; energy conservation, emission reductions, and environmental protection.

Sources: CBSA, 2014, pp. 17-18; http://www.eurofer.eu/Issues%26Positions/Trade/ws.res/Steel Industry Adjustment Policy Comments Appendix.fhtml/Steel Industry Adjustment Policy Appendix.pdf; Dept. of Industry and Science, 2015, *China Resources Quarterly*, Southern Autumn – Northern Spring, p. 15.

The Commission also notes that provincial and local governments implement a number of plans and measures to control the development of the iron and steel industry. The plans and directives issued at the central government level have often, in the past, been integrated and reinforced at the provincial level.[52] The Commission understands that provincial and local governments have recently prioritised policies to maintain or grow production and employment, sometimes in a manner contrary to central government policies to improve efficiency or increase the scale of production.

For example, there have been increasing reports in recent times of so-called 'zombie' companies in steel (and aluminium) manufacturing. These companies are financially unviable, or unable to repay debts, but are being supported and prevented from bankruptcy by local governments, in the hope

[52] Anti-Dumping Commission, Statement of Essential Facts No. 301: Alleged Dumping of Certain Steel Rod in Coils Exported from The People's Republic of China, 15 February 2016, pp. 54-55. For example, the Chinese Government's 'Blueprint for the Adjustment and Revitalisation of the Steel Industry' (2009) and the 'Shandong Province Iron and Steel Industry Revitalisation Plan' (2009) identified a number of corresponding policy measures.

that a recovery in steel (and aluminium) prices would allow them to return to profitable operation.[53] The Commission considers that such actions are likely to further delay the necessary structural adjustment within the Chinese steel industry.

3.5 Other Asian steel markets: government interventions

Countries that compete with China (including Korea, Malaysia and Taiwan) have been affected by the excess capacity in the region and depressed prices. Markets in other Asian countries are indirectly affected by Chinese market interventions that affect raw materials used in steel production.

The Commission has found evidence of significant volumes of Chinese steel billets being traded in East Asia. It is highly likely that Chinese billet prices, which are affected by subsidisation of raw material costs, have influenced steel billet prices in East Asia.

The information currently available to the Commission on government interventions in other Asian countries is summarised below.

3.5.1 Japan

During the 1990s, despite the Japanese steel industry's status as an efficient producer, it continued to benefit from a lack of domestic competition among the integrated steel producers, which contributed to the maintenance of excess capacity. Revenues from high prices in the domestic market could be used to enhance producers export competitiveness, for example by funding research and development and sustaining cheap exports (because fixed costs could be recovered from domestic sales). Import barriers insulated the domestic steel industry from import competition.

Since then, government intervention in the steel industry appears to have been significantly reduced. Structural adjustment has been promoted, including through reducing capacity in response to lower demand and assisting displaced workers. A 2013 report to the OECD Steel Committee stated that Japanese steelmakers quickly initiated structural adjustments when demand declined.[54] It reported that the number of blast furnaces in Japan fell from 72 in 1976 to 28 in 2012.

These changes have occurred within a broader economic strategy to improve Japan's growth and international competitiveness. The OECD's 2015 survey of the Japanese economy described progress on the three-pillar strategy for fiscal and monetary policy and structural reforms (the so-called three arrows of 'Abenomics').[55] The Japan Revitalisation Strategy, launched in June 2013 and revised in 2014, sets out ten key reforms to boost growth, productivity and competitiveness, including by reducing regulation, promoting innovation and labour flexibility, and promoting greater trade openness and internationalisation.

A Commission review of investigations by the CBSA and the US Department of Commerce did not find evidence of Japanese government interventions in the steel industry. Japan has not been the subject of investigation by the Commission in respect of industry applications alleging market-distorting government interventions in its steel industry.

3.5.2 Korea

In the 1990s, the Korean steel industry significantly expanded capacity, reflecting overly optimistic demand forecasts and poor bank lending practices (which were often subject to direct or indirect

[53] http://www.theaustralian.com.au/business/economics/debtladen-zombie-companies-imperil-chinas-growth/news-story/4083e25e12ae4cff07cb447551079eac; http://www.ejinsight.com/20160312-how-china-could-put-zombie-companies-to-rest/

[54] Presentation to 75th OECD Steel Committee meeting, 'Japanese steel industry structural adjustment process and status', 5-6 December 2013, Paris, http://www.oecd.org/sti/ind/Item%204.5%20Japan.pdf.

[55] *OECD Economic Surveys: Japan 2015*, DOI:10.1787/eco_surveys-jpn-2015-en.

government influence). Financial sector reforms were subsequently implemented under Korea's International Monetary Fund program and these reforms improved bank lending practices.

In 1998, Korea's Fair Trade Commission found that POSCO, a government-owned integrated steel mill, had used its market dominance to engage in monopolistic behaviours, which had anti-competitive effects on the Korean steel market. Despite POSCO's market dominance in a number of basic steel products, the company did not benefit from high domestic prices due to the Korean government's price stabilisation policies.

From the 1970s and into the 1990s, POSCO was used to advance the government's industrial development objectives, which included providing low-cost steel to downstream producers. The government's price stabilisation policies required POSCO to maintain low, stable domestic steel prices. Until 1999, this policy was reinforced by POSCO's three-tiered pricing system, which served three different markets: domestic prices in Korean won for products consumed in Korea; direct export prices in US dollars or Japanese yen; and local export prices in US dollars which were charged to domestic customers purchasing steel for further processing into products that were exported.[56]

More recently, the Korean government has moved to implement broad economic policies to boost growth, productivity and international competitiveness. In 2014, it launched the "Three-year plan for Economic Innovation" as a part of its effort to improve Korea's growth potential. Recent reforms include its "creative economy" initiative, which aims to promote Korea's science, technology, innovation and cultural capabilities, easing the regulatory burden and fostering competition to improve efficiency, particularly in key services sectors and among SMEs.[57]

A 2014 investigation by the CSBA found little or no government intervention in the Korean steel industry.[58] Similarly, recent US Department of Commerce investigations into Korean government subsidisation of the steel industry have found either no actionable subsidies or negligible subsidies. Korea has not been the subject of investigation by the Commission in respect of industry applications alleging market-distorting government interventions in its steel industry.

3.5.3 India

During the 1990s, the Indian government promoted rapid expansion of steel production capacity. When domestic demand slowed in the late 1990s, the government stepped in to support the industry which was experiencing falling capacity utilisation while investment in new capacity continued as a result of a large pipeline of projects.

A range of government assistance was provided to promote investment in steel facilities and avoid plant closures, including government loans, loan guarantees, debt write-offs, and tax breaks. High import barriers, such as tariffs, cumbersome customs procedures, and minimum floor prices for imports, shielded the domestic industry from import competition. Steel exporters could receive

[56] US Department of Commerce-International Trade Administration, *Global Steel Trade: Structural Problems and Future Solutions*, Report to the President, July 2000, pp. 85-97

[57] OECD, *Korea: Policy priorities for a dynamic, inclusive and creative economy*, "Better Policies" Series, October 2015, http://www.oecd.org/korea/korea-policy-priorities-for-a-dynamic-inclusive-and-creative-economy-EN.pdf.

[58] Canada Border Services Agency (CSBA), Statement of Reasons: Concerning the final determinations with respect to the dumping of 'Certain Concrete Reinforcing Bar Originating in or Exported from The People's Republic of China, The Republic of Korea and The Republic of Turkey'; and the Subsidising of 'Certain Concrete Reinforcing Bar Originating in or Exported from The People's Republic of China'; and the terminations of the investigation with respect to the Subsidising of 'Certain Concrete Reinforcing Bar Originating in or Exported from The Republic of Korea and The Republic of Turkey', December 2014.

export subsidies, reduced duties on imported capital goods, export financing subsidies, and a passback scheme to avoid paying duties on imports.[59]

From 1991, a suite of economic reforms were implemented by the government, including licensing requirements for capacity creation were abolished, except for certain locational restrictions. The steel industry was removed from the list of industries reserved for the public sector. Automatic approval of foreign equity investment of up to 100 per cent was allowed. Price and distribution controls were removed from January 1992. Volume restrictions on external trade were removed. Certain levies to fund capital expenditure for modernisation, rehabilitation, diversification, renewal and replacement of integrated steel plants, and certain steel exports were removed in the 1990s.[60]

However, there continues to be significant government involvement in the steel industry. The government categorises the steel industry as 'a core sector', considering its sustained growth as 'a prerequisite for attaining the high level of Gross Domestic Product (GDP) growth'.[61] There is significant state ownership of steel production capacity, including Steel Authority of India Limited (SAIL), which is the market leader.

Under the government's National Steel Policy 2005, assistance has been provided to private steel producers to promote growth of the iron and steel sector, including ensuring raw material supplies to the industry (such as allocation of coal blocks and coal linkages and supply of natural gas to the sector).[62] The government imposes export duty of 30 per cent on all forms of iron ore, except low grades (duty of 10 per cent) and iron ore pellets (duty of 5 per cent), in order to conserve iron ore 'for the long term requirement of the domestic steel industry'.

The government's new National Steel Policy will continue to support the development of the steel industry with the focus on achieving the targeted production of 300 mtpa of steel by 2025, a substantial increase from the crude steel capacity of 109.85 mt in 2014-15.[63] The federal budget for 2015-16 has allocated funding for capacity expansion by state-owned steelmakers.

During the current economic downturn, the Indian government has increased the level of trade protection for steel products, including through:

- an increase in import duties on all categories of steel products in June and August 2015
- imposition of a 20 per cent provisional safeguard duty on certain hot-rolled steel products for 200 days in September 2015—with possible extension of this duty until March 2018 (phasing down to 10 per cent over the period) currently under consideration
- imposition of minimum import prices on 173 steel products for a period of six months in February 2016
- notification of Steel and Steel Product (Quality Control) Orders to ensure only quality steel is produced or imported.[64]

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[59] US Department of Commerce-International Trade Administration, *Global Steel Trade: Structural Problems and Future Solutions*, Report to the President, July 2000, pp.162-3.
[60] Government of India, Ministry of Steel, 'An overview of steel sector', http://steel.nic.in/overview.htm; 'Development of Indian steel sector since 1991', http://steel.gov.in/development.htm.
[61] Government of India, *Outcome Budget of Ministry of Steel 2015-2016*, p. 1, http://steel.gov.in/Outcome%20Budget%20(2015-16)/Outcome-Budget-English-2015-16.pdf.
[62] Government of India, Ministry of Steel, 'The Policy Framework', http://steel.gov.in/policy.htm#pol3.
[63] Government of India, *Outcome Budget of Ministry of Steel 2015-2016*, p. 1
[64] 'Economic survey against more tariff protection for steel producers', *The Economic Times*, 26 February 2016, www.economictimes.com; D Seth, 'Decision on steel levy likely today', *Business Standard*, 28 March 2016, www.business-standard.com/article/economy-policy/decision-on-steel-levy-likely-today; S Darabshaw, 'India enters the anti-dumping fray in aluminium and steel', 15 March 2016, agmetalminer.co/2016/03/15/india-enters-the-anti-dumping-fray-in-aluminium-and-steel.

Some Indian state governments also offer concessions to steel producers such as: land subsidies; interest rate subsidies on borrowed funds; VAT, stamp duty and entry tax exemptions; and employment cost subsidies.[65]

In December 2015, the US Department of Commerce made a preliminary finding of countervailable subsidisation of certain cold-rolled steel flat products imported from India.[66] There are currently ten ongoing anti-dumping and countervailing investigations into Indian exports of steel products, seven of which were initiated by the United States.[67]

3.5.4 Taiwan

A Commission review of investigations by the CBSA and the US Department of Commerce did not find evidence of Taiwanese government interventions in the steel industry. Taiwan has not been the subject of investigation by the Commission in respect of industry applications alleging market-distorting government interventions in its steel industry.

3.5.5 Indonesia

The Indonesian government has listed the basic metals sector as one of the nine so-called 'pioneer' industries. In August 2015 the Ministry of Finance issued a regulation that offers a tax holiday of up to 20 years for companies operating in these nine sectors.[68]

3.5.6 Malaysia

In its Third Industrial Master Plan 2006-2020, the Malaysian Investment Development Authority (MIDA) identifies the iron and steel industry as one of the promoted activities that are eligible for so-called "pioneer status" and investment tax allowances.[69]

3.5.7 Thailand

In late 2014, the Board of Investment of Thailand introduced a seven-year Investment Promotion Strategy, with effect from January 2015.[70] Steel is one of the eligible activities for investment promotion. Different tax and non-tax incentives apply, depending on the nature of the steel project. Higher tax concessions are available for crude steel investments than for downstream investments such as the manufacture of steel coils, flat-rolled steel for construction or long products.

3.5.8 Vietnam

Vietnam's Foreign Investment Agency of the Ministry of Planning and Investment has listed the 'production of high quality steel, alloy, special metals, sponge iron and steel billets' as one of the activities eligible for special investment incentives.[71] These incentives include tax concessions for the

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[65] For example, see Draft Odisha Industrial Policy-2015, Industries Department, Government of Odisha, http://218.248.11.68/industries/Draft_IPR/Draft_IPR-2015.pdf.
[66] US Department of Commerce-International Trade Administration, Fact Sheet, www.enforcement.trade.gov/download/factsheets/factsheet-multiple-cold-rolled-steel-flat-products-cvd-prelim-1.
[67] Sourced from Platts World Steel Review 30 March 2016, p. 16.
[68] 'List of Indonesia's Pioneer Industries', www.aseanbriefing.com/news/2015/08/07/indonesia-expands-list-of-pioneer-industries-eligible-for-a-tax-holiday.html.
[69] www.mida.gov.my/home/basic-metal-products/posts; www.mida.gov.my/env3/uploads/images/invest/invest-pdf/APP1_02032012.pdf.
[70] New Policy on Investment Promotion, December 2014, www.britcham.org.sg/files/images/pdfs/new_boi_policy.pdf.
[71] 'List of Sectors Entitled to Investment Incentives', vietnamembassy-usa.org/basic-page/list-sectors-entitled-investment-incentives.

first 15 years of revenue generation for new investments, tax exemptions for large scale investments or investments in an Economic Zone, and land subsidies.[72]

3.6 Aluminium industry: Chinese government interventions

The Commission has found evidence that the Chinese Government continues to play a significant role in the Chinese aluminium industry. The Commission considers that this intervention has significantly contributed to overcapacity and large stockpiles in the Chinese and global aluminium markets.

3.6.1 Chinese Government plans and guidelines

Similar to the steel industry, the Chinese Government has been heavily involved in directing and controlling the structure, composition, growth and financial viability of the Chinese aluminium industry. This occurs through: policies and plans that treat the non-ferrous metals industry as a encouraged industry; subsidy programs; taxation arrangements; and the significant number of state-owned aluminium companies (especially in smelting).

In a recent investigation into aluminium road wheels, the Commission found consistent themes in the Chinese Government's plans and measures for the aluminium industry, relating to:

- elimination of backwards capacity
- control of production levels
- encouraging mergers, restructuring and relocation
- promoting technological and product quality improvement
- implementing and encouraging environmental measures.[73]

These macroeconomic plans highlight the overall importance of the industry to the Chinese economy. The Government's Guidelines identify the aluminium industry as fundamental to the development of the national economy.

The Commission considers that overall the Chinese Government's policies and plans are likely to have resulted in higher production of primary aluminium, which would be likely in turn to lead to lower prices for primary and alloyed aluminium.

As noted in section 4.2, China's 13th Five Year Plan, covering the period 2016-2020, was endorsed at the National People's Congress held in March 2016. Detailed plans for each region and major industry are expected to be released later in the year. The Five Year Plan for aluminium is expected to be released around the middle of 2016.

The Commission notes that the Five Year Plan's continuing focus on reform, including reducing excess capacity, is positive for promoting the required structural adjustment of the Chinese aluminium industry. However, the Chinese Government's desire for a 'soft landing', its ongoing financial support for large aluminium stockpiles (see below), and ongoing subsidies and tax concessions suggests that the process of structural adjustment is likely to be prolonged.

The Commission also notes that provincial and local governments implement a number of plans and measures to control the development of the aluminium industry and there is potential for these plans and measures to further slow the pace of structural adjustment. For example, there have been increasing reports in recent times of so-called 'zombie' companies in aluminium manufacturing. These companies are financially unviable, or unable to repay debts, but are being supported and

[72] 'Investment Incentives', Foreign Investment Agency, Vietnam, fia.mpi.gov.vn/detail/689/investment-incentive.

[73] Anti-Dumping Commission, Report No. 263 – Aluminium Road Wheels, 2015.

prevented from bankruptcy by local governments, in the hope that a recovery in aluminium prices would allow them to return to profitability.[74]

3.6.2 Chinese Government subsidies and tax concessions

The Chinese government offers a variety of subsidies to domestic aluminium manufacturers:

- Government purchases of aluminium stocks (discussed below)
- raw material subsidies, such as discounted alumina pricing and subsidised energy prices (including for electricity and coal)
- favourable lending terms
- capital support and grants
- logistical support
- subsidised land and infrastructure.[75]

Primary and alloyed aluminium is a major cost component in fabricated aluminium. For example, the Commission found that the cost of primary and alloyed aluminium inputs averaged 61 per cent across certain exporters of aluminium road wheels.[76] The Commission considers that lower prices for these inputs would either reduce the price of manufactured aluminium products (to the extent these lower costs are passed on) or increase the profitability of these products (which would provide an incentive for increased production).

As in the steel industry, the Commission found evidence of subsidies provided to the aluminium and extrusions sectors that would likely reduce the costs of inputs to their production, such as electricity. There was also evidence that the Chinese Government imposes export taxes on primary aluminium in order to increase its supply to the domestic market and encourage aluminium manufacturing, in particular of value-added products.

China's export tax and VAT rebate regime is also used to encourage increased domestic value adding, such as transforming aluminium into semi-finished products (known as 'semis'), and discouraging the export of primary aluminium. There can be a tax wedge of approximately 20 percentage points (reflecting 15 per cent export tax plus a rebate of the 17 per cent VAT on some input costs). This creates a large incentive to export 'semis' rather than primary aluminium.

The Commission found in its aluminium road wheels investigation that the impact of Chinese Government influences on supply are extensive, complex and manifold.[77]

3.6.3 Aluminium stockpiling: financial support

Stockpiling of aluminium increased significantly in 2009 (see Figure 2.21 in chapter 2 of this report). This allowed production to be maintained during the global financial crisis and avoided the potential closure of some aluminium manufacturers. While the Commission has been informed that production and demand are moving back towards balance, the high level of aluminium stockpiles are continuing to depress global prices.[78]

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[74] http://www.theaustralian.com.au/business/economics/debtladen-zombie-companies-imperil-chinas-growth/news-story/4083e25e12ae4cff07cb447551079eac; http://www.ejinsight.com/20160312-how-china-could-put-zombie-companies-to-rest/

[75] Variety of sources including Aluminium Association market intelligence, Bloomberg, Metal Bulletin.

[76] Anti-Dumping Commission, Report No. 263 – Aluminium Road Wheels, 2015.

[77] ibid.

[78] http://www.smh.com.au/business/how-beijing-kicked-an-own-goal-on-aluminium-20090705-d96e.html

The Commission has seen reports that continuing stockpiling of aluminium—financed by interest payments from the Strategic Reserves Bureau—will occur in 2016, with as much as one million tonnes of aluminium being purchased at 12,500 RMB (which is higher than the current LME price).[79]

The likely effect of this market intervention is to ease the pressure on the Chinese aluminium industry to reduce excess capacity and to avoid rationalising the higher-cost manufacturing facilities.

3.7 Other Asian aluminium markets: government interventions

Similar to steel, the Commission considers it likely that the impact of Chinese government intervention in aluminium markets, particularly subsidisation of raw material costs, will have influenced the prices for, and production of, aluminium goods that are produced in East Asia.

The information currently available to the Commission on government interventions in other Asian countries is summarised below.

3.7.1 India

Media reports suggest that the Indian government is considering increased trade protection for aluminium products through a possible increase in import duties on primary aluminium and aluminium products.[80]

3.7.2 Japan, Korea and Taiwan

The Commission reviewed investigations by the CBSA and the US Department of Commerce over recent years and did not find evidence of Japanese, Korean or Taiwanese government interventions in their aluminium industries. These countries have not been the subject of investigations by the Commission in respect of industry applications alleging market-distorting government interventions in aluminium industries.

3.7.3 Indonesia and Malaysia

Bauxite is a major input to the production of alumina, which is a raw material input for aluminium manufacturing. Overall, the bauxite supply chain within Asia for aluminium production appears to have been highly disrupted due to government bans and regulations on bauxite exports. This is likely to impact on the cost of feedstock for alumina and aluminium production in those countries.

For example, Indonesia was previously the main supplier of bauxite to China, but banned bauxite exports two years ago as a measure to encourage value-added production in Indonesia. Malaysia increased its bauxite exports to fill the gap, but recently banned bauxite exports for three months due to the environmental impacts of poorly regulated bauxite mining.

3.8 Conclusion

As noted earlier, Asian governments are not unusual in intervening in steel and aluminium markets. These interventions have been driven by economic growth, employment and social objectives.

The Commission's analysis of subsidies and tax arrangements for the Chinese steel and aluminium industries, and the operation of state-owned enterprises, indicates that many of these market interventions have been economically inefficient and have resulted in distortions to market outcomes.

The Commission considers that the nature and extent of Chinese market interventions (coupled with the sheer size of Chinese production) has made a significant contribution to the size of the current

[79] http://az-china.com/archives/7433

[80] S Darabshaw, 'India enters the anti-dumping fray in aluminium and steel', 15 March 2016, agmetalminer.co/2016/03/15/india-enters-the-ant-dumping-fray-in-aluminium-and-steel.

global overcapacity and persistent global imbalance between production and demand. These factors have in turn contributed to the build-up of large stockpiles (especially aluminium) and depressed world prices.

The impacts of economically inefficient market interventions have been both direct (through Chinese production levels, prices and exports) and indirect (through their influence on Asian markets more generally).

While there are signs of policy responses that could reduce excess capacity and boost the efficiency of the Chinese steel and aluminium industries, there are significant questions over whether these reforms will be implemented to any great extent in the near-term. The Commission considers there are significant risks that the required capacity adjustments will either not occur or will occur over a prolonged period, taking into account:

- the Chinese Government's desire to adjust slowly to maintain annual economic growth in the range of 6.5 to 7 per cent
- provincial and local government actions to avoid sudden large scale job losses in their regions and maintain tax revenues to finance social programs
- ongoing government assistance to help heavily indebted and state-owned steel and aluminium enterprises survive
- continuing investments in new steelmaking capacity and failure to close inefficient plants
- a likely slow re-balancing of the Chinese economy towards domestic consumption within the Chinese Government's growth target.

In addition, the Commission has found evidence of government interventions in other Asian countries, including India, Indonesia, Malaysia, Thailand and Vietnam, that provide incentives to increase steel production capacity. New investments in capacity are likely to delay the required global structural adjustment to lower global demand.

The Commission's concerns are consistent with the most recent OECD analysis of prospects for the steel industry. The OECD considers that:

> the outlook for the steel industry has weakened significantly, due to cyclical factors associated with sluggish global economic activity and industry-specific structural problems such as overcapacity. It appears that adjustment pressures are growing significantly and will have to be worked out in the coming years. There are many ways in which the industry can adjust, but one possible near-term scenario involves further price and profitability suppression, production declines resulting in low capacity utilisation rates across the board, and possibly plant closures amongst the least efficient firms. There will be growing social and human costs associated with the current market downturn, and governments should prepare effective programmes to help steel workers, who are laid off in the process, adapt to these changes. Alternatively, government interventions may help the industry "muddle through" the crisis, but these would be expected to lead to more market distortions that would eventually create even more severe adjustment challenges in the longer term.[81]

[81] OECD, *Steel Market Developments, Q4 2015*, 2016, p. 21.

4 Market conditions in the Australian steel and aluminium industries and the economic impacts of dumping and subsidisation

Key points

- Difficult operating conditions in the Australian steel and aluminium markets can be partly attributed to slower growth in the domestic construction and manufacturing industries, which has reduced demand for steel and aluminium products.
- However, increased competition from imports and lower domestic product prices, which reflect global overcapacity and the impacts of economically inefficient market interventions, have been major contributors to declines in Australian steel and aluminium output, revenue and profitability.
- While Australian steel and aluminium producers generally have higher labour costs and may not be able to achieve significant scale economies, they have other competitive advantages compared to international competitors. These result from the development of innovative high-quality products and access to domestically produced raw materials.
- Geography also offers a natural price protection against imports shipped into Australia. The recent decline in the Australian dollar has also helped to increase domestic cost competitiveness.
- The Australian steel and aluminium industries are putting in place a range of measures to reduce costs, increase productivity and improve their global competitiveness.
- The Australian and state governments have implemented policy reforms to strengthen the competitiveness of Australia's steel and aluminium industries and support their adjustment to changed market conditions.
- The Commission engaged Cadence Economics to estimate the economic impacts of dumping and subsidisation on the Australian steel and aluminium industries. The consultant's model also estimated of impacts on production for selected upstream and downstream industries as well as broader economy-wide effects, with and without the implementation of trade remedies.
- On the basis that dumping and subsidisation are temporary and will gradually come to an end as global capacity is brought into balance with global demand, the model results support a finding that, in the absence of trade remedies, dumping and subsidisation are negative both for the Australian steel and aluminium industries and for overall economic growth and employment. Implementing trade remedies prevents these negative economic and employment effects, which would be additional to the impacts from the current cyclical global downturn.

4.1 Market conditions in the Australian steel and aluminium industries

As discussed in chapter 2, over recent years, market conditions within the Australian steel and aluminium industries have been characterised by weaker domestic demand, overall declines in local production, increasing volumes of imports and declining prices.[82] The Australian aluminium industry, which exports a significant proportion of its production, has also been adversely impacted by the relatively strong Australian dollar.

[82] Consistent with section 2 of this report, the steel industry refers to crude steel production which includes Iron Smelting and Steel Manufacturing (ANZSIC class 2110), Iron and Steel Casting (2121), and Steel Pipe and Tube Manufacturing (2122). The aluminium industry refers to primary aluminium production which includes Aluminium Smelting (2132) and Aluminium Rolling, Drawing and Extruding (2142).

While the weakness in domestic demand for steel and aluminium largely reflects slower growth in the construction and manufacturing industries, the increased competition from imports and lower domestic product prices have been directly influenced by the international market conditions described in chapter 2 of this report and the impacts of economically inefficient market interventions described in chapter 3. The combined impact of these factors has resulted in declining industry output, industry revenue and profitability. Total industry revenue for the five year period to 2015-16 is estimated to have fallen by an average 5.7 and 2.4 per cent a year for the steel and aluminium industries respectively.[83]

The future growth and viability of the Australian steel and aluminium industries depend on two main factors: growth in domestic demand for their products, and the ability of domestic producers to compete with imports, especially on cost. For aluminium smelters, the competitiveness of Australian exports is also important.

Cost structures vary between firms within an industry for a number of reasons including size, scale of production, access to production inputs, use of technology, and capital investment. The two major cost components for both the Australian steel and aluminium industries are input purchase and labour costs, which combined account for 81 per cent of total steel industry costs and 74 per cent of aluminium industry costs.[84]

The Australian steel and aluminium industries generally have a competitive advantage in access to key raw materials.[85] In addition, in recent years, both the Australian steel industry and aluminium rolling, drawing and extruding industry have benefited from declining absolute input costs, largely due to declining international commodity prices.[86]

However for both industries, particularly steel, relatively high labour costs remain a significant issue for steel producers' ability to compete with imports. Based on analysis undertaken in mid-2015, labour and overhead costs for producing steel in Australian were estimated to be between 19 and 55 per cent higher than the average costs of non-Australian steel producers.[87] However, it should be noted that these estimates did not adjust for any differences in product quality.

Other factors that influence the global competitiveness of the Australian steel and aluminium industries include the level of the Australian dollar and producers' ability to expand production to better exploit economies of scale and to diversify their product range, including through innovation and the development of premium products.

In the past, aluminium smelters, which produce the major input to the aluminium rolling, drawing and extruding industry, had a cost advantage from relatively low electricity costs. In recent years, this relative advantage has reduced as electricity costs have risen.

Overall, while Australian steel producers maintain a relatively small volume of production and generally have higher labour costs, they do have other competitive advantages compared to

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[83] IBISWorld Industry Report C2110, February 2016, p. 5; IBISWorld Industry Report C2142, September 2015, p. 4.

[84] Purchase costs relate to input costs such as iron ore and coking coal for steel production and alumina and electricity for aluminium production.

[85] Department of Industry, Innovation and Science, *Submission to the inquiry into the future of Australia's steel industry*, February 2016, pp. 9-10. Based on analysis in mid-2015, Australian steel plants using blast oxygen furnaces had an estimated material cost advantage (relative to plants in other countries) in terms of raw materials, being about 10 per cent lower than other plants on average. For steel plants using electric arc furnaces, the raw materials advantage was less at 4 per cent on average, possibly because recycled steel is also used as an input.

[86] IBISWorld Industry Report C2110, February 2016, p. 20; IBISWorld Industry Report C2142, September 2015, p. 20.

[87] Department of Industry, Innovation and Science, *Submission to the inquiry into the future of Australia's steel industry*, February 2016, p. 13.

international competitors. For example, BlueScope is a technical leader in galvanising and coating of flat steel and Arrium has become a world leader in the production of steel grinding media for the mining industry.

Geography also offers a natural price protection against imports shipped into Australia and Australian steel and aluminium producers have access to domestically produced raw materials, which are generally of a high quality and often located near manufacturing facilities.

The recent decline in the Australian dollar has also helped to increase domestic cost competitiveness. However, it should be noted that world steel and aluminium prices have generally declined around the same time as the exchange rate has depreciated, and some raw material prices (notably iron ore) are denominated in US dollars.

4.2 Australian industry initiatives to improve competitiveness

In response to increased competition from cheap imports of steel and aluminium products, the Australian steel and aluminium industries are implementing measures to reduce costs and improve their competitiveness. The measures being adopted for the three largest producers are summarised below.

BlueScope is currently undertaking a number of initiatives in response to current market conditions. These efforts commenced in 2011 with BlueScope's decision to cease exporting steel produced at Port Kembla. The associated shut-down of one of its two blast furnaces at its Port Kembla steel works and closure of the Western Port Strip Mill were estimated by BlueScope to generate improvements in earnings before interest and tax of around $225 million.[88] More recently, BlueScope's efforts to manage current market conditions and grow its business have focused on:

- growing its premium branded coated and painted steel markets in the Asia-Pacific region and North America
- delivering competitively priced steel into local markets through cost reductions and business process efficiencies
- ensuring its ongoing financial strength by maintaining a strong balance sheet.[89]

BlueScope recently announced that it had achieved cost savings of $95 million in the first half of 2016, compared to the same period in 2015. It is targeting cost reductions totalling $270 million in 2016-17 relative to 2014-15.[90] Some of these savings will be achieved through rationalising employment and employee supported wage freezes.[91]

Arrium recently announced plans to restructure the broader group in order to turn its steel and mining businesses into 'more integrated, low cost operators'.[92] Arrium is also undertaking a strategic

[88] BlueScope – responding to structural change, Sept 2011, p. 3, https://s3-ap-southeast-2.amazonaws.com/bluescope-corporate-umbraco-media/media/1362/paul_omalley_asi_presentation.pdf.
[89] BlueScope Annual Report 2014-15, p. 8, https://s3-ap-southeast-2.amazonaws.com/bluescope-corporate-umbraco-media/media/1905/bluescope-annual-report.pdf; Bluescope 1H-FY2016 Financial Results Presentation, p. 5, https://s3-ap-southeast-2.amazonaws.com/bluescope-corporate-umbraco-media/media/2097/1h-fy2016-investor-presentation-final.pdf.
[90] Bluescope 1H-FY2016 Financial Results Presentation, p. 9.
[91] BlueScope Strategic initiatives and outlook update Oct 2015, p. 10, https://s3-ap-southeast-2.amazonaws.com/bluescope-corporate-umbraco-media/media/1935/update-pack-151026.pdf. Announced cost reductions include a new 3 year enterprise agreement with accompanying 3 year wage freeze, 500 job losses, and NSW government deferral of payroll tax payments and reductions in other charges.
[92] Arrium 1H16 Results Presentation, 17 Feb 2016, p. 35, http://www.arrium.com/~/media/Arrium%20Mining%20and%20Materials/Files/Results/1H16%20Results%20Presentation%20FINAL%20170216.pdf.

review of its businesses with the goal of achieving a more appropriate structure and level of debt.[93] As part of its cost reduction activities, Arrium is targeting around $200 million of annualised cost reductions over the next two years.[94] Key sources of cost reductions include Whyalla Steelworks ($100 million),[95] Steel & Recycling (excluding Whyalla) ($25 million), Corporate, shared functions and other Steel ($50 million) and Group sourcing and procurement ($25 million).[96] The cost reduction target for Whyalla Steelworks was recently increased to $160 million due to continued deterioration in market conditions.[97]

Capral, Australia's largest producer of extruded aluminium products, has adopted a 'multi focused' approach to improving its competitiveness through:

- reducing costs through productivity focused improvements to manufacturing processes and through supply chain optimisation to reduce inventory levels
- maximising the benefits from its large scale extrusion capability and distribution network
- offering a wide range of products designed to meet customers' needs
- working closely with customers to develop innovative new products and generate value-add opportunities
- 'capitalising on positive anti-dumping outcomes'.[98]

These actions by Australian industry will assist them to weather the current cyclical global downturn. They will also contribute to improving industry's ongoing competitiveness by boosting productivity and ensuring their products respond to the needs and preferences of their customers.

The Commission considers that it is reasonable to expect the Australian steel and aluminium industries to respond to vigorous competition and changes in market conditions. Such pressures create strong incentives for producers to undertake investments and innovations that improve productivity and global competitiveness and thereby support sustainable business growth and long-term financial viability.

However, as discussed in chapter 3 of this report, the impacts of Asian steel and aluminium market interventions have added to the challenges resulting from the cyclical global downturn and increased competition from the emergence of China as an important steel and aluminium producer. The Commission considers that these additional pressures have been generated by economically inefficient market interventions and thus go beyond the challenges expected in highly competitive markets.

4.3 Policy reforms to strengthen Australian industries' competitiveness

Governments at the national and state levels have implemented policy reforms that aim to strengthen the competitiveness of Australia's steel and aluminium industries and to support their adjustment to changed market conditions. Examples of measures implemented by the Australian government include: alleviating regulatory burdens; reforms to the anti-dumping system; industry

[93] Arrium 1H16 Results Presentation, 17 Feb 2016, p. 16, http://www.arrium.com/~/media/Arrium%20Mining%20and%20Materials/Files/Results/1H16%20Results%20Presentation%20FINAL%20170216.pdf.
[94] Arrium 1H16 Results Presentation, 17 Feb 2016, p.35, http://www.arrium.com/~/media/Arrium%20Mining%20and%20Materials/Files/Results/1H16%20Results%20Presentation%20FINAL%20170216.pdf.
[95] Including the loss of around 200 jobs, with an additional 50 losses likely from contractors.
[96] Arrium 1H16 Results Presentation, 17 Feb 2016, p. 16, http://www.arrium.com/~/media/Arrium%20Mining%20and%20Materials/Files/Results/1H16%20Results%20Presentation%20FINAL%20170216.pdf.
[97] Arrium submission to the future of Australia's steel industry (2016), p. 8, http://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Economics/Australias_Steel_Industy/Submissions.
[98] Capral 2015 Full Year Results Presentation, 19 February 2016, http://www.capral.com.au/Results-Presentations.

participation policies; industry support initiatives; and employment services. Initiatives undertaken by state governments have generally been in the form of financial support.

4.3.1 Deregulation

Some deregulation has assisted Australian producers, particularly trade exposed producers, to adjust to market conditions. For example, the Australian government repealed the carbon-tax related suite of legislation, with effect from 1 July 2014. This repeal accompanied the discontinuation of the *Steel Transformation Plan Act 2011* (STP Act). A 100 per cent exemption from the Renewable Energy Target (RET) for emissions intensive, trade exposed industries, including the steel industry, was established on 23 June 2015.

4.3.2 Anti-dumping reforms

Recent anti-dumping reforms, which were fully implemented in November 2015, have strengthened Australia's anti-dumping system. The reforms seek to ensure the anti-dumping system is more responsive to dumped and subsidised imports that cause material injury to Australian industries and entities that attempt to circumvent measures. The government also introduced new anti-circumvention regulations in April 2015 to address dumped goods that are slightly modified in order to avoid payment of duties.

The government has provided additional funds to the Commission to enable it to employ additional investigators and strengthen its market intelligence unit (the ADIS).

4.3.3 Australian industry participation

Australian Industry Participation (AIP) policy, underpinned by the AIP National Framework, was endorsed by Australian, state and territory ministers in 2001. The objective of AIP policy is that Australian industry should have full, fair and reasonable opportunity to supply goods and services to major projects in Australia.

The Australian government supports an open market economy as the best way to generate investment and employment, and seeks to foster an environment where Australian businesses have equal opportunities to bid for work on major Australian public and private projects and be evaluated on the merits of their offerings, consistent with Australia's international trade obligations.

The AIP National Framework does not mandate a minimum level of Australian content and Australian suppliers must be competitive in terms of price, schedule and capability to be considered for contract award. Activities under the Framework are consistent with Australia's international obligations, including those under the WTO and Free Trade Agreements (FTAs).

The Australian *Jobs Act 2013* (the Jobs Act) commenced on 27 December 2013 and requires proponents of major private and public projects ($500 million and above) in Australia to develop and implement an AIP plan that ensures full, fair and reasonable opportunity for Australian entities to supply key goods and services to the project.[99]

The Jobs Act created the statutory position of the AIP Authority to monitor compliance with the legislation and provide guidance to proponents. Since the Jobs Act commenced, the AIP Authority has approved 14 AIP plans for major projects around Australia, mainly in the resources sector. Each AIP plan includes steps the proponent will take to publicise opportunities to supply goods and services to the project, the design standards used in the project and any supplier pre-qualification requirements. Proponents report at six monthly intervals to the AIP Authority on implementation of their AIP plans.

[99] http://www.industry.gov.au/industry/IndustryInitiatives/AustralianIndustryParticipation/Pages/Australian-Jobs-Act-2013.aspx.

The Australian government has requirements in place for its own procurement. Since 2010, companies bidding for major government procurements of $20 million or more have been required to prepare and implement an AIP plan as part of their tender processes. These AIP plans outline the actions a tenderer will take to provide Australian suppliers, especially small and medium enterprises (SMEs), with full, fair and reasonable opportunities to supply goods and services on a project.

On 1 July 2012, the AIP plan requirement was extended to government grants and Australian government funded infrastructure projects of $20 million or more. To avoid duplication, an AIP plan is not required if the state or territory government applies its own industry participation plan to the project (see section 4.3.5 below). Since 1 July 2013, AIP plans have also been required in respect of selected Clean Energy Finance Corporation investments of $20 million or more.

4.3.4 Other policy measures

The Australian government has implemented a number of broad industry support initiatives centred on the government's National Innovation and Science Agenda, which is a blueprint for a more skilled, innovative and entrepreneurial Australia. Measures include: the Industry Growth Centres initiative to foster high value and export focused industries; the Entrepreneurs' Program for business competitiveness and productivity at the firm level; and the Industry Skills Fund, which provides training places and support services across Australia.[100]

The government is supporting the deepening of collaboration between Australia's steel industry and the research sector. Through the Australian Research Council, the government has provided $5 million to the Steel Research Hub, launched on 4 September 2014. The Steel Research Hub, based at the University of Wollongong, brings together the Australian government, universities and industry partners to develop cutting-edge processes and product innovations. This will enable steel industry partners to improve their global competitiveness.

The government is also providing support to employees made redundant from BlueScope's Port Kembla operations and Arrium's Whyalla steelworks. Retrenched workers will have access to intensive employment assistance from the government's Jobactive Employment Service which connects job seekers with employers to help find employment, as well as offering other support services including training in skills that local employers need and assistance preparing for interviews.

More recently the Australian government, through the Australian Rail Track Corporation, has awarded Arrium a contract for 1200 km of rail track (estimated to be worth around $80 million).[101]

4.3.5 State government initiatives

State governments are also responding to market developments where these developments impact state based facilities and employment. State and territory governments have developed their own local industry participation policies.

In late 2015, the New South Wales government agreed to defer $60 million in payroll taxes over three years for BlueScope, which, along with concessions from unions and employees, contributed to BlueScope announcing its intention to continue steelmaking at Port Kembla.[102]

The South Australian government has provided mining royalty concessions to Arrium, signed a Memorandum of Understanding with Arrium to create a multi-user port at Arrium's wholly-owned Port of Whyalla and announced a $4.3 million Steel Taskforce that will work with Arrium and local

[100] http://www.minister.industry.gov.au/ministers/macfarlane/media-releases/strengthening-illawarras-economic-future.
[101] https://www.pm.gov.au/media/2016-03-09/australian-rail-track-corporation-deliver-significant-rail-upgrade.
[102] http://www.treasury.nsw.gov.au/__data/assets/pdf_file/0005/126941/20152610_Gladys_Berejiklian_med_rel_-_NSW_Government_supports_Illawarra_steelworkers.pdf.

fabricators in an effort to create a competitive and sustainable steel industry in South Australia and implement a third party audit that will monitor the South Australian Government's commitment to use only steel which meets Australian standards and certification in all future state government projects.[103] The South Australian government has provided funding through its Steel Taskforce to assist the South Australian steel fabrication sector to become compliant with the standards.[104]

4.4 Economic impacts of dumping and subsidisation on Australian industry

WTO rules allow Australian producers to seek remedial action against dumped or subsidised goods that materially injure local industries. Australian producers have increasingly sought relief in recent years through Australia's trade remedies system (see section 5 of this report).

4.4.1 Assessment of injury to Australian steel and aluminium industries from dumped and subsidised goods

Under Australia's anti-dumping system, and consistent with WTO rules, measures may not generally be imposed unless there is evidence, and a positive finding, of both of material injury to the Australian industry and of a causal link between such injury and the dumped or subsidised imports.[105] The Australian legislation provides that the relevant decision maker:

- may have regard to a number of matters in assessing whether material injury has been caused including the extent of the dumping margin, the quantity of dumped or subsidised goods imported to Australia and the difference in prices of the Australian produced goods and the dumped or subsidised goods (*Customs Act 1901*, subsection 269TAE(1)); and
- must consider whether any injury is being caused by a factor other than by the dumped or subsidised goods being imported to Australia, such as contractions in demand, the volume and price of imported goods that are not dumped or subsidised or developments in technology. Any injury caused by a factor other than by the dumped or subsidised goods being imported to Australia must not be attributed to those goods (*Customs Act 1901*, subsection 269TAE(2A)).

The effect of taking account of these provisions is that trade remedies will be imposed to remedy material injury to Australian industry from dumping and subsidisation and not to insulate Australian industries from vigorous competition or changing market conditions.

[103] http://www.statedevelopment.sa.gov.au/news-releases/all-news-updates/high-powered-steel-taskforce-to-secure-whyallas-future.
[104] http://www.statedevelopment.sa.gov.au/news-releases/all-news-updates/high-powered-steel-taskforce-to-secure-whyallas-future.
[105] Anti-Dumping Commission, *Dumping and Subsidy Manual*, section 21.

Example of causation in injury assessments: Galvanised steel products from India and Vietnam

Causation is an important issue in the Commission's investigations. An example is Investigation 249, which was initiated in May 2014 following allegations by the Australian industry that certain galvanised steel products exported to Australia from India and Vietnam were being dumped.

The Commission found that the Australian industry suffered injury[106] and that goods were dumped by certain Indian exporters in quantities that were not negligible.[107]

However the Commission found that the Australian industry experienced a significant degree of price competition from undumped goods from India and Vietnam and that the aggregate volume of those undumped goods was greater than the volume of dumped goods from India.[108] In those circumstances, the Commission considered that the Australian selling prices of the dumped goods were not materially influencing the selling price of Australian industry.[109] On that basis, the injury suffered by Australian industry was not caused by the dumped goods and the investigation was accordingly terminated in relation to India.[110]

4.4.2 Quantitative estimates of the impacts of dumping and subsidisation on the Australian steel and aluminium industries

The Commission engaged Cadence Economics to estimate the economic impacts of dumping and subsidisation on the Australian steel and aluminium industries. The Cadence Economics report provides a detailed explanation of the methodology and assumptions used in the modelling, the scenarios tested, and the results.

Cadence Economics used a dynamic (general equilibrium) model of the world economy to estimate the economic impacts of three different scenarios on production in the Australian steel and aluminium industries. For each scenario, the model also produced estimates of the consequential impacts on production for selected upstream and downstream industries as well as broader economy-wide effects (measured by changes in gross domestic product (GDP), gross national product (GNP), employment and investment).

Important qualifications

Several important qualifications should be borne in mind in interpreting and using these results:

- The results are indicative estimates only. While the model aims to be a simplified representation of reality, the results are only estimates produced by economic modelling, not actual measures of outcomes in the Australian economy or for specific firms.
- Using different assumptions could produce significantly different results. The Commission considers that the basic design features and assumptions used in the Cadence model are standard for simplified general equilibrium models.
- The magnitude of the results reflects the model inputs used in each scenario. Different inputs would give different results. Cadence Economics has advised that the results are scalable for different estimates of dumped and/or subsidised imports into Australia. The Commission considers that the import volume and value assumptions used in modelling the scenarios are reasonable for the purpose of the modelling exercise but, as noted above, should not be interpreted as actual measures of outcomes in the Australian economy.

[106] Anti-Dumping Commission, Termination Report 249, 28 July 2015, section 7.
[107] Termination Report 249, section 6.
[108] Termination Report 249, section 8.6.1.
[109] Termination Report 249, sections 8.6.1, 8.7.
[110] Termination Report 249, section 9. The investigation was terminated in respect of Vietnam due to negligible volumes.

- The model is used to separate out the economic effects of dumping and subsidisation, and the implementation of trade remedies to address dumping and subsidisation, from other economic and market influences on the growth and viability of the Australian steel and aluminium industries. In reality, a number of different factors would simultaneously determine these industries' growth and viability.

Modelling scenarios and main assumptions

Due to data limitations, Cadence Economics was unable to quantify the full extent of inefficient market interventions in Asian steel and aluminium markets or their impact of steel and aluminium production. For the purpose of modelling the scenarios, Cadence Economics assumed Asian market interventions resulted in $400 million of dumped/subsidised steel imports into Australia (additional to imports levels in the baseline case where there is assumed to be no dumping or subsidisation). For aluminium, the consultant also assumed that market interventions resulted in $400 million of dumped/subsidised semi-processed aluminium imports into Australia (above the levels they would be in the baseline case). Due to the higher estimated average value of semi-processed aluminium products, this represents a smaller volume at a higher average price than for steel.

As noted above, the Commission considers that these assumptions are reasonable for the purposes of the modelling exercise but notes that they should not be interpreted as representing the actual values or volumes of imported steel and aluminium products that have been found to be dumped or subsidised.

The scenarios modeled by Cadence Economics are described below:

- **Baseline:** Normal trade with no dumping or subsidisation of steel/aluminium products.
- **Scenario 1:** Ongoing dumping/subsidisation and excess production of Asian steel/aluminium for the foreseeable future. No Australian trade remedies (that is, no anti-dumping or countervailing measures).
- **Scenario 2:** Ongoing dumping/subsidisation and excess production of Asian steel/aluminium for the foreseeable future. Australian remedies implemented to exactly offset the dumping margin and/or full extent of the subsidy.
- **Scenario 3:** Temporary dumping and subsidisation until excess steel/aluminium production ends in 2016-17. No Australian trade remedies. Some domestic production capacity is lost and does not return after global demand and supply return to balance.

Modelling outcomes

Table 4.1 below shows, for the steel industry, the changes in the key economic outcomes for each scenario compared to the baseline.

Scenario 1 estimates what could happen if economically inefficient market interventions and global steel overcapacity were assumed to continue indefinitely and no measures were implemented to address the impacts of dumping and subsidisation on the Australian steel industry. Cheap steel imports are estimated to result in small increases in overall economic growth and employment and production in the manufacturing and construction sectors. The negative impact on the local steel industry is more significant, where production is estimated to shrink by $169 million for every $400 million of additional dumped or subsidised steel imports.

The overall economic benefits estimated for Scenario 1 come about because dumping and subsidisation—which represent income transfers from Asian businesses and governments to Australians—are assumed to continue indefinitely.

In contrast, **Scenario 2** estimates what could happen if trade remedies were implemented that redress the impacts of dumping and subsidisation on the Australian steel industry, assuming that

economically inefficient market interventions and global steel overcapacity continue indefinitely (as in Scenario 1). Trade remedies would prevent the steel sector from contracting but there would still be small increases in overall economic growth and in manufacturing production over time. While there is a small initial reduction in employment reflecting the impact of dumped and/or subsidised imports prior to the imposition of measures, this is reversed over the subsequent three years.

The overall economic benefits found in Scenario 2 result from the additional government revenues raised from anti-dumping (or countervailing) duties. The modest increase in government revenue is assumed to be used to fund government services, tax cuts or budget deficit reductions that have positive effects on overall economic growth. In effect, trade remedies lead to the transfer into government revenues of an amount equivalent to the dumping margin or foreign subsidy.[111]

Table 4.1: Steel scenarios, real deviation from the baseline, AUD$ 2015/16

Scenario 1	**2016/17**	**2017/18**	**2018/19**	**2019/20**	**2020/21**
Key macro results					
Real GDP ($m)	64.8	69.2	74.7	79.4	82.7
Real GNP ($m)	115.4	114.3	117.2	120.7	122.9
Employment (FTE)	78.2	71.2	69.1	69.0	68.8
Investment ($m)	113.2	88.0	74.4	66.4	60.0
Key sectoral output results					
Steel ($m)	-168.6	-170.3	-172.4	-173.9	-174.7
Manufacturing ($m)	114.8	126.0	134.3	140.4	144.7
Construction ($m)	76.4	60.0	51.2	46.1	42.0
Scenario 2	**2016/17**	**2017/18**	**2018/19**	**2019/20**	**2020/21**
Key macro results					
Real GDP($m)	64.8	23.6	25.8	26.5	26.7
Real GNP ($m)	115.4	67.2	79.9	87.1	91.4
Employment (FTE)	78.2	-15.2	-0.8	5.9	9.3
Investment ($m)	113.2	-118.5	-72.7	-48.4	-34.4
Key sectoral output results					
Steel ($m)	-168.6	-1.0	-2.5	-3.5	-4.1
Manufacturing ($m)	114.8	27.3	13.1	5.5	1.2
Construction ($m)	76.4	-77.0	-47.0	-31.1	-21.9
Scenario 3	**2016/17**	**2017/18**	**2018/19**	**2019/20**	**2020/21**
Key macro results					
Real GDP ($m)	64.8	-73.5	-67.0	-66.9	-70.3
Real GNP ($m)	**115.4**	**-198.3**	**-121.8**	**-83.9**	**-65.4**
Employment (FTE)	78.2	-351.9	-243.3	-193.5	-169.8
Investment ($m)	113.2	-722.8	-416.8	-266.4	-189.7
Key sectoral output results					
Steel ($m)	-168.6	-168.6	-168.6	-168.6	-168.6
Manufacturing ($m)	114.8	103.1	16.3	-25.5	-46.7
Construction ($m)	76.4	-479.3	-278.0	-179.2	-129.0

Source: Cadence Economics estimates

[111] Importers or foreign exporters may respond to the implementation of trade remedies by increasing their prices (to reduce the extent of dumping or flow-through of subsidisation), and this would reduce the amount of revenue raised by anti-dumping (or countervailing) duties. Therefore, the results reported for Scenario 2 are an estimated upper limit for the overall economic benefits in this scenario.

Scenario 3 differs from the first two scenarios in that dumping and subsidisation are assumed to be temporary, rather than permanent income transfers from Asian businesses and governments to Australians. While dumping and subsidisation are temporary (and reflect a period of slow structural adjustment to overcapacity), they are of sufficient magnitude and duration to cause the Australian steel industry to contract.

Domestic steel production capacity declines and does not return to its previous levels after global production capacity returns to balance with global demand and the period of dumping and subsidisation ends. This is because the large sunk costs of steel furnaces create large entry and expansion barriers which would deter investments in rebuilding capacity once it is lost.[112] The risk of renewed dumping and subsidisation in the next cyclical industry downturn could also deter investments in rebuilding capacity.

In this scenario, there is no ongoing benefit from obtaining cheap steel. After global demand and supply return to balance, average steel import prices return to the undumped/unsubsidised price, plus the transport costs of importing steel products—which is higher than the price for locally-produced steel due to lower transport costs. The results are negative both for the steel industry and the economy as a whole.

Table 4.2 shows the changes in the key economic outcomes for each scenario compared to the baseline for the aluminium industry. The pattern of economic impacts and the causal mechanisms in each of the three scenarios are comparable to those observed for the steel industry.

Similar to Scenario 3 for the steel industry, there is no ongoing benefit from obtaining cheap aluminium products. After global demand and supply return to balance, average steel import prices return to the undumped/unsubsidised price, plus the transport costs of importing aluminium products (which is higher than for locally-produced goods). The results are negative both for the aluminium industry and the economy as a whole.

In Scenario 3, domestic production capacity for primary aluminium products declines and is assumed not return to its previous levels after global production capacity returns to balance with global demand and the period of dumping and subsidisation ends. The Commission understands that sunk costs are not as significant for the production of aluminium extrusions as they are for the steel industry or for aluminium smelting. Therefore, Scenario 3 may represent a worst case scenario for the aluminium industry as, due to lower entry and expansion barriers, there would be a greater likelihood that investments in rebuilding capacity would occur over time after the period of dumping and subsidisation ended.

[112] Based on industry information, the Commission understands that blast and arc furnaces have long asset lives (around 25 years for a blast furnace) and significant costs are incurred in shutting down and restarting them, including the costs of relining the furnace.

Table 4.2: Aluminium scenarios, real deviations from the baseline, AUD$ 2015/16

Scenario 1	2016/17	2017/18	2018/19	2019/20	2020/21
Key macro results					
Real GDP ($m)	86.2	93.7	103.2	111.3	117.3
Real GNP ($m)	122.8	124.3	132.0	139.2	143.5
Employment (FTE)	45.2	39.3	39.9	41.8	42.5
Investment ($m)	146.6	119.8	108.5	101.2	92.8
Key sectoral output results					
Aluminium ($m)	-261.1	-264.8	-268.6	-271.4	-273.4
Manufacturing ($m)	78.1	94.8	104.4	111.6	118.2
Construction ($m)	100.4	82.9	75.7	71.2	65.9
Scenario 2	**2016/17**	**2017/18**	**2018/19**	**2019/20**	**2020/21**
Key macro results					
Real GDP ($m)	86.2	11.7	17.8	22.4	27.6
Real GNP ($m)	122.8	60.7	78.6	87.3	93.4
Employment (FTE)	45.2	17.4	37.6	46.7	52.5
Investment ($m)	146.6	-18.5	43.9	73.6	91.2
Key sectoral output results					
Aluminium ($m)	-261.1	3.0	0.2	-2.0	-3.8
Manufacturing ($m)	78.1	16.9	-6.4	-14.9	-18.1
Construction ($m)	100.4	-10.5	31.0	50.8	62.7
Scenario 3	**2016/17**	**2017/18**	**2018/19**	**2019/20**	**2020/21**
Key macro results					
Real GDP ($m)	86.2	-8.5	-27.9	-48.7	-63.6
Real GNP ($m)	122.8	-105.8	-119.8	-147.3	-175.6
Employment (FTE)	45.2	-413.6	-394.5	-392.1	-390.9
Investment ($m)	146.6	-218.5	-123.9	-77.5	-52.3
Key sectoral output results					
Aluminium ($m)	-261.1	-261.1	-261.1	-261.1	-261.1
Manufacturing ($m)	78.1	-243.1	-290.1	-313.5	-322.2
Construction ($m)	-149.0	-87.4	-57.6	-41.6	-31.7

Source: Cadence Economics estimates

Commission's conclusion

The Commission considers it is more realistic to assume (as in Scenario 3) that dumping and subsidisation are temporary and that they will gradually come to an end as global capacity is brought into balance with global demand, than to assume that dumping and subsidisation will be permanent features of Asian steel and aluminium markets (as assumed in Scenarios 1 and 2). Assuming that dumping and subsidisation will be permanent would imply that Asian (or other) governments will be willing to support an ongoing income (and welfare) transfer to Australians.

However, as noted in chapter 3 of this report, the Commission recognises that the process of bringing global capacity and demand into balance is unlikely to be completed in the near future.

Based on Scenario 3, the implementation of trade remedies will prevent a (likely) permanent contraction in Australian steel and aluminium production capacity as a result of the material injury to Australian industry caused by a period of dumping and subsidisation. Trade remedies will prevent the ongoing negative impacts for these industries and for the economy as a whole that the modelling has estimated to occur in the absence of appropriate trade remedies.

The Commission recognises that, from a narrow economic perspective, the net present value of the benefits for the economy as a whole of imposing trade remedies will depend on how long dumping and subsidisation occur and the discount rate applied to future benefits and costs.

The Commission also notes that trade remedies have other benefits beyond those measured by the modelling results. Such benefits include those that accrue from the role of trade remedies systems in supporting efforts by the Australian government and other governments to foster trade liberalisation and more open global markets, which generate significant economic benefits by promoting productivity and innovation.

4.5 Regional impacts of dumping and subsidisation

The Cadence Economics model assumes that the resources displaced from the steel and aluminium industries as a result of dumping and subsidisation find new uses in other industries. The required re-allocation of resources is assumed to occur over a period of time, reflecting temporary barriers to labour mobility (due, for example, to the time required for retraining or relocation), but all resources will be re-employed in other industries.

If this modelling assumption is too optimistic, the economic and employment results produced by the model, especially for Scenario 1, would be overstated.

To assess the likelihood that displaced workers would find new jobs relatively quickly, the Commission considered available information and analysis on employment outcomes following large structural changes in Australian industries.

The (then) Department of Industry's Office of the Chief Economist noted that structural change is the result of the economy shifting resources to where they are most valued, and is therefore necessary for continued growth and prosperity, and crucial for the economy's ability to capitalise on opportunities. The report noted that:

> While there has been a long-term shift of resources from Manufacturing activities to Services, the extent of structural change in Australia appears to have accelerated in recent years … [resulting in the] speed[ing] up [of] the relative decline of Manufacturing and Agriculture's shares of the economy.[113]

The report noted further that:

> Changes in the sectoral composition of the economy can impose costs on some workers and regions. Barriers to labour mobility, for example, mean that the impact of structural change can be severe for certain groups … Given that Manufacturing employees in particular seem to be less geographically mobile than in other industries, declining employment in Manufacturing poses some challenges. Empirical results, however, show that while the recent accelerated decline of the Manufacturing industry did have an impact on regional employment and unemployment rates in Australia, regions have demonstrated considerable capacity to adjust.[114]

Using data from the 2006 and 2011 Australian Censuses, the employment outcomes for displaced automotive workers was analysed. The report found that one third of workers in the automotive sector in 2006 remained in automotive manufacturing in 2011, another third changed industries altogether and 14 per cent switched to another manufacturing subsector. Three per cent of 2006 automotive manufacturing workers were unemployed in 2011. Some had left the labour force, for a variety of reasons including forced early retirement by displaced older workers or a decision to study or raise a family.

[113] Department of Industry, Office of the Chief Economist, *Australian Industry Report 2014*, p. 123, www.industry.gov.au.
[114] ibid.

The report concluded that while the outcomes were largely positive, employment outcomes for some groups were less favourable than for others. These groups included women and young and older workers, three groups that were overrepresented among the unemployed.[115]

As noted in the report, the impact of structural change can be severe for certain groups of workers and regions. A 2015 study of the regional economic impacts of a modelled closure of BlueScope Steel Operations in Port Kembla, conducted by researchers at the University of Wollongong,[116] found large negative impacts on regional output and employment from the scenarios considered in the modelling.

The estimated results from the scenario of a complete shutdown of the Bluescope plant at Port Kembla were an estimated $3.3 billion loss to regional output (or more than 20 per cent of total gross regional production for the Illawarra region of $15.5 billion). Approximately 10,000 jobs were estimated to be lost, directly and through flow-on effects, if such a shutdown occurred, exacerbating existing high unemployment levels of 8.3 per cent (in August 2015). The authors note that historical data and modelling suggest that marginal workers such as older workers and youth would be severely impacted in this scenario.

In assessing the overall economic and employment effects of dumping and subsidisation on Australian industry impacts, economic growth and employment, it is important to consider the regional impacts. This is particularly the case where material injury to Australian industry from dumping and subsidisation—as well as the structural adjustments to global overcapacity in steel and aluminium production—are concentrated in regional areas.

The government can play a role in helping to remove or reduce some of the barriers to structural adjustment, such as the costs of retraining and relocation. Policies that support smooth structural change will better position the Australian economy to be more competitive and capitalise on growth opportunities while lowering the costs of adjustment. Section 4.2 in this chapter outlines some of the policies governments have put in place in this regard.

The government can also play a role in facilitating the economy's ability to exploit its areas of comparative advantage, to enable Australian businesses to turn structural change to their benefit. Developing business capabilities, harnessing the potential of science and research and encouraging collaboration between researchers and industry, forging new trade alliances and trade agreements, facilitating the commercialisation of ideas and building workforce skills are just some examples of the initiatives being implemented by the government.

[115] ibid., p. 117.

[116] S Burrows, A Masouman and C Harvie, *Regional Economic Impacts of a Closure of BlueScope Steel Operations in Port Kembla*, Report prepared for the Australian Workers Union, Port Kembla, University of Wollongong, 2015, http://ro.uow.edu.au/cgi/viewcontent.cgi?article=3100&context=lhapapers. The modelling used the Illawarra Interregional Input-Output Model (IIRI-OM) based upon ABS data and developed to estimate impacts of the regional economy of assumed 'shocks'.

5 Current trade remedies – international and Australian trends

Key points

- Since the 2009 global financial crisis, total trade remedy investigations and measures in force for steel, and to a lesser extent aluminium, products have been rising globally. The majority of investigations and measures have been in respect of Chinese exports.
- Asian countries are active users of trade remedies, including anti-dumping and countervailing duties as well as safeguards. Being less targeted than anti-dumping and countervailing duties, safeguards have wider and more significant impacts on imports than other forms of trade remedy.
- Consistent with global trends, trade-exposed Australian steel and aluminium producers have increasingly sought trade remedies under Australia's anti-dumping system.

5.1 Overview

Since the GFC, total trade remedy measures in force against steel, and to a lesser extent aluminium, have been rising, both globally and in Australia. There has also been a significant increase in the number of initiations. Initiations can have impacts of imports from exporters under investigation, prior to the completion of an investigation, due to their signalling effects. This is particularly the case when provisional measures are put in place (such as through a Preliminary Affirmative Determination).

Annual trade remedy investigation initiations by the United States into steel products increased more than sevenfold from 2008 to 2015. In 2015, trade remedy investigation initiations by the US into steel products comprised 70 per cent of all US trade remedy investigation initiations. The country against which most trade remedy investigations into steel were initiated by the US during 2008 to 2015 was China.

In the European Union, trade remedy measures in force against steel have risen steeply in recent years. At February 2016 the EU had 37 trade remedy measures imposed on steel with nine investigations on foot.[117]

For G-20 countries generally, steel counted for a substantial proportion of trade remedy investigations during the reporting period July 2013 to June 2015.

Asian region countries (excluding Australia) are also active in imposing trade remedy measures for metal products, which include steel and aluminium. Currently the main users of anti-dumping measures are Thailand, Indonesia and India. Asian countries are also large users of safeguards, with Indonesia and Thailand currently having the largest number of safeguards on metal products. Safeguards apply to all imports in a particular category and therefore have broader impacts than anti-dumping and countervailing measures. The use of safeguards in Asia has increased in recent years.

Following global trends, trade remedy investigation initiations and measures imposed in respect of steel and aluminium have also increased substantially in Australia in recent years. Trade remedy measures against steel and aluminium in force in Australia currently comprise two thirds of all Australian trade remedy measures.

[117] European Commission, 2016, Commission launches new anti-dumping investigations into several steel products, 12 February 2016.

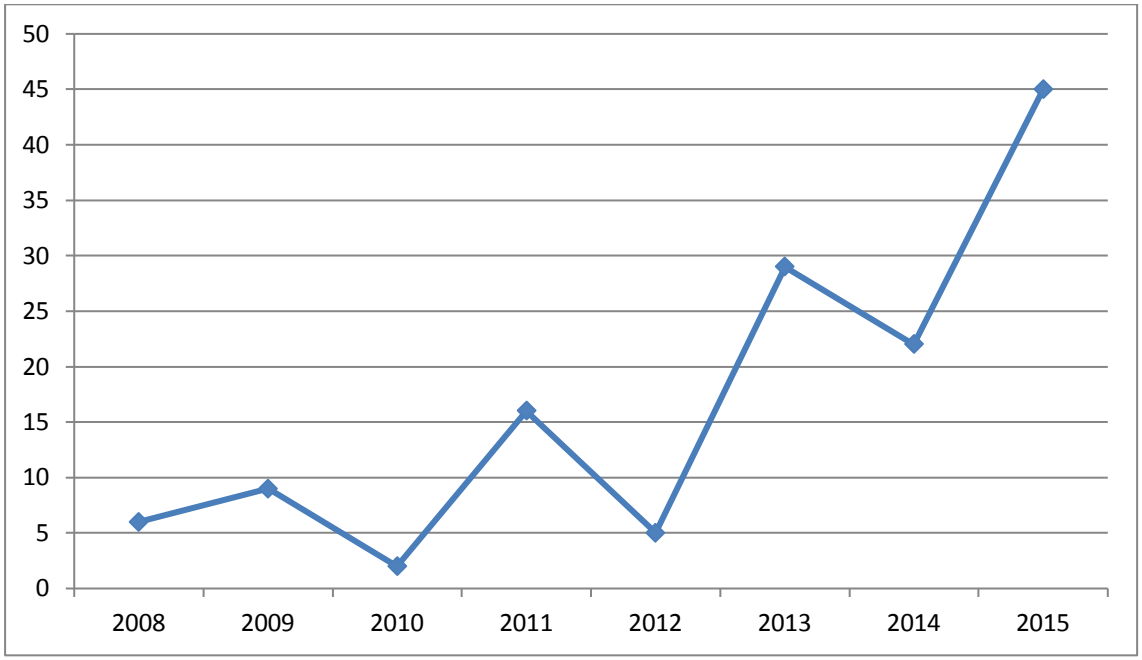
5.2 International trends in trade remedy investigations and measures

This section provides more detailed information on trends in trade remedy investigations and measures in the United States, European Union, G-20 countries, Asian region, and Australia. The Commission's analysis has been limited by the availability of data.

5.2.1 United States trade remedy investigations

Trade remedy investigations by the United States into imports of steel products have increased substantially since 2008. Figure 5.1 below shows trade remedy investigations into steel initiated by the United States in each year from 2008 to 2015. Six United States trade remedy investigations into steel products were initiated in 2008, rising to 45 such investigations in 2015.[118]

Figure 5.1: United States anti-dumping and countervailing investigations initiated against steel products

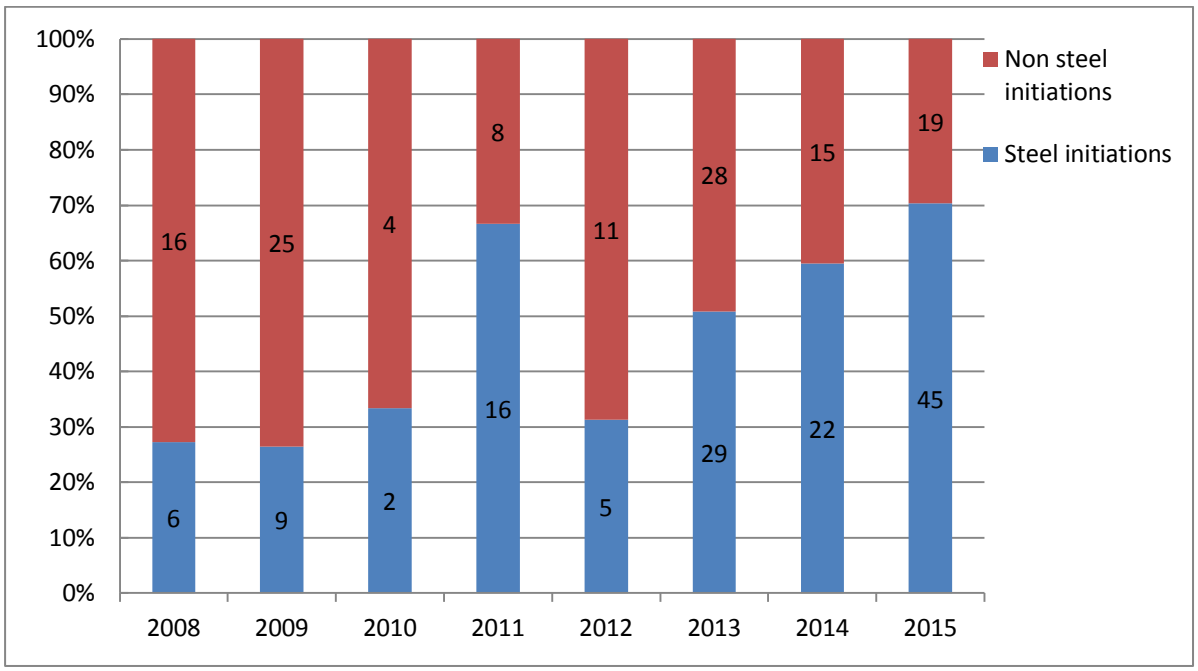


Source: United States Department of Commerce, International Trade Administration, Enforcement and Compliance website at http://enforcement.trade.gov/stats/inv-initiations-2000-current.html

Trade remedy investigations by the United States into imports of steel products have also increased as a proportion of the United States' trade remedy caseload. Figure 5.2 below shows United States initiations of trade remedy investigations into steel as a proportion of total United States trade remedy investigation initiations. Initiations of trade remedy investigations into steel products comprised 70 per cent of all initiations in 2015.

[118] United States Department of Commerce, International Trade Administration, Enforcement and Compliance website at http://enforcement.trade.gov/stats/inv-initiations-2000-current.html, accessed on 24 March 2016.

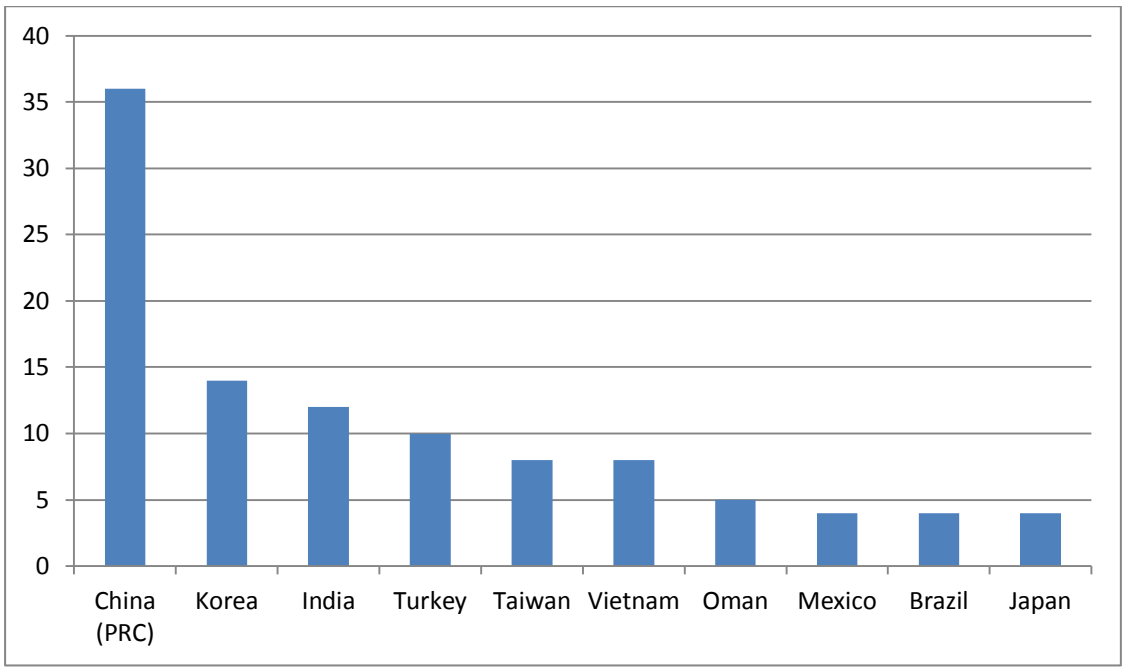
Figure 5.2: United States anti-dumping and countervailing investigations initiated against steel products as a proportion of total investigations initiated



Source: United States Department of Commerce, International Trade Administration, Enforcement and Compliance website at http://enforcement.trade.gov/stats/inv-initiations-2000-current.html

Figure 5.3 below shows United States trade remedy investigations into steel initiated over the 2008 to 2015 period broken down by country (for the top ten countries). The largest number of initiations into steel products were in respect of China, at 36 for the period.

Figure 5.3: United States anti-dumping and countervailing investigations initiated against steel products during 2008 to 2015 broken down by country (top ten countries)

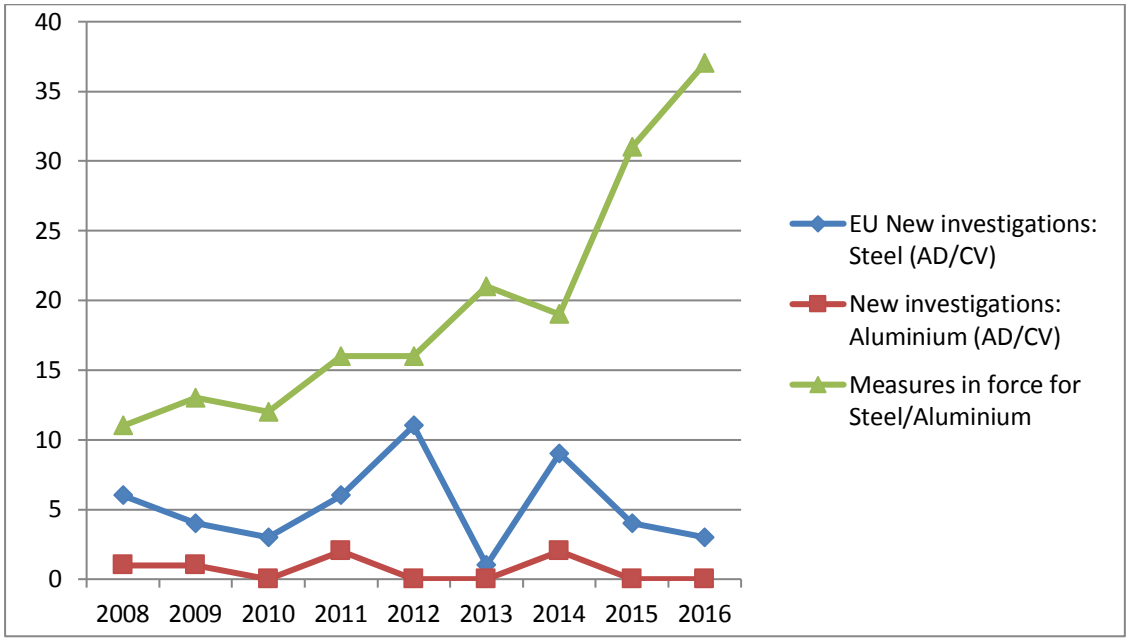


Source: United States Department of Commerce, International Trade Administration, Enforcement and Compliance website at http://enforcement.trade.gov/stats/inv-initiations-2000-current.html

5.2.2 European Union trade remedy investigations and measures

The total number of trade remedy measures in force in the European Union against steel products increased significantly during the 2008 to 2016 period, as shown in Figure 5.4 below. As at 12 February 2016, the EU had 37 trade remedy measures in force on steel products and nine investigations underway. Three further trade remedy investigations were initiated by the European Commission in February 2016 concerning steel products from China.

Figure 5.4: European Union anti-dumping and countervailing investigations and measures in force



Source: Compiled by the ADC using the European Commission's, Annual Reports from the Commission to the Council and the European Parliament (2006-2015)

5.2.3 G-20 trade remedy investigations

Metal products accounted for between 30 and 40 percent of anti-dumping investigations initiated by G-20 economies in the period July 2013 to June 2015. Of those investigations, steel counted for a substantial proportion, approximately 80 percent of the 156 investigations initiated. China was the country most affected by these investigations.

Metal products were also the subject of the largest number of countervailing subsidy investigations for G-20 countries during the same period, accounting for over 50 percent of all such countervailing subsidy investigations.

5.2.4 Asian region trade remedy investigations and measures (excluding Australia)

Asian region countries are active in imposing trade remedy measures (anti-dumping, countervailing and safeguards) for metal products.[119] A total of 117 measures are currently in force among the Asian region countries shown in the table below. Thailand tops the list with 34 measures currently in place, followed by Indonesia with 31 measures and India with 21. Anti-dumping measures are by far the most common form of trade remedy (by number of measures) in the Asian region. The countries most affected by these measures, namely China, Korea, Taiwan and Japan, have not imposed a significant number of measures themselves.

[119]Global Trade Alert statistics only report in terms of metals. Steel and aluminium are significant components of this category. Other metals included in this category include: precious metals, copper, lead, zinc and tin, and their respective alloys and other non-ferrous metals.

Developing countries appear to be the largest users of safeguards. Within the Asian region, Indonesia and Thailand currently have the largest number of safeguards on metal products, with ten and two measures respectively. The use of safeguards has increased in recent years. The Commission understands that further safeguard measures are currently being considered by several Asian countries.

While this form of trade remedy accounts for a small number of the total trade measures in place, safeguards apply to all imports in a particular category and therefore have broader impacts on imports than anti-dumping and countervailing measures.

Table: 5.1: Asian region (excluding Australia) measures in place for metal products

Country imposing measures	Measures in place against metal products (includes anti-dumping, countervailing, safeguards)	Safeguards
Thailand	34	2
Indonesia	31	10
India	21	1
Malaysia	14	1
China	5	0
Viet Nam	4	0
Korea	4	0
Taiwan	2	0
New Zealand	1	0
Philippines	1	1
Japan	0	0
Singapore	0	0
TOTAL	**117**	**15**

Source: Data from Global Trade Alert and WTO Safeguards Gateway. Measures are counted on the basis of the number of exporting countries affected by the investigation.

Thailand and Malaysia are the most significant initiators of current investigations into alleged dumping of steel products. The majority of these investigations are anti-dumping investigations against other Asian steel producers, particularly China and Korea. Thailand has four current investigations and Malaysia has three. Indonesia, Vietnam and China each have one investigation on foot. India currently has three investigations on foot which relate to anti-dumping measures, safeguard duties and minimum import prices.

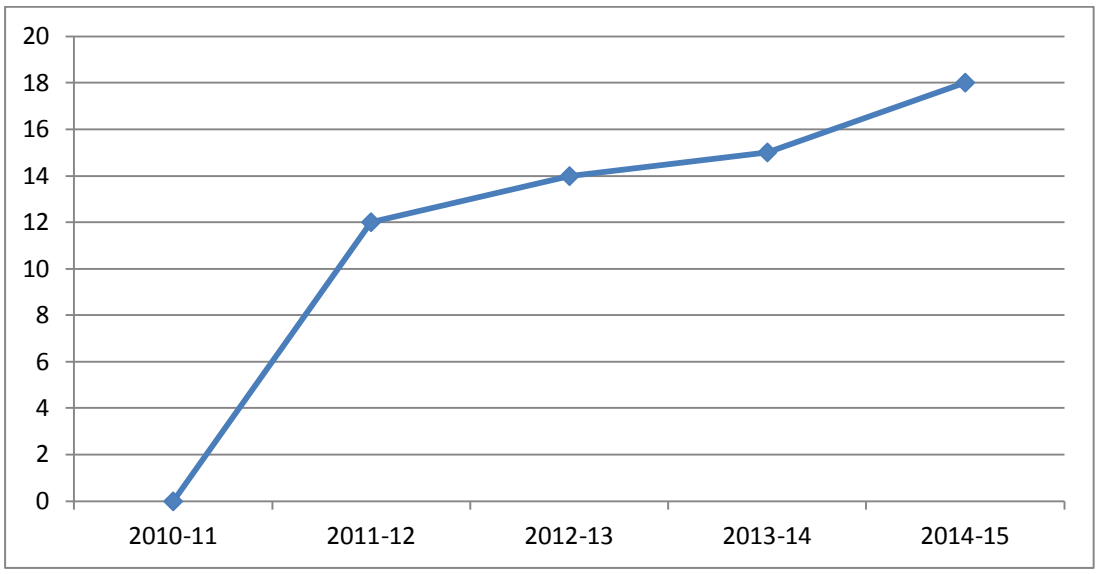
5.3 Australian trends in trade remedy investigations and measures

5.3.1 Initiation of investigations in Australia

Measures sought by trade-exposed Australian industries are following global trends. The number of trade remedy investigations initiated in Australia concerning steel and aluminium goods has increased substantially since 2010-11 (Figure 5.5).[120]

[120] Figures include anti-dumping, countervailing and anti-circumvention investigations.

Figure 5.5 Australian trade remedy investigations initiated for steel and aluminium products, 2010 to February 2016. Includes anti-circumvention investigations

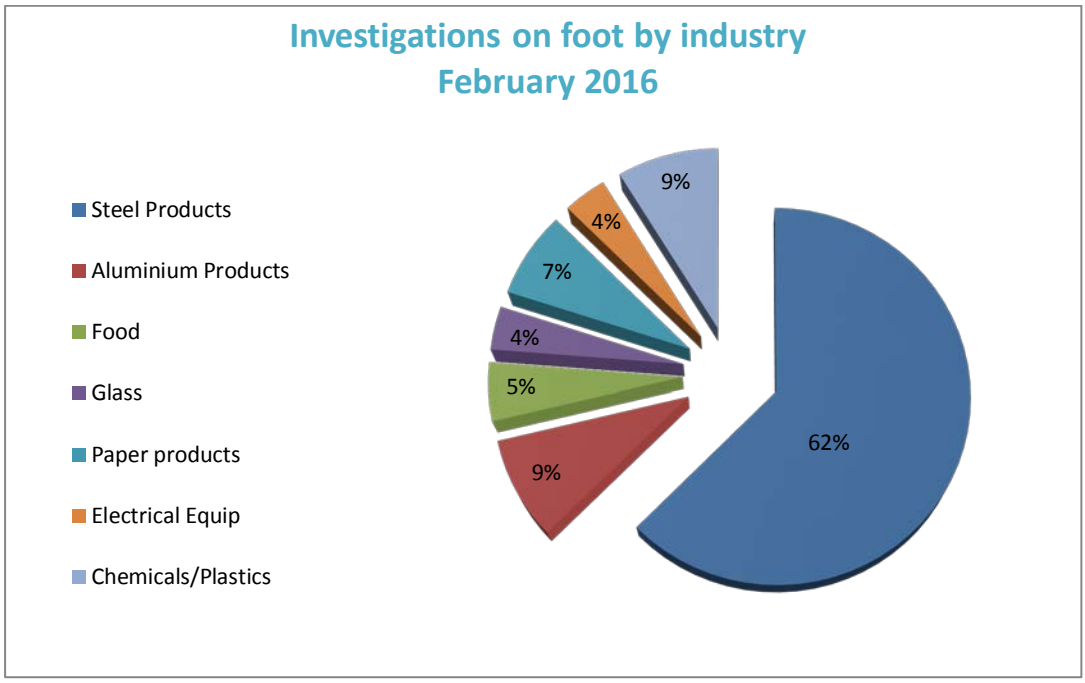


Source: Anti-Dumping Commission

The increasing trend in trade remedy investigations is most pronounced for steel. The number of steel investigation initiations increased from none in 2010-11 to 18 in 2014-15 and accounted for 90 per cent of all new investigations by 2014-15. Fewer investigations were initiated for aluminium goods during the same period. However, broadly consistent with the trend for steel, aluminium investigations initiated have also increased since 2011-12.

Steel is continuing to dominate the Commission's current caseload. Figure 5.6 below shows a snapshot of Australian trade remedy investigations as at February 2016 broken down by industry. Investigations for steel, at 62 per cent, and aluminium, at 9 per cent, together comprise 71 percent of the Commission's current caseload.

Figure 5.6 Australian trade remedy investigations on foot by industry in February 2016

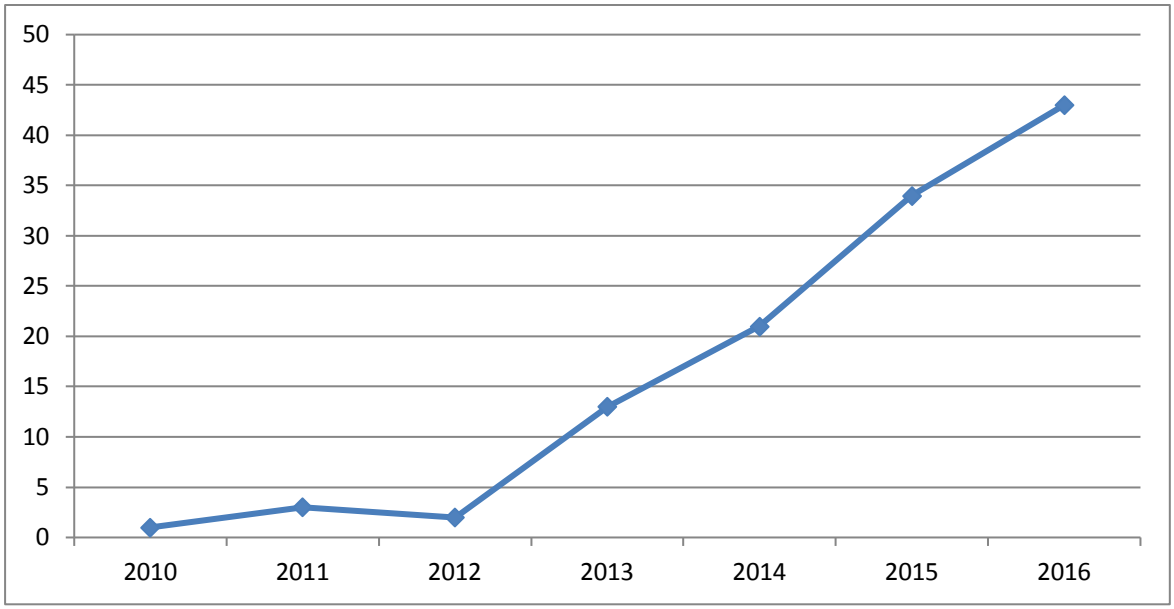


Source: Anti-Dumping Commission

5.3.2 Trade remedy measures in force in Australia

As a result of completed investigations, there were, as at February 2016, 43 trade remedy measures in force for steel and aluminium. Figure 5.7 below shows the total number of measures in force in February in each year from 2010 to 2016; approximately ten measures have been added every year since 2012.

Figure 5.7 Australian measures in place for steel and aluminium products, 2010 to 2016



Source: Anti-Dumping Commission

Not only have numbers of Australian trade remedy measures against steel and aluminium increased significantly since 2010, the measures have also increased significantly as a share of the measures in force. Table 5.2 below shows trade remedy measures for steel and aluminium as a percentage of total trade remedy measures in force for every year since 2010. From a low of 4.3 per cent in 2010, trade remedy measures in respect of steel and aluminium goods are now two thirds of all Australian trade remedy measures in force.

Table 5.2 Steel and aluminium measures in force in Australia—share of total measures

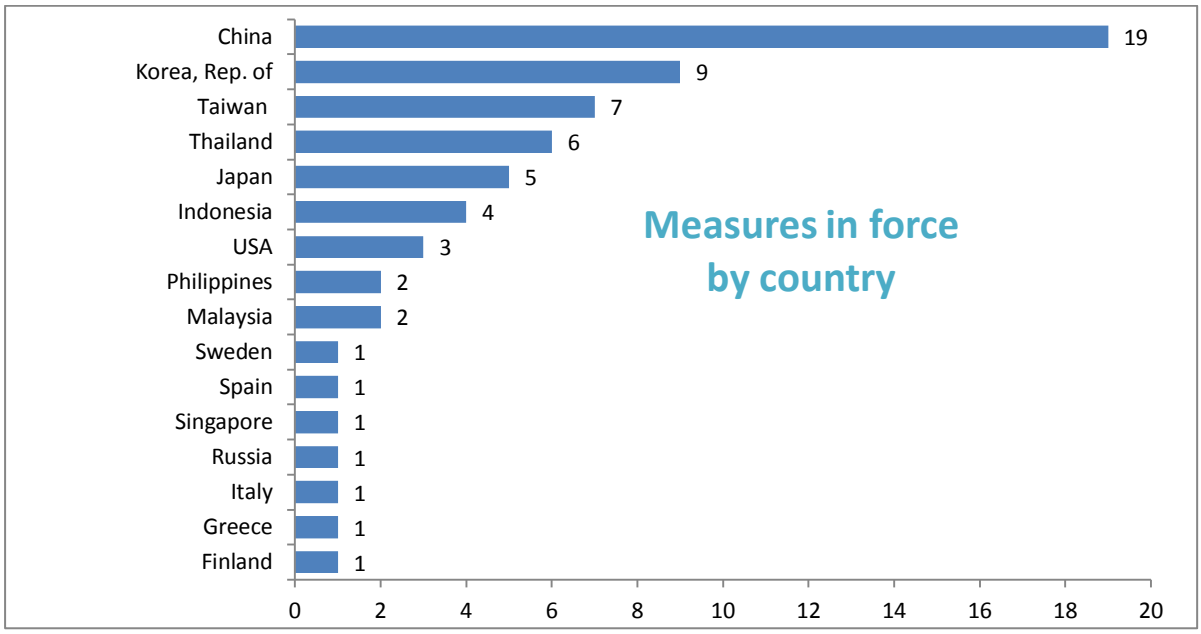
Year (at February)	Steel and aluminium measures as percentage of total measures
2010	4.3%
2011	13%
2012	8%
2013	36.1%
2014	47.7%
2015	60.7%
2016	67.1%

Source: Anti-Dumping Commission

5.3.3 Countries subject to Australian trade remedy investigations and measures

Measures imposed following investigations by the Commission into steel and aluminium imports have primarily involved goods produced in China, and to a lesser extent Korea and Taiwan. Figure 5.8 shows the breakdown of measures in force as at February 2016 by country.

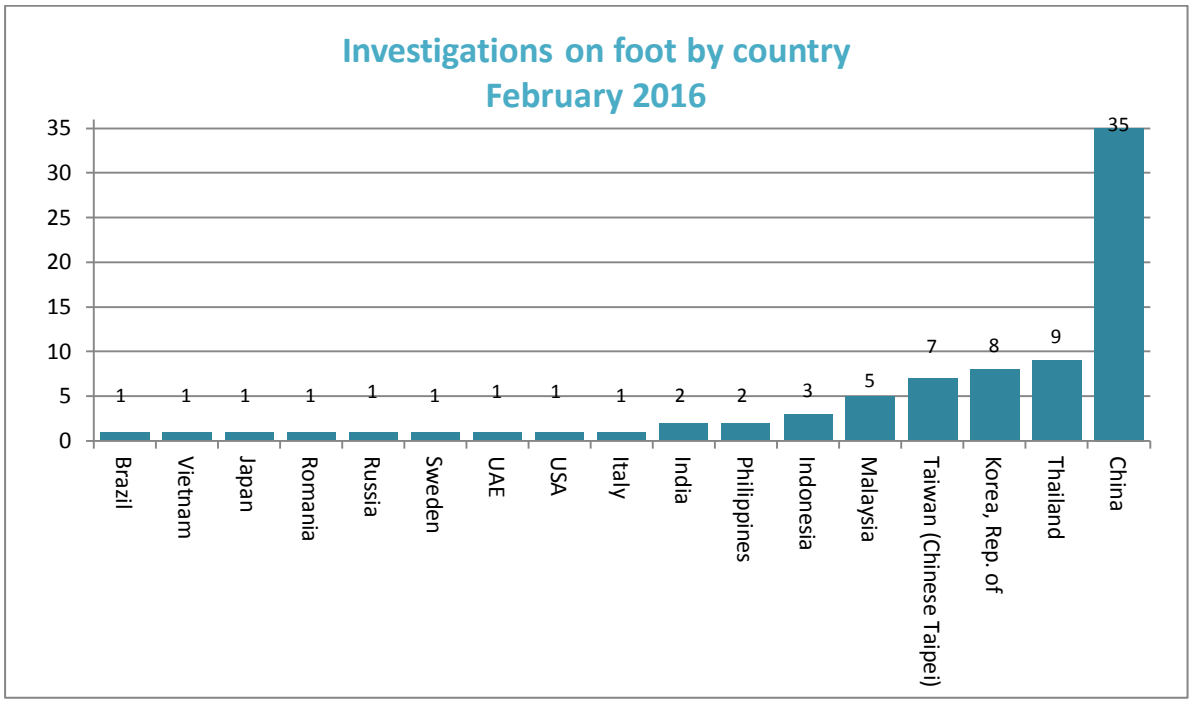
Figure 5.8 Australian trade remedy measures in force by country as at February 2016



Source: Anti-Dumping Commission

Investigations by the Commission into dumping and subsidisation of steel and aluminium imports continue to be dominated by goods produced in China. Figure 5.9 shows the breakdown of Australian trade remedy investigations as at February 2016 by country.

Figure 5.9 Australian trade remedy investigations on foot by country as at February 2016



Source: Anti-Dumping Commission

6 Effectiveness of measures

Key points

- There is evidence of circumvention and non-compliance behaviour by some exporters and importers. Further strengthening the application of the anti-circumvention and compliance framework will improve the effectiveness of Australia's anti-dumping system.
- Preliminary analysis of available data suggests that Australian anti-dumping and countervailing measures are generally effective in that they result in lower imports from countries subject to measures and improve Australian industry's ability to compete on a level playing field.

6.1 What is an effective trade remedy?

The Commission considers that an effective trade remedy measure is one that achieves the government's objective of remedying material injury to Australian industry caused by dumping and subsidisation.

A trade remedy's success in remedying injury is central to its effectiveness. Anti-dumping and countervailing duties that do not redress the injury arising from dumping and subsidisation—for example, because the duties are circumvented or not enforced—would be ineffective.

Injury may be caused by other factors, such as a decline in overall demand or strong competition from imports that are not dumped or subsidised. Such injury is not relevant to the effectiveness of a trade remedy.

6.2 Activities that may reduce the effectiveness of trade remedies

The Commission has collected information on potential circumvention and compliance issues in steel and aluminium markets through targeted consultations, market intelligence gathered by the Commission on circumvention and compliance issues, and submissions to the House of Representatives Standing Committee on Agriculture and Industry's inquiry into the effectiveness of Australia's anti-circumvention framework (the House of Representatives inquiry).

6.2.1 Circumvention

Circumvention is a trade strategy used by exporters and importers of certain products to avoid the full payment of dumping and countervailing duties or to avoid the intended effect of those duties. Circumvention activities reduce the effectiveness of trade remedies in addressing the injury to Australian industry caused by dumping and subsidisation. There are no agreed WTO rules to specifically address circumvention.

Division 5A of Part XVB of the *Customs Act 1901* establishes Australia's anti-circumvention framework and is administered by the Anti-Dumping Commission.

The Commission considers that the following forms of alleged circumvention activities are reducing, or have the potential to reduce, the effectiveness of Australian trade remedies for the steel and aluminium industries:

- **Slight modification of goods**: Goods are slightly modified so that they no longer fit the description of goods subject to measures, or fall into a different tariff classification and/or statistical code, for the purpose of avoiding the application of anti-dumping duties.

  Industry submitted evidence to the House of Representatives inquiry that a range of steel products are being slightly modified to circumvent anti-dumping measures, including plate, coil, pipe, tube and galvanised steel products. A number of submissions to the House of Representatives inquiry made particular reference to the addition of 'alloys' (in particular, boron) to steel products in an attempt to avoid the payment of anti-dumping duties.

Bluescope estimated that the addition of alloys to steel products resulted in between $1-3 million in foregone interim dumping duties in the 12 months to September 2014.[121]

Australian industry provided further examples of claimed exporter circumvention by slightly modifying their goods:

- Exporters apply a primer to steel products to change the tariff classification of the imported goods from "uncoated steel" to "coated steel".
- Exporters drill a hole in an aluminium extrusion or tube of steel to change the classification of the imported goods to a "fabricated" product.

- **Avoidance of the intended effects of duties:** The application of dumping or countervailing duties is intended to increase the prices of dumped goods in the Australian market by the extent of the duty. For this to occur, the importer would pass on to the consumer or end-user the amount of duty paid by raising domestic prices. These intended effects are avoided when dumping and/or countervailing duty has been imposed and is being paid by the importer but there is little or no effect, over a reasonable period, on the price of the goods in the Australian market.

  When the price at which the goods are sold by the importer does not increase in line with the duty paid, the duty will not be effective in redressing the injury to Australian industry from the dumping or subsidisation.

  The Commission is aware that the form of measure imposed can, in some circumstances, influence an exporter's ability to circumvent the intended effect of the duty. For example, where an ad valorem measure is applied,[122] an exporter may lower the export price to minimise the effect of the duty. Where such behaviour occurs, the amount of duty collected falls proportionally. Industry has raised concerns that such behaviour may be occurring in relation to certain steel imports.

  Industry has also told the Commission that they have seen evidence suggesting that some exporters are providing rebates, reimbursements or other compensations to importers to offset the impact of duties on the export price, while not changing the invoiced export price. Such payments will have the same effect in reducing the effectiveness of duties as if the export invoiced value had been lowered.

- **Export of goods through one or more third countries (trans-shipment)**: Duties on goods produced in a country subject to measures may be circumvented by shipping goods destined for Australia to a third country (that is not subject to measures), and then on to Australia. To avoid paying anti-dumping duties, importers claim, at the time of entering the goods into Australia, that the goods are from a country not subject to measures. Industry has advised the Commission of market intelligence suggesting possible trans-shipped goods.

- **Export of goods from a third country:** Exporters may arrange for goods from a country subject to measures to be exported by a related company in a third country. As the goods are exported from a country not covered by anti-dumping measures, importers avoid paying anti-dumping duties. Industry has advised the Commission of market intelligence that certain goods produced in a foreign country are being exported to third countries where measures on those goods do not apply and the goods are being minimally processed (or 're-manufactured') and then exported to Australia.

- **Arrangements between exporters:** An exporter subject to a high rate of duties may arrange for goods to be exported to Australia by another exporter which is either not subject to

[121] BlueScope Steel submission, p. 3.
[122] An ad valorem measure applies duty as a proportion of the actual export price of the goods.

duties or is subject to a lower rate of duty. This allows the importer to pay the lower duty rate (or no duty), when in fact the higher duty rate should apply. For example, Australian industry has claimed that aluminium extrusions are being produced by certain exporters, yet are shipped to Australia by a different exporter that is subject to a lower rate of duty.

- **'Phoenix' companies**: This refers to a situation where an exporter or importer that is subject to measures is 'wound' up to avoid paying the assessed duties and a 'new' company reappears in its place, with essentially the same operations, staff, location and so on. The Commission was given market intelligence that purports to demonstrate this practice occurring in parts of the global aluminium industry.

6.2.2 Non-compliance with measures

While circumvention is not illegal, non-compliance typically involves fraudulent behaviour designed to avoid or minimise the payment of duties.

The Department of Immigration and Border Protection (DIBP) is responsible for collecting anti-dumping and countervailing duties for enforcing compliance after duties have been imposed.

The Commission considers that the following forms of alleged non-compliance are reducing, or have the potential to reduce, the effectiveness of Australian trade remedies for the steel and aluminium industries:

- **Misclassification of goods:** Goods belonging to a tariff classification to which anti-dumping duties apply may be declared by the importer (or authorised customs broker) as belonging to another tariff classification to which anti-dumping duties do not apply. This behaviour may be intentional (fraudulent) or may reflect a classification error. An indication of this type of behaviour may be an unexplained change in trade patterns after the imposition of duties, specifically a reduction in the volume of goods under a tariff classification to which duties apply to one not subject to duties (or subject to a lower rate of duty).

  For example, the Commission has been made aware that some importers are misclassifying aluminium extrusions to avoid paying anti-dumping duties.

- **Misuse of exemption codes:** When completing an import declaration for imported goods, importers may falsely declare that the goods are exempt from anti-dumping measures, when in fact anti-dumping measures should apply.

- **Mislabelling of country of origin:** When completing an import declaration for imported goods, importers may falsely declare that the goods are from a country that is not subject to anti-dumping measures. Alternatively, exporters may falsely label goods as coming from another country that is not subject to measures. Industry has provided evidence on this.

6.2.3 Other activities that reduce the effectiveness of trade remedies

The Commission was told that exporters may engage in other activities that reduce the effectiveness of trade remedies, including:

- **Deliberate increase in imports prior to a Preliminary Affirmative Determination (PAD):** The Commission has been told that some exporters substantially increase the volume of dumped or subsidised exports to Australia in the period between the initiation of an anti-dumping investigation and the Commissioner making a PAD to impose interim duties. No anti-dumping duties are payable on goods exported to Australia prior to the Commissioner making a PAD (except under certain specific circumstances[123]). This behaviour may minimise duty payable and undermine the effectiveness of measures.

[123] Section 269TN of the Customs Act.

- **'Input dumping':** This describes a situation where an exporter produces goods for export into Australia using dumped or subsidised inputs from a third country. A submission to the House of Representatives inquiry gave an example relating to hot rolled coil from China which is dumped into a third country. The hot rolled coil is used to produce steel pipe and tube (hollow structural sections) in that country, which are then exported to Australia at effectively dumped prices, due to the dumped input comprising a significant proportion of the cost of producing hollow structural sections. When the third country is not covered by the measures for hollow structural sections, no anti-dumping duties are payable on the goods exported to Australia from that country.
- **Country hopping:** Country hopping occurs where, after anti-dumping measures are imposed (or an application for measures is made) in relation to certain countries, importers move to source the goods from another country not covered by measures (or by the application) but which appears likely to also be 'dumping' or benefiting from subsidisation (but this has not been proven).

  As a result, the Australian industry may continue to suffer material injury caused by dumping (to the extent that dumping is subsequently proven), and the effectiveness of measures is undermined, until industry can bring an application to the Commission and an investigation is conducted that finds the evidence required to support the application of duties to those countries. Material injury can be suffered during this period.

  Industry has provided market intelligence that certain importers have sought new sources of supply following the imposition of measures on specific products and suggested that these new sources are also dumped or subsidised.

6.3 Assessment of impact of measures on exporter and importer behaviour

Using the import data and industry data currently available to it, the Commission has conducted a preliminary quantitative assessment of the effectiveness of trade remedies in changing importer and exporter behaviour.

The initial findings described below are indicative only due to the preliminary nature of the Commission's assessment. It is important to note that import volumes and prices may have changed for reasons other than the imposition of measures. These reasons include demand changes, changes in the quality or features of imported products, or increased competition from non-dumped and non-subsidised imports. The Commission intends to conduct further work as part of the ADIS conduct of its market intelligence role to analyse the data in greater detail, and using appropriate economic and statistical techniques, to identify separately the impacts of the main influences on import volumes and prices.

The Commission is working closely with DIBP to build capability in applying advanced statistical techniques to import data to:

- measure the impacts on import volumes and prices resulting from the imposition of anti-dumping and countervailing duties
- identify statistical indicators of potential circumvention or non-compliance, such as unexpected increases in imports not subject to measures that appear to correlate with the imposition of duties.

Results from detailed statistical analyses of DIBP import data will assist the Commission in its ongoing work program for assessing the effectiveness of measures and identifying, in conjunction with DIBP, potential instances of circumvention or non-compliance that require further investigation. The Commission notes that the Parliamentary Secretary may initiate circumvention

inquiries under the Customs Act. Anti-circumvention measures or enforcement actions may be taken when such investigations uncover evidence of circumvention or non-compliance.

6.3.1 Summary of findings

The impact of measures on the imports of three products was assessed using DIBP import data. The three products are zinc coated (galvanised) steel, hollow structural steel sections and aluminium extrusions.

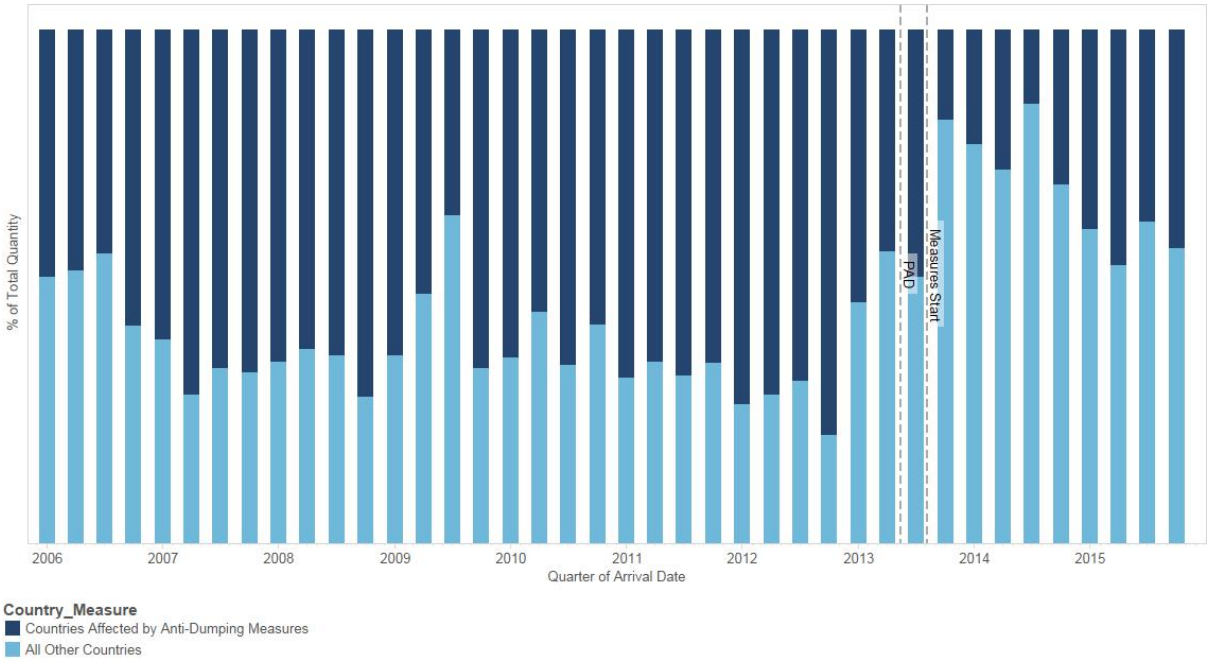
The analysis of the import data in this section focuses on identifying how the imposition of measures has affected the composition of imports. In the next section, the Commission reports on its analysis of import data in combination with data from the Australian industry—this analysis gives a fuller picture of the impact of measures and allows for some conclusions to be drawn about the effectiveness of measures in reducing injury to the Australian industry.

The Commission's preliminary analysis of the import data suggests that Australian anti-dumping and countervailing measures are generally effective in reducing the share of imports from countries subject to measures. This occurs because the targeted nature of anti-dumping and countervailing measures changes the relative prices for goods subject to measures compared to those from countries (or exporters) that have not been found to be dumping or benefiting from subsidisation, as well as products manufactured by the Australian industries.

6.3.2 Zinc coated (galvanised) steel

The impact of measures on zinc coated (galvanised) steel was assessed using DIBP data. Figure 6.1 shows that, following initiation of an investigation by the Commission and imposition of measures on zinc coated (galvanised) steel by the then Attorney-General in August 2013, the proportion of those goods imported to Australia from countries affected by the measures dropped significantly but partly recovered from late 2014.

Figure 6.1: Zinc coated (galvanised) steel—share of import volumes by country group (% per quarter)



Source: DIBP trade data

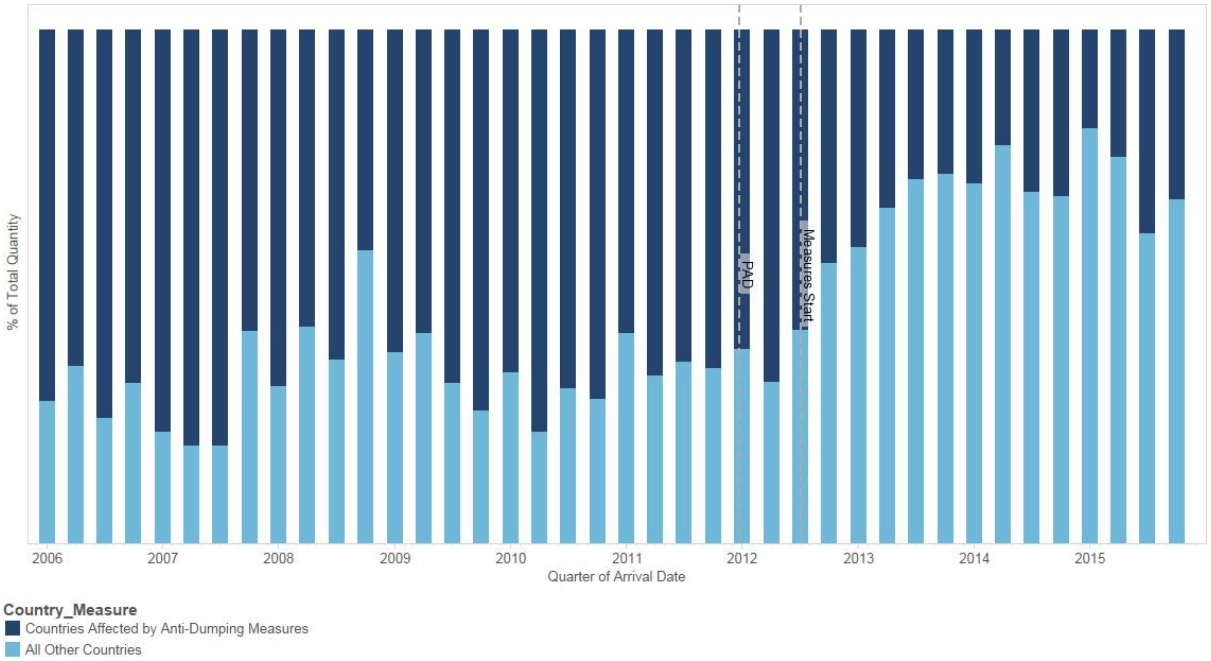
The Commission considers that the increase in the import share of countries subject to measures is likely to have reflected circumvention, specifically the addition of alloys such as boron. As noted in

section 7.4.1, on 18 March 2016, notice of the Parliamentary Secretary's decision to accept the Commissioner's recommendation that the original anti-dumping notices be altered to apply to alloyed galvanised steel imported with effect from the date of initiation of the anti-circumvention inquiries was published.

6.3.3 Hollow structural steel sections

The impact of measures imposed on hollow structural steel sections was assessed using DIBP data. Figure 6.2 shows that, following the imposition of measures on hollow structural steel sections by the then Minister for Home Affairs, the share of those goods imported to Australia from the countries affected by the measures has fallen compared to the period before measures were imposed.

Figure 6.2: Hollow structural sections—share of import volumes by country group (% per quarter)



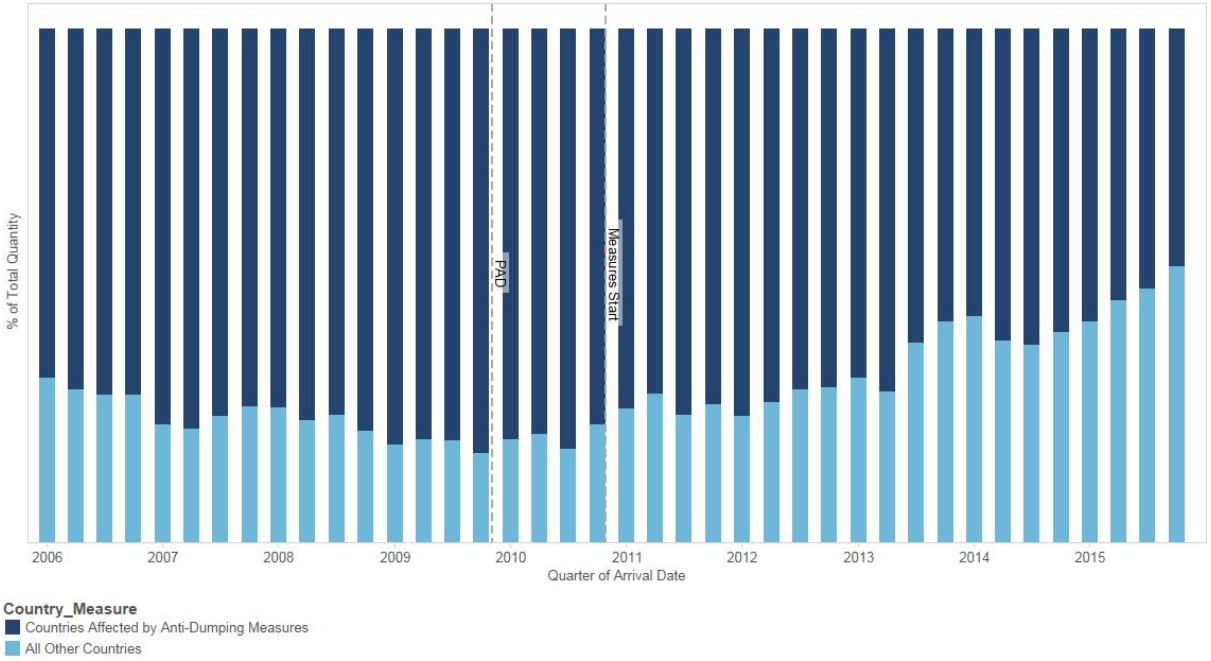
Source: DIBP trade data

Similar to zinc coated (galvanized) steel, the Commission considers that the increase in the import share of countries subject to measures from late 2014 is likely to have reflected circumvention, specifically the addition of alloys such as boron. As noted in section 7.4.1, on 18 March 2016, notice of the Parliamentary Secretary's decision to accept the Commissioner's recommendation that the original anti-dumping notices be altered to apply to alloyed hollow structural sections imported with effect from the date of initiation of the anti-circumvention inquiries was published.

6.3.4 Aluminium extrusions

The impact of measures imposed on aluminium extrusions was assessed using DIBP data. Figure 6.3 below shows that, following imposition of measures on aluminium extrusions by the then Attorney-General, the proportion of those goods imported to Australia from the countries affected by the measures has generally fallen compared to the period before measures were imposed.

Figure 6.3: Aluminium extrusions—share of import volumes by country group (% per quarter)



Source: DIBP trade data

6.4 Assessment of impact of measures on Australian industry sales volumes and prices

6.4.1 Summary of assessment method and findings

The Commission obtained import data from the DIBP and sales revenue and volume data from Australian steel and aluminium manufacturers, namely OneSteel, BlueScope and Capral. Data sought and provided related specifically to the following steel and aluminium products that have been subject to anti-dumping and/or countervailing measures:

- steel reinforcing bar
- rod in coil
- hollow structural sections
- hot rolled structural sections
- hot rolled coil
- galvanised steel
- plate steel
- aluminium extrusions.

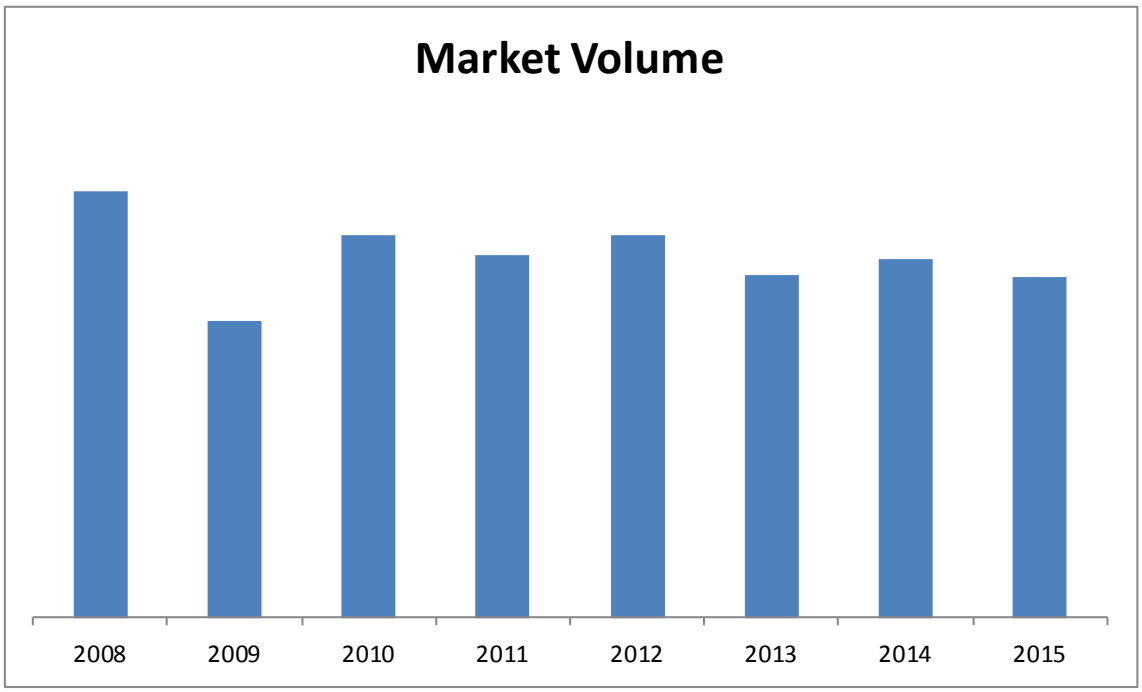
The data does not cover the entire Australian steel and aluminium market, but the Commission considers that the coverage of the products listed above provides a reasonable basis for a preliminary assessment of the effectiveness of measures.

The initial results suggest that Australian anti-dumping and countervailing measures have generally been effective in improving Australian industry's ability to compete with imports.

6.4.2 Steel sales volumes

Australian steel volumes, consisting of Australian manufactured and imported steel, have been relatively stable since 2010 after recovering from the 2009 global financial crisis (Figure 6.4).

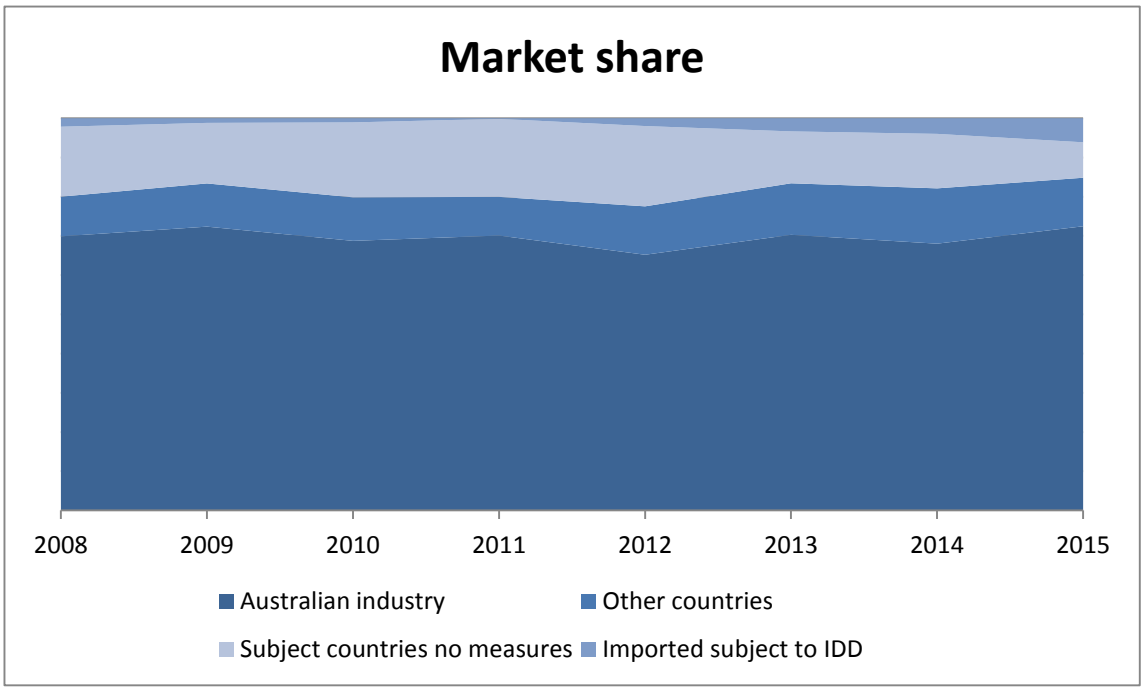
Figure 6.4: Total sales volumes of Australian manufactured and imported steel



Source: Anti-Dumping Commission using DIBP trade data and industry sales data

The total market share for Australian manufactured steel products has increased gradually since 2012 in line with the imposition of anti-dumping or countervailing measures (Figure 6.5). Imported steel products represent a significant proportion of the Australian steel market, and a significant proportion of imported products are subject to anti-dumping or countervailing measures.

Figure 6.5: Market share of all steel products



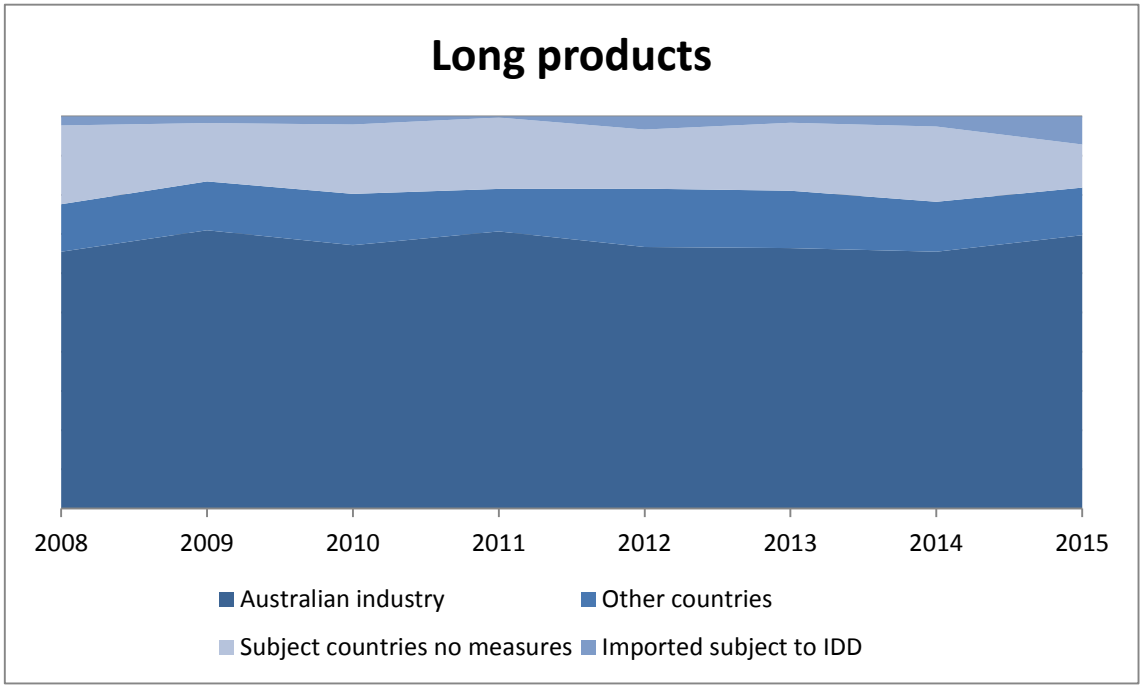
Note: IDD refers to import anti-dumping duties

Source: Anti-Dumping Commission using DIBP trade data and industry sales data

Market shares for long products and flat products are shown separately in Figures 6.6 and 6.7, respectively.

For long steel products, the Australian industry's market share has been fairly flat but there has been some improvement in its market share since 2014 (Figure 6.5). Similarly, imported long steel products from countries that have not been found to be dumping or providing subsidisation have captured market share since measures were imposed from 2012.

Figure 6.6: Market share of long steel products

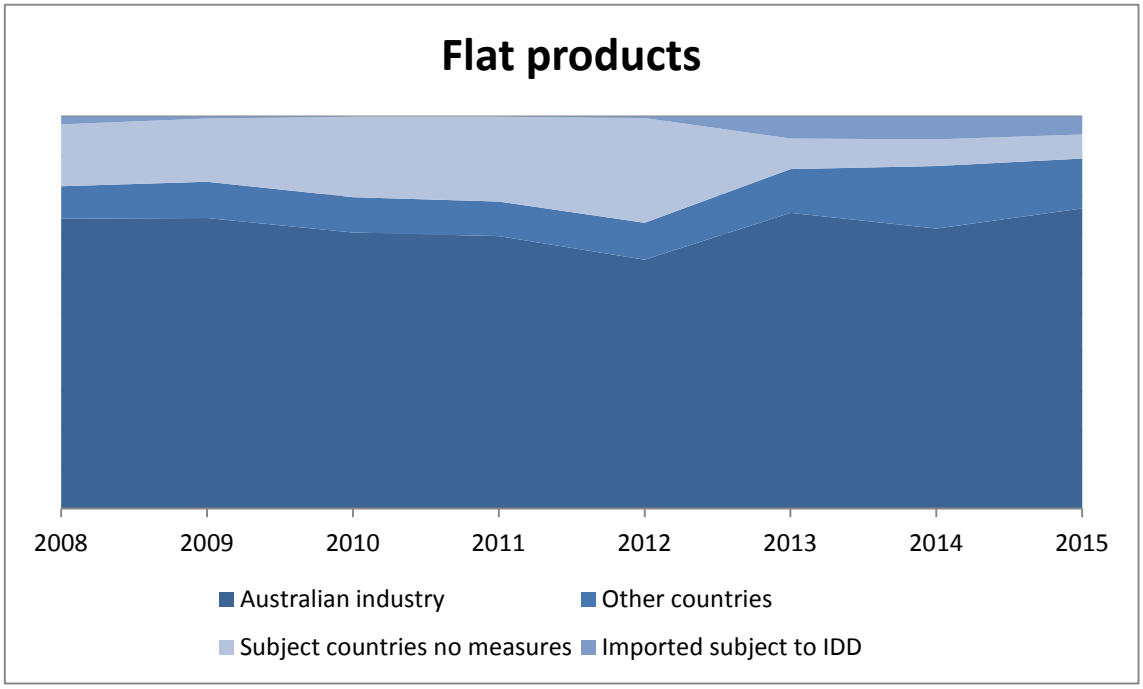


Note: IDD refers to import anti-dumping duties

Source: Anti-Dumping Commission using DIBP trade data and industry sales data

For flat steel products, the Australian industry experienced a steady decline in its share from 2008 but has recaptured market share since the imposition of measures in 2012 and 2013 (Figure 6.7). Similarly, imported flat steel products from other countries have also captured market share since that time.

Figure 6.7: Market share of flat steel products



Note: IDD refers to import anti-dumping duties

Source: Anti-Dumping Commission using DIBP trade data and industry sales data

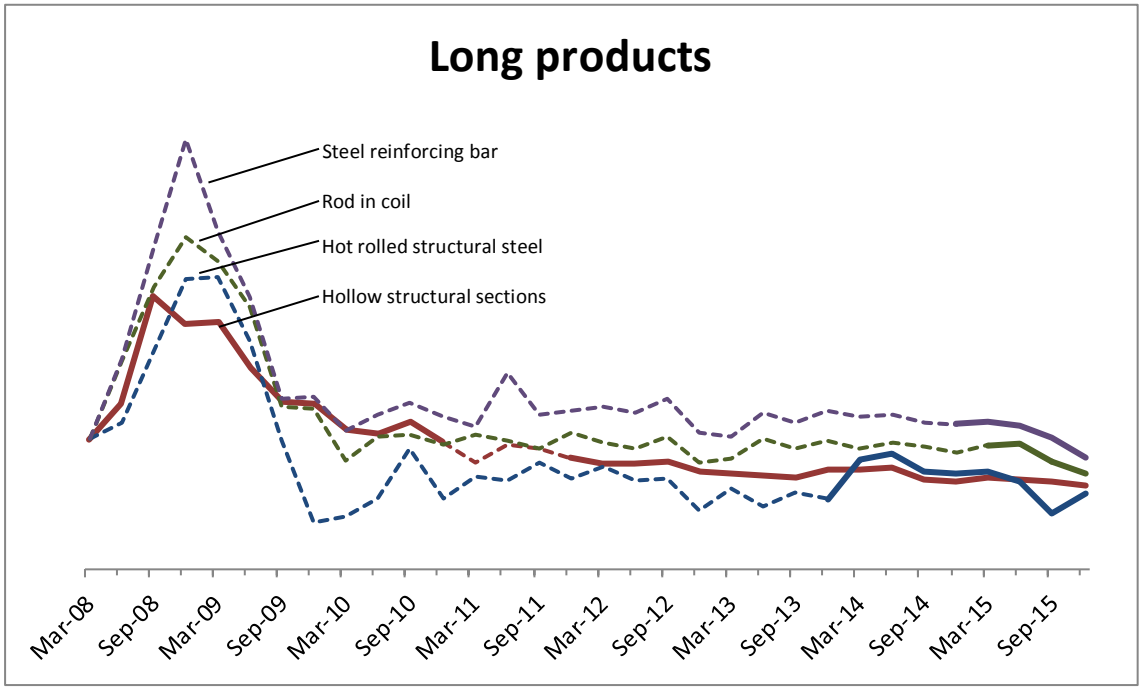
6.4.3 Steel selling prices

Average selling prices for steel products increased significantly in 2008 reflecting strong economic growth and fell during the 2009 global financial crisis. As shown in Figures 6.8 and 6.9, prices have generally been relatively flat since then, reflecting sustained global overcapacity in steel production.

The Commission's analysis based on the pattern of prices is necessarily indicative only because of the need to separate the impact of anti-dumping measures from other factors that affect prices (such as changes in economic demand or product quality).

For some steel products, the imposition of measures since 2012 appears to have supported Australian industry's selling prices and prevented injury from price depression caused by dumping. For example, for hot rolled plate steel (for which measures were not imposed until 2014), Australian industry selling prices fell significantly in early 2013. In contrast, prices for other flat steel products (for which measures were imposed earlier, in 2012 and 2013) generally rose over 2013.

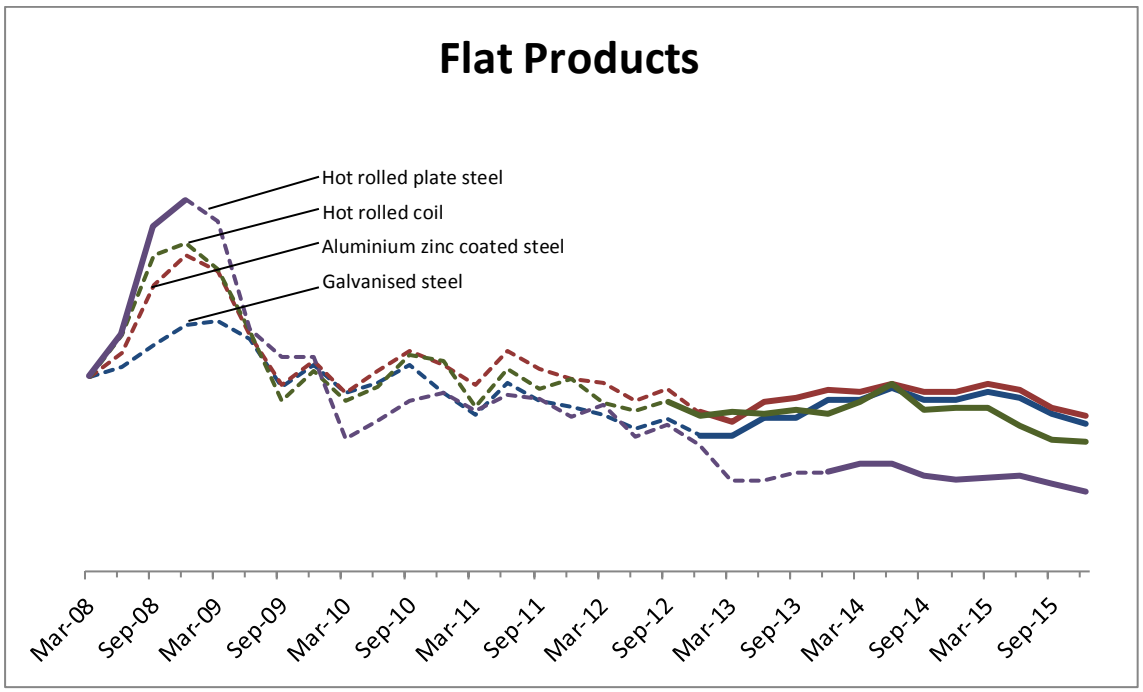
Figure 6.8: Weighted average prices of long steel products sold by the Australian industry, indexed to March 2008



Source: Anti-Dumping Commission using DIBP trade data and industry sales data

Note: Solid line signifies measures in place.

Figure 6.9: Weighted average prices of flat steel products sold by the Australian industry, indexed to March 2008



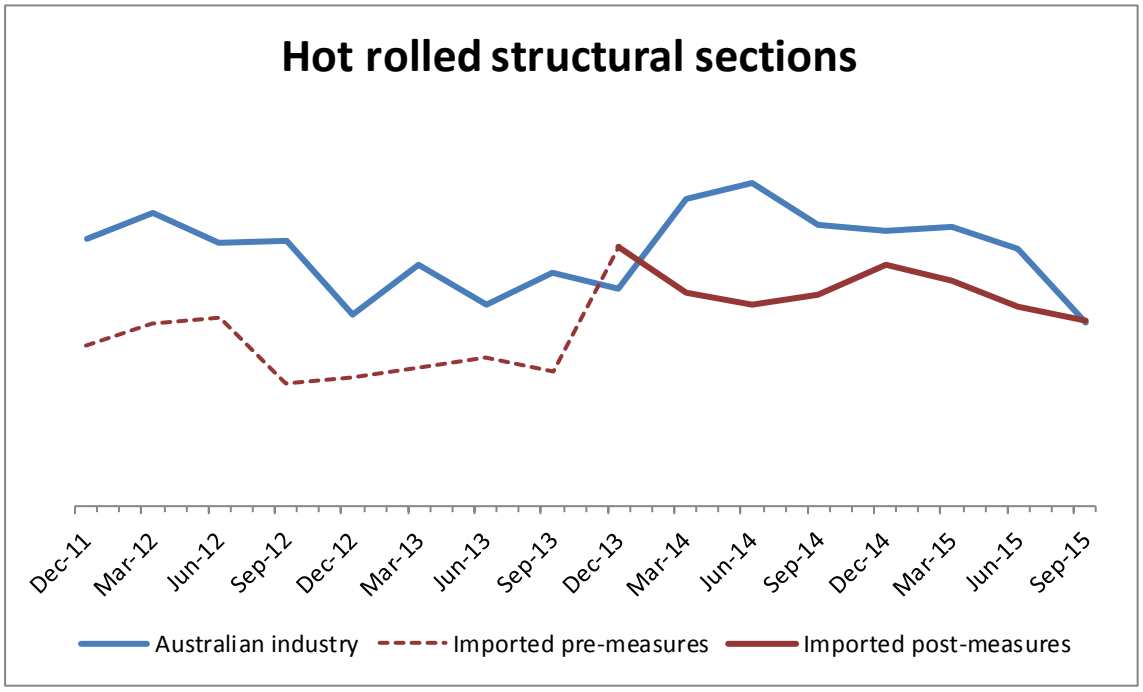
Source: Anti-Dumping Commission using DIBP trade data and industry sales data

Note: Solid line signifies measures in place.

Comparing Australian industry's selling prices and landed import prices (inclusive of securities and duties), the available data for hot rolled structural sections and galvanized steel (Figures 6.10 and

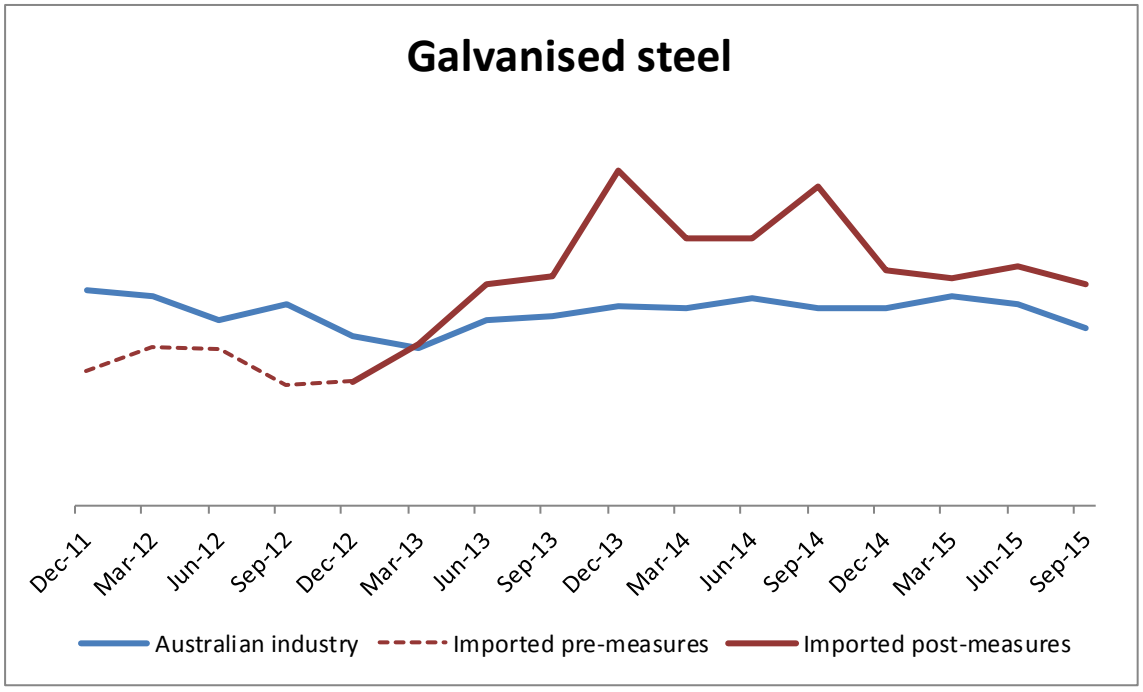
6.11 respectively) indicate that measures have been effective in raising the landed import price for goods that were previously being dumped, which results in a higher average import price.

Figure 6.10: Weighted average prices of hot rolled structural sections sold by the Australian industry and landed import prices



Source: Anti-Dumping Commission using DIBP trade data and industry sales data

Figure 6.11: Weighted average prices of galvanised steel sold by the Australian industry and landed import prices

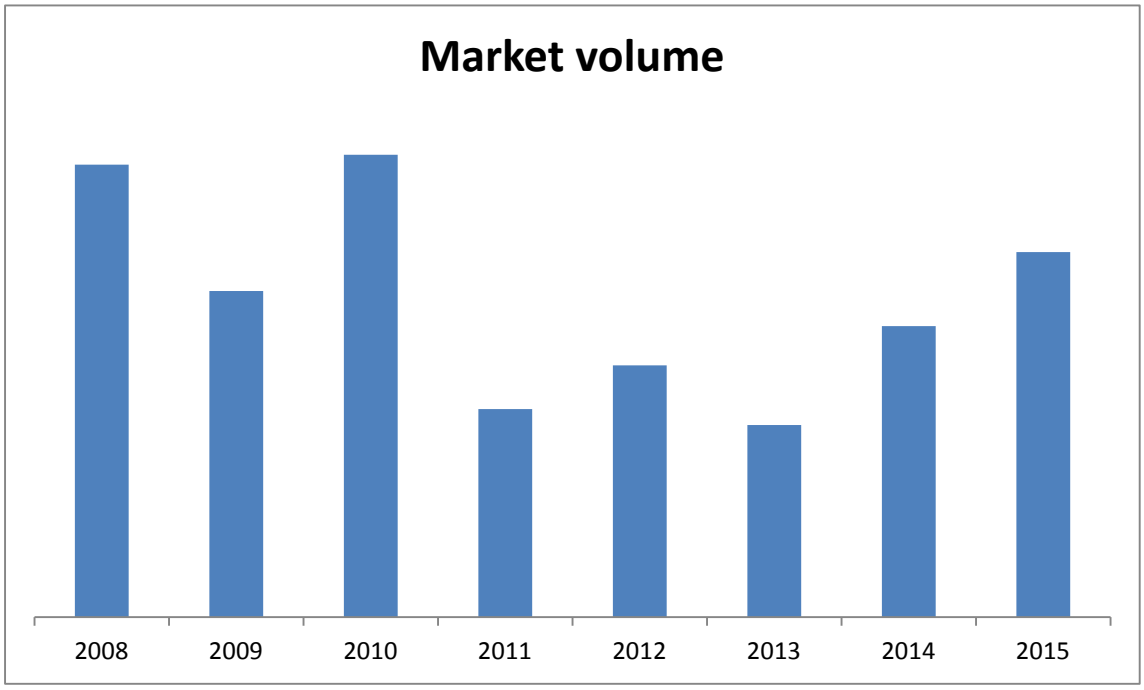


Source: Anti-Dumping Commission using DIBP trade data and industry sales data

6.4.4 Aluminium sales volumes

Australian sales volumes of aluminium extrusions, consisting of Australian and imported goods, fell significantly in 2011 and have gradually recovered to some extent (Figure 6.12). Anti-dumping and countervailing measures were imposed on aluminium extrusions exported from China in late 2009 and revised in late 2011 after a reinvestigation.

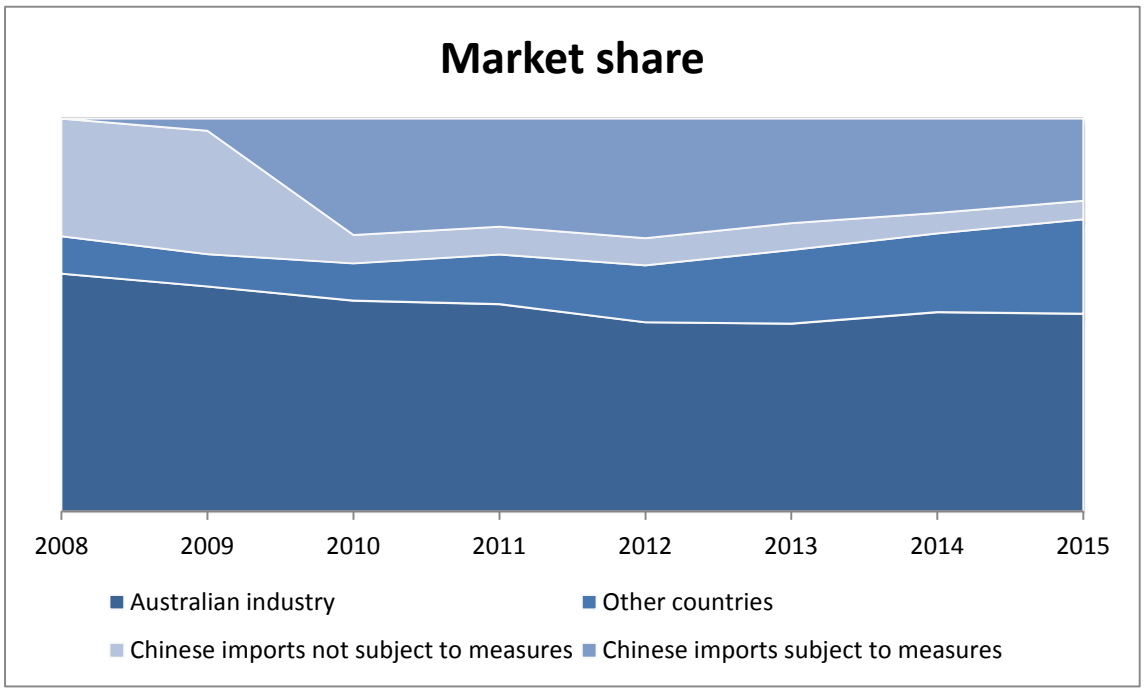
Figure 6.12: Sales volumes of Australian manufactured and imported aluminium extrusions



Source: Anti-Dumping Commission using DIBP trade data and industry sales data

Figure 6.13 indicates that the imposition of measures on aluminium extrusions have had the effect of stopping the decline in the Australian industry's market share that occurred from 2008 to 2012. Between 2012 and 2015, the market share of aluminium extrusions from China declined, reflecting the 2011 revision of measures. The market share of imports from other countries not subject to measures has increased.

Figure 6.13: Market shares of aluminium extrusions



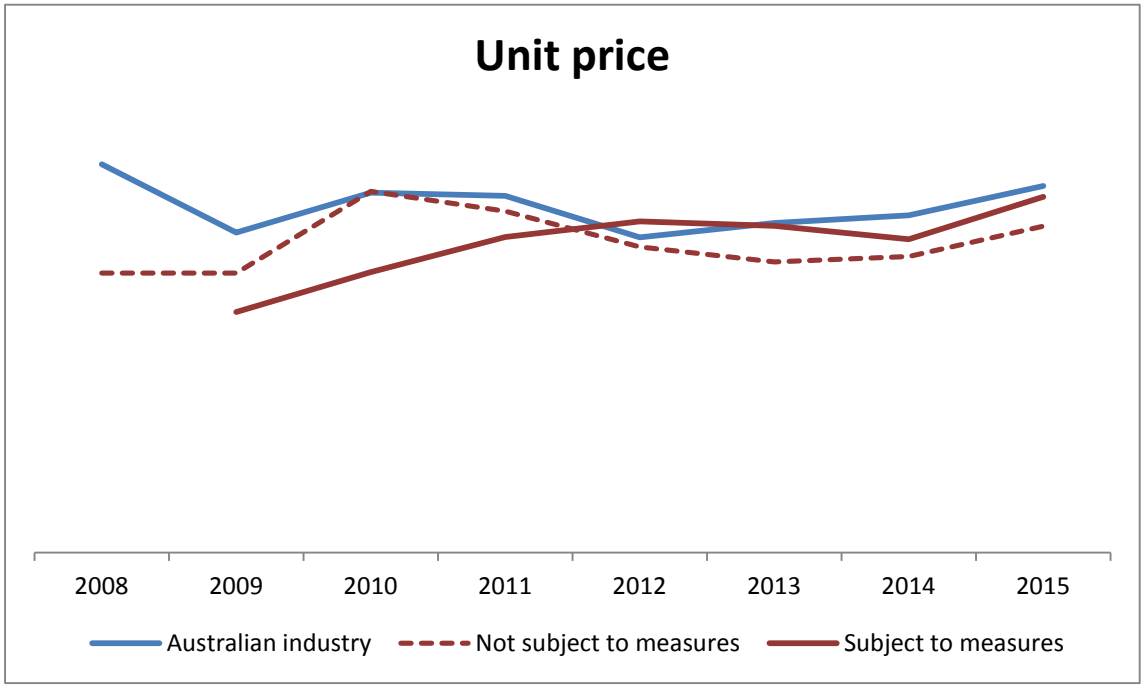
Source: Anti-Dumping Commission using DIBP trade data and industry sales data

6.4.5 Aluminium selling prices

Figure 6.14 shows the selling prices of aluminium extrusions between 2008 and 2015. It appears that since the revision of measures in late 2011, the Australian industry selling prices have shown a gradual recovery. The landed import prices of aluminium extrusions subject to measures have increased to be comparable to those of the Australian industry.

The Australian industry continues to face price competition from imports that are not subject to measures.

Figure 6.14: Weighted average prices of aluminium extrusions sold by the Australian industry and landed import prices



Source: Anti-Dumping Commission using DIBP trade data and industry sales data

7 Options for reform

Key points

- The Commission is committed to implementing a strong and effective trade remedy system for Australian steel and aluminium industries materially injured by dumping and/or subsidisation.
- The Commission has identified a number of operational policy improvements that can be implemented promptly to address many of the priority concerns of industry. These include:
  - a new investigations model to implement a more efficient approach to investigations that improves the timeliness, quality and evidence-base of decisions and recommendations
  - adopt a more active, risk based approach to address proven circumvention, including through ensuring retrospective application of anti-circumvention measures (to the date of initiation of the inquiry) and sufficiently broad modification of the goods description to address proven circumvention activities
  - implement a stronger whole of government approach to compliance with anti-dumping measures
  - further improve the timeliness and effectiveness of PADs, including by taking a more measured approach to form of duties an d application of the lesser duty rule at PAD stage
  - enhance the market intelligence capability of the Commission's Anti-Dumping Information Service to support investigations and the pro-active identification of issues
  - strengthen access to and use of international information and Australian industry expertise in investigations.
- The Commissioner has summarised the additional policy reform options suggested by stakeholders. These options could be considered in the development of the Minister's second tranche of policy reforms.

7.1 Key concerns of domestic steel and aluminium producers

In line with government policy, the Commission is committed to implementing a strong, robust and evidence-based trade remedy system which meets its purpose of preventing material injury to Australian industry caused by dumping and subsidisation.

As part of this market analysis, the Commission canvassed the Australian steel and aluminium industries' views on the effectiveness of measures and what they see as priority areas for improving the anti-dumping system.

The Commission met with representatives from: the largest Australian producers, being Arrium Limited (formerly OneSteel Limited), BlueScope Steel Limited, and Capral Limited; the Australian Aluminium Council (AAC); and Alcoa of Australia Limited.

The Commission was unable to consult more broadly within the timeframe for the preparation of this report. However, to ensure the Commission took into account broader stakeholder views, the Commission also had regard to information and views provided by a range of interested parties in representations to the Minister, in submissions to the Commission and other areas of the Department, through the International Trade Remedies Forum (ITRF), and submissions to other relevant inquiries and reviews including:

- the House of Representatives Standing Committee on Agriculture and Industry inquiry into Australia's anti-circumvention framework in relation to anti-dumping measures

- the Senate Estimates Economic References Committee inquiry into the future of Australia's steel industry
- the Productivity Commission's 2016 research study into *Developments in Anti-Dumping Arrangements*.

Information obtained during the course of the Commission's investigations and inquiries in respect of steel and aluminium products has also been taken into account where relevant to the Commission's analysis of steel and aluminium markets.

Consistent themes were identified in the Commission's meetings with industry representatives. These were:

- **efficiency and administration**—streamlining and improving the Commission's practices
- **transparency**—allowing industry to better understand the Commission's analysis and claims by other parties
- **effectiveness of measures**—including the form and level of measures, the timing of preliminary affirmative determinations and how legislative provisions are applied
- **circumvention and compliance**—taking steps to better monitor circumvention activity and enforce anti-circumvention and compliance measures.

Many of these themes have been raised previously by industry and discussed with the Commission in some detail. A detailed outline of the industries' priority concerns is set out in attachment 2 to this report.

7.2 Proposed reforms

As explained in chapter 3 of this report, economically inefficient market interventions in Asia and other regions have exacerbated the current difficult trading conditions for Australia's steel and aluminium industries beyond those resulting from a normal cyclical downturn. In advocating government actions to address market distortions that underpin sustained global overcapacity, the OECD has highlighted that 'excess capacity in one region can displace production in other regions, thus harming producers in those markets', including through 'unfair trade practices such as dumping'.[124]

The increasing use of trade remedies around the globe (outlined in chapter 5 of this report) have the potential to further displace production, and increase the injury caused by dumping and subsidisation to domestic industries in jurisdictions with less effective trade remedies systems. It is important therefore that the Australian trade remedies system is as effective and efficient as possible to ensure that Australian industries can compete on a level playing field.

The Commission has assessed the effectiveness of Australian anti-dumping and countervailing duties, using available data and taking into account information provided by stakeholders (see chapter 6 of this report). While Australia's anti-dumping system is generally effective in addressing proven cases of dumping and subsidisation, the Commission has identified a number of ways to further strengthen the system.

The Commission proposes to implement a series of operational reforms to improve the efficiency of investigations and inform recommendations on the most effective form of measure where there is evidence of dumping and circumvention activities.

Table 7.1 lists the Commission's operational reforms and industry's proposed reform options, noting the industry concerns they are designed to address.

[124] OECD, 'Excess capacity in the global steel industry: The current situation and ways forward', 2015, p. 4.

Table 7.1: Summary of Commission's operational reforms and reform options proposed by industry

Area of change	Initial operational reforms	Reform options proposed by industry stakeholders	Targeted at addressing industry concerns about:
Improved investigation processes	1. Implement a new more efficient, evidence-base investigations model 2. Enhance the market intelligence capability of the Anti-Dumping Information Service to support investigations and the pro-active identification of issues 3. Strengthen access to and use of international information 4. Enhance access to and use of industry expertise in investigations	• Strengthen the governance model for the anti-dumping system including enhanced quality assurance and review mechanisms	Efficiency & administration Transparency Effectiveness of measures
Effectiveness of measures	1. Strengthen the application of Australia's circumvention and compliance framework (see reforms below)	• Evaluate the effectiveness of different forms of measures in different industry circumstances, based on experiences to date • Improve industry's access to trade data, subject to appropriate protections for confidential data • Review the application of the lesser duty rule	
Circumvention and compliance	1. Adopt a more active, risk-based approach to address proven circumvention activities 2. Implement a stronger whole of government approach to compliance 3. Provide greater transparency around compliance and circumvention outcomes	• Further strengthen the application of the circumvention and compliance framework.	Effectiveness of measures Transparency Circumvention and compliance
Preliminary Affirmative Determinations	1. Further improve the timeliness and effectiveness of Preliminary Affirmative Determinations, including by taking a more measured approach to form of duties and application of the lesser duty rule, consistent with existing legislation and WTO obligations		Effectiveness of measures

7.3 Improved investigation processes

The Commission is currently implementing improvements to its investigation processes to provide a higher quality service to Australian industries that are materially affected by dumping and subsidisation. These improvements will strengthen the evidence base for decision making, reduce the time required to complete investigations, and achieve operational efficiencies. The Commission will implement four operational improvements:

- implement a new more efficient, evidence-based investigations model
- enhance the market intelligence capability of the ADIS to support investigations and the pro-active identification of issues and market intelligence and analysis within the new investigations model
- strengthen access to and use of international information by concluding information protocols with overseas anti-dumping authorities
- enhance access to and use of industry expertise in investigations, including the engagement of an independent industry expert.

First, the Commission is currently in the process of developing a new model to be implemented for all new investigations from 1 July 2016. The Commission's new investigations model will lead to:

- a more consistent approach to addressing difficult issues within an investigation through greater integration of quality assurance, policy and legal functions throughout the investigation lifecycle
- early identification of individual investigation requirements to enable allocation of specialised resources to increase the level of confidence in the Commission's ability to resource investigation analysis and decision-making, supporting the publication of PADs as close to 60 days as possible
- greater integration of ADIS market analysis into investigation decisions and identification of areas where a more in-depth understanding of markets would assist analysis
- improved quality assurance throughout the investigation, particularly around verification of exporter data, to enable more robust evidence-based decisions
- consistent and clearer reports, addressing concerns around transparency by allowing interested parties to better understand the Commission's analysis and claims made by other parties.

In addition to these immediate operational efficiencies, the Commission intends implement a new 'best practice' case management system and a more user-friendly website. A case management system, which allows the Commission to collect and use real time information on cases, will support the new investigations model resulting in operational efficiencies. These process improvements will improve investigation efficiency and allow the Commission to better service the needs of Australian industry, and could apply learnings from international best practice regarding case management and reporting. Benefits include: improved reporting capability including around cases in progress; better resource planning; improved external reporting; better management of parallel activities; reduced manual handling and fewer errors, and continuous improvement in case management.

In developing a case management system tailored to the needs of the Commission and Australian industry, the Commission will build on the features of the new WTO case management system.

Second, to complement the new investigation model, the ADIS's recently established market research function will provide targeted economic analysis of trends and trading behaviours to provide better information earlier in the investigations processes. As is apparent from this report,

steel and aluminium markets are complex markets. Better understanding of these markets allows the Commission to conduct better informed investigations and to evaluate the effectiveness of trade measures in particular circumstances, which in turn leads to improved investigation efficiency. This information will strengthen the evidence base for the Commission's dumping and countervailing investigations and anti-circumvention inquiries.

Third, the Commission proposes that closer international liaison would ensure that information and analysis available in other jurisdictions is appropriately leveraged and operationalised in the Australian context. In particular, the ADIS could provide better investigations support by accessing information obtained in the course of investigations undertaken by overseas jurisdictions, where the information is relevant in the Australian context. Examples of such information may be general information on subsidy programs or general analysis of the effects of government interventions in markets. An international protocol may need to be entered into with the relevant jurisdictions to enable this type of information exchange (including appropriately protecting any confidential information).

More general technical exchanges are already underway. Two investigations officers from the Commission recently participated in an international trade conference and a series of technical exchanges with the United States and Canadian anti-dumping authorities. Technical exchanges of this type provide a valuable opportunity to understand the broader international trade environment and allow the Commission to benchmark against international best practices in anti-dumping.

Fourth, the Commission plans to engage an ongoing 'industry expert' to assist in steel and aluminium investigations. While a large body of industry information is available to the Commission, an industry expert could further enhance the Commission's ability to access relevant, targeted, accurate information to improve its understanding of markets. The appointment of an independent expert to provide information separate to Australian industry submissions would assist the Commission in ensuring the robustness of the evidence base for the Commissioner's decisions and recommendations.

This package of reforms will provide a prompt response to many of industry's priority concerns.

7.4 Circumvention and compliance reforms

When overseas exporters and importers circumvent or fail to comply with trade remedies, the effectiveness of those remedies in addressing material injury caused by dumping and subsidisation is undermined. As discussed in chapter 6, there is a range of ways in which exporters and importers may seek to circumvent anti-dumping duties.

The Commission proposes a three step response to circumvention and compliance:

- adopt a more active, risk-based approach to address proven circumvention activities
- implement a stronger whole of government approach to compliance
- provide greater transparency around compliance and circumvention outcomes.

7.4.1 Adopt a more active, risk-based approach to address proven circumvention activities

The Commission considers that potential circumventers should be 'on notice' that the Commission will strengthen its approach to investigating alleged circumvention behaviour and taking steps to remedy proven circumvention activities. This includes examining evidence presented by industry on alleged circumvention of existing measures and further investigating complaints where there is sufficient evidence, potentially through investigations that are initiated by the Parliamentary Secretary.

While the anti-circumvention framework is a relatively new feature of Australia's anti-dumping system, having only been introduced in June 2013, the Commission has received a number of applications from Australian industry. The Parliamentary Secretary to the Minister for Industry, Innovation and Science recently accepted the Commissioner's recommendations in relation to anti-circumvention inquiries into:

- zinc coated (galvanized) steel exported from the Republic of Korea and Taiwan (case 290)
- galvanized steel exported from the People's Republic of China (case 298)
- hollow structural sections exported from China, Korea and Malaysia (case 291).

These anti-circumvention inquiries are detailed in the case study below.

Case Study–Anti-circumvention inquiries into galvanized steel exported from the Republic of Korea, Taiwan, and the People's Republic of China (Final Reports Nos 290, 298) and hollow structural sections exported from China, Korea and Malaysia (Final Report 291)

In these cases, the Commission considered that the balance of evidence supported a finding that galvanised steel and hollow structural sections exported by particular exporters had been slightly modified through the addition of 'alloys'.

At the time of the SEFs, the Commissioner proposed a narrowly framed alteration to the original dumping/countervailing duty notice such that the circumvention activity was limited to 'boron-alloyed' galvanised steel and hollow structural sections. However, in further considering the available evidence and the legislative provisions, the Commissioner recommended a broader alteration to the notice to take account of evidence that the 'circumvention activity' could more accurately be characterised as the addition of 'alloys', with the use of 'boron' for this purpose merely being an example. This recommendation was accepted by the Parliamentary Secretary and public notice of the decisions was published on 18 March 2016. Interested parties now have 30 days in which to seek a review of the decision by the Anti-Dumping Review Panel.

In this case, the Commissioner also recommended that the original notices be altered to the extent that they would have effect on alloyed galvanised steel and hollow structural sections imported from the date of initiation of the inquiries. This approach, which is permitted by the legislation, ensured the maximum effectiveness of measures in addressing circumvention activity that had occurred by particular circumventing exporters.

Within the limits of the legislative framework and Australia's international obligations, the Commission will implement an active, risk-based approach to addressing proven circumvention. This means that the Commission will weigh up the relevant considerations and make an on-balance decision with the aim of maximising the effectiveness of the government's response to circumvention. Specifically, the Commission will adopt this approach, for example, in ensuring the retrospective application of measures (to the date of initiation of the inquiry) and in determining the extent of modification to the goods description in the notice required to effectively address the circumvention activity.

7.4.2 Implement a stronger whole of government response to compliance

A more coordinated whole of government approach to circumvention and non-compliance would boost the effectiveness of measures in addressing material injury caused by dumping.

The Commission administers Australia's anti-dumping system and DIBP is responsible for enforcement and compliance activities. The Commission currently works closely with DIBP through the Trade Analysis Capability (TAC) function. This function was established in August 2015, and involves the Commission and DIBP working together and in consultation with key industry stakeholders to monitor trade flows, provide evidence on the effectiveness of trade remedies, and

identify potential evidence of non-compliance with existing anti-dumping measures and possible circumvention using advanced statistical techniques. In addition the Australian Border Force (ABF) undertakes risk-based compliance activities to identify and address non-compliance with anti-dumping measures.

The Commission considers that there is scope to enhance the circumvention and compliance framework by adopting a stronger whole of government approach.

A greater focus on monitoring compliance with, and the impacts of, measures once they are in place, achieved through stronger collaboration between the Commission and DIBP, should lead to greater confidence within industry that measures are being implemented effectively.

Dedicated staffing would need to be established within the DIBP to focus solely on addressing criminal avoidance of anti-dumping duties. The need for a robust compliance approach is particularly important as exporters have strong commercial incentives to minimise the effect of anti-dumping duties and find new ways to avoid the effect of duties on their products.

7.4.3 Transparency of circumvention and compliance activities

Greater transparency around compliance and anti-circumvention activities could address many of the concerns raised by industry and ensure compliance and circumvention issues are adequately identified and addressed. Through this review it is apparent that a major gap in the current system is that information on circumvention and compliance is not regularly collated or made available. Providing the resources to regularly undertake this type of analysis could improve the effectiveness of measures as well as provide increased transparency to industry.

The Commission considers that 12-18 months after a measure is imposed, an evaluation of the effectiveness of the measures in reducing material injury to Australian industry should be conducted by assessing the following outcomes:

- net duties collected (including any duties refunded) by DIBP disaggregated at commodity level and tariff class
- trends in import volumes and trade flows using DIBP data
- changes in export prices since the measures have been imposed (such as whether prices have been raised as a response to measures being put in place, or whether there is evidence of avoidance of the intended effect of duty)
- any audits/investigations of compliance including details of any compliance complaints made to ABF and the response/outcome
- evidence of any suspected circumvention activity and actions taken to investigate that conduct
- the results of market monitoring to identify compliance and circumvention issues, including trends in goods showing evidence of misclassification of goods
- whether the goods description is effective.

The Commission will consider options to make the outcomes of this evaluation available to industry at a level that protected any confidentiality issues.

7.5 More effective Preliminary Affirmative Determinations

A consistent theme raised by Australian Industry is the powerful deterrent effect of PADs in signalling the Australian government's intention to remedy the impact of Australia industry of dumping and subsidisation activities and to change market behaviour to redress material injury caused by dumping. This is an area where operational changes to improve the timeliness of PADs

can achieve more effective measures for Australian steel and aluminium industries affected by dumping.

In particular, the Commission will:

- impose PADs as early as possible
- adopt a more measured approach to form of duties at PAD stage
- no longer routinely applying the lesser duty rule at PAD stage.

On the first point, the Commission is fully committed to making PADs at the earliest possible point (60 days), provided the legislative requirements are met. The Customs (Preliminary Affirmative Determinations) Direction, which came into operation in November 2015, requires that on day 60 after the initiation of an investigation, the Commission must either make a PAD under section 269TD or publish a Status Report providing reasons why a PAD was not made. In operationalising these reforms, the Commission will:

- wherever possible, based on the available evidence and application of the legal tests, make a PAD at day 60
- where the threshold to make a PAD at day 60 is not met, the Commission will publish a status report and the Commission will work to make a PAD at the earliest possible point. For example, where the status report provides reasons why a PAD was not made, the Commission will make a PAD as soon as those reasons are addressed.
- adopt the new investigations model (discussed in section 7.3 above) to better equip the Commission to be in a position to make a PAD as soon as possible.

Case Study – HSS UAE and India Case 320
In relation to dumping of certain hollow structural sections exported from the United Arab Emirates (case 320), the Commissioner made a PAD at day 60 of the investigation based on exporter questionnaire responses which substantiated that dumping was occurring, and evidence regarding injury and causation that was confirmed following an Australian industry visit.

On the second point, the Commission recommends the most appropriate form of duty available under the Customs Tariff (Anti-Dumping) Regulation 2013.

The Commission considers that the most appropriate form of duty may differ at PAD stage and at final stage. In the context of a PAD, some of the potential disadvantages sometimes associated with the combination method[125] may be less relevant. For example:

- As the PAD only imposes securities, which are not converted until a later stage, concerns regarding the so-called 'punitive effect' of the actual final duty paid are lessened and issues regarding the final form of duty can still be explored during the investigation process.
- The Ascertained Export Price is unlikely to become outdated in the relatively short period that a PAD can be in place.

Imposing a combination duty at the PAD stage may ensure that an effective security is taken which can then be converted into an interim duty. Taking this approach, it is expected that more interim duties will be in the combination form. This is expected to provide a stronger price signal to exporters who are dumping goods causing material injury to the Australian steel and aluminium industries. There may be some cases (such as where there are many forms of models) where a combination duty is not appropriate.

[125] These potential disadvantages are listed in the Commission's public guidelines, available on the Commission's website.

On the third point, there is no explicit requirement in the Customs Act to apply the lesser duty rule when making a PAD. The Commission's practice has been to calculate a non-injurious price and to require and take securities that do not exceed the non-injurious price. However, the Commission considers that the timeliness of making a PAD could be improved by deferring the calculation of a non-injurious price until the Commissioner makes his final report. Further, where the lesser duty is applied in the Parliamentary Secretary's decision, the non-injurious price would be taken into account in converting securities.

7.6 Resourcing implications

Implementation of some of these further reforms will, in part, depend on sufficient funding being available to the Commission or the capacity to re-direct funds from lower-priority activities.

There will also be resource implications for DIBP.

7.7 Policy reform options proposed by stakeholders

Stakeholder consultations identified a number of additional concerns about the effectiveness of the anti-dumping system and proposed government consideration of potential reforms. Some of these would require legislative change. Details of these concerns are summarised in attachment 2.

The Commission considers that evaluation of the policy options proposed by Australian steel and aluminium producers should form part of a policy development process. They are included in this report so that they can be considered by the Minister in developing the second tranche of policy reforms. This would allow for further consideration and thorough analysis of policy options, consultation with a wider range of stakeholders and the development of a fully costed set of proposals.

Attachment 1: Minister's request to the Commissioner

THE HON CHRISTOPHER PYNE MP
MINISTER FOR INDUSTRY, INNOVATION AND SCIENCE
LEADER OF THE HOUSE
MEMBER FOR STURT

17 FEB 2016

MS16-000311

Mr Dale Seymour
Commissioner of the Anti-Dumping Commission
dale.seymour@adcommission.gov.au

Dear Commissioner

You will be well aware of the current challenges facing Australia's steel and aluminium industries.

Australian steel and aluminium producers have made representations to me that the global overcapacity, particularly from Asian markets, is having significant economic impacts on the Australian domestic market. I am concerned that distortions in the global market for steel and aluminium are unfairly damaging the viability and growth of the Australian steel sector.

I request that the Anti-Dumping Information Service (ADIS) within the Anti-Dumping Commission (ADC) undertake an economic analysis of Asian steel and aluminium markets and the impact on the global and Australian markets. The analysis should identify trends in dumping and circumvention behaviour in steel and aluminium markets, improve the efficiency of investigations of potential dumping and circumvention and inform any recommendations on the most effective form of measures where there is evidence of dumping and circumvention activities.

The analysis should be completed and a brief provided to me by Monday 4 April 2016.

The ADIS should consult and draw upon relevant areas of my department to complement the capability of the ADC's existing resources.

I look forward to receiving your advice on the outcomes of your work.

Yours sincerely

Christopher Pyne MP

CC: The Hon Karen Andrews MP, Assistant Minister for Science

Parliament House Canberra ACT 2600 Telephone (02) 6277 7070 Fax (02) 6273 4134

Attachment 2: Summary of priority concerns of domestic steel and aluminium producers

The Commission met with representatives from Arrium Limited (Arrium, formerly OneSteel Limited); BlueScope Steel Limited (BlueScope); Capral Limited (Capral); the Australian Aluminium Council (AAC); and Alcoa of Australia Limited (Alcoa). The Commission also had regard to submissions provided to other inquiries and reviews, including the:

- House of Representatives Standing Committee on Agriculture and Industry inquiry into Australia's anti-circumvention framework in relation to anti-dumping measures
- Senate Economics References Committee into the future of Australia's steel industry
- Productivity Commission's research study on *Developments in anti-dumping arrangements*.

Consistent themes were identified in the Commission's meetings with industry representatives. These were: effectiveness of measures; confidentiality and transparency; circumvention and compliance; and efficiency and administration. Many of these themes have been raised and explained in significant detail in submissions to the inquiries and reviews mentioned above.

An overview of these themes is presented below to help inform the Minister's consideration of options for the second tranche of policy reforms. Where industry proposals go beyond the scope of this report, they have not been considered further by the Commission in preparing this report.

Many of the proposals raised by industry are likely to require further detailed consideration and broad consultation. Some would require legislative change.

Effectiveness of measures

While industry members were generally satisfied with the coverage of measures on steel and aluminium products, concerns were raised regarding effectiveness. A number of suggestions to improve the effectiveness of measures were suggested.

Form of measures

When recommending to the Parliamentary Secretary a method to calculate the interim dumping duty payable on goods, the Commissioner may recommend one of the four methods prescribed by the Customs Tariff (Anti-Dumping) Regulation 2013:

- **Fixed duty**—collects a fixed amount of duty regardless of the export price, such as $10 per tonne
- **Floor price**—sets a floor, a duty is collected if the actual export price is less than the floor price
- ***Ad valorem***—applied as a proportion of the export price
- **Combination of fixed and variable**—applies a fixed duty (either as a percentage or per unit of goods) on all imports subject to the measure and where the export price is lower than an ascertained price, a variable component is applied (being the difference between the actual export price and the ascertained export price).

Industry was of the view that the combination method should be the 'default' form of measure recommended by the Commissioner on the basis that it is most effective in discouraging dumping and preventing the circumvention of measures. This is because the variable component essentially acts as a floor price at which exporters must sell their goods to prevent further duty becoming payable, making it difficult for exporters to avoid the intended effect of the duty by lowering export price. This is particularly relevant in the steel and aluminium industries, where producers are able to operate in the short term by reducing prices to only recover marginal costs.

Preliminary affirmative determinations

During the course of an investigation, the Commissioner may make a preliminary affirmative determination (PAD). This cannot be earlier than 60 days after the initiation of the investigation. A PAD can only be made if at the time there appears to be sufficient grounds for the publication of a dumping duty or countervailing duty notice. Reforms which commenced in November 2015 now require the Commissioner, at day 60 of an investigation, to either make a PAD or publish a status report stating why a PAD was not made. Once a PAD has been made by the Commissioner, the Commonwealth may then require and take securities (or provisional duties) on goods imported into Australia which are subject to the dumping or countervailing investigation.

Industry was of the view that the Commissioner should make a PAD at day 60 for every investigation as this would limit the injury being caused to industry while the investigation is underway. As noted in the body of this paper, the Commissioner is committed to making PADs at the earliest point where the evidence supports doing so and recognises that these are a signal to the market regarding steps taken to address materially injury caused by dumping.

Level of measures

Industry expressed concern that the level of measures being put in place were either not adequate to remedy the injury being caused or not economically justifiable.

Some suggested the removal of the lesser duty rule. Unless certain circumstances apply, the Minister responsible for imposing duties must have regard to the desirability of ensuring that the amount of duty applied is not greater than is necessary to prevent injury or a recurrence of injury. This is known as the lesser duty rule and may mean that that the duties imposed do not equate to the full extent of the dumping or subsidisation that was found. Others commented that if the lesser duty rule must apply, then when determining an amount that would be sufficient to prevent injury (known as a non-injurious price), a level of profit based upon an acceptable commercial rate of return should be accounted for in the non-injurious price.

An industry member proposed that different rates of duty should be applied to different models (or grades or finishes) to stop duty levels being diluted by the necessity to calculate a weighted average dumping margin across different models (which may vary significantly in cost to make or selling price). The same industry member stated that in order to create disincentives to dumping and to prevent importers moving from importing goods from one dumped source to another (once measures are put in place) that retrospective measures should be applied for importers who frequently import dumped goods.

Where a market situation exists, the Commission is generally not able to use the exporter's selling price of goods in its home market to establish normal value (normal value is used to calculate a dumping margin). In these instances, the Commission will look to other methods such as constructing normal value based on costs to make and sell and profit. Generally, when constructing normal value, the costs to make and sell will be based on the information in the exporter's records provided they are kept in accordance with the generally accepted accounting principles in the country of export and reasonably reflect competitive market costs. Where it is found that the records are kept in accordance with generally accepted accounting principles, the Commission may seek to replace a certain cost or costs in the normal value calculation where they are found to not reflect competitive market costs.

Industry was of the view that where a market situation finding meant that at least one of the costs reflected in the exporter's records does not reflect competitive market costs then full cost surrogacy should be used—that is the Commission should replace all costs to make and sell the goods in determining normal value. Additionally, when determining an amount for profit, industry was of the view that a level of profit should be set which reflects a suitable return on capital investment.

Currency conversion

An industry member raised concerns over the Commission's interpretation of currency conversion legislative provisions. Where currency conversion is required to determine whether dumping is occurring, these provisions allow for adjustment to the exchange rate where the rate of exchange between the currencies has undergone a sustained movement. This provision was explored for the first time in an investigation involving an application by this industry member. The industry member stated that when the Commission only applies these provisions when the currency of the exporting country has appreciated (and not when the currency has depreciated), this asymmetry benefits the exporter.

Confidentiality and transparency

Industry raised a concern that where relevant parties claimed information to be confidential, there is not enough transparency to allow a sufficient understanding of the Commission's analysis or another party's claims. This was a particular concern in regard to the model matching criteria applied by the Commission in individual investigations. When determining whether there are suitable sales of like goods in the domestic market of an exporter (to establish normal value), the Commission will use model matching criteria to identify identical goods or, absent identical goods, goods which most closely resemble the goods which are the subject of the investigation.

Industry stated that this information is not confidential as product information is readily available. However, claims by parties that information used in model matching is confidential means that the Australian industry is not able to verify whether the criteria applied by the Commission fairly compares the goods in the exporter's domestic market to the goods produced in Australia.

Industry proposed that more transparent model matching processes should be adopted and more guidance around confidential information should be provided.

Compliance and circumvention

While industry was generally supportive of the current anti-circumvention framework, some areas were identified as needing improvement. Industry proposed that a closer working relationship between the Commission and DIBP would promote a whole of government approach that would be more effective in preventing overseas exporters and local importers from 'getting around' measures through circumvention or fraudulent activities, and will further enhance compliance with anti-dumping and countervailing duties.

Back channels or 'input dumping'

Given measures are in place for a range of steel and aluminium products, both the steel and aluminium industries have raised concern about dumped goods being brought in via back channels.

For example, the steel industry claimed that certain countries import cheap steel billet which is then processed further and sold into Australia at uncompetitive prices. These products are therefore not subject to duties when they would have been if they were exported from the originating country. This is sometimes referred to as 'input dumping'.

The aluminium industry claims there are instances where products are exported to Australia via an intermediate country (often through a related company) to avoid duties in place for the originating country.

Compliance

Given the difficulty in determining what is in a shipment of goods, even on inspection (as custom tariff classification and goods description can be very technical), industry was of the view that it is easy for importers to deliberately or otherwise misclassify products when making a declaration to the ABF to avoid duties.

The aluminium industry also raised concerns about 'phoenix companies'. This is a situation where an exporter or importer will close down a part of its business and reopen under a new company name to avoid paying duties which applied to the original exporter or importer.

Applying penalties under the infringement notice scheme was raised by an industry member to encourage compliance. An infringement notice is an administrative enforcement remedy that DIBP may issue in certain circumstances and involves paying the penalty specified in the infringement notice or having the matter determined by the relevant court.

Another suggestion was for DIBP to use its ability to conduct 'like good' inquiries. These inquiries involve investigating shipments which have been brought into Australia and declared as 'not the goods' subject to dumping duties to ascertain whether they should be classified as the goods and subject to dumping duties.

Improved monitoring

Industry considered a whole of government approach would improve the anti-dumping system. This would invovle a closer working relationship between the Commission and DIBP on anti-dumping matters, resulting in better monitoring, compliance and enforcement of measures. A restatement of DIBP's responsibilities in regard to the anti-dumping system was suggested to highlight the importance of DIBP's role.

Industry suggested that the Commission and the ABF should create a joint taskforce. The taskforce would focus on monitoring trends by leveraging the government's greater access to import data with a view to initiating investigations and undertaking compliance and enforcement activities. This would be a way to strengthen anti-circumvention and compliance activities and promote closer involvement by DIBP in the anti-dumping system.

Efficiency and administration

Industry members also expressed views on the Commission's administration of the anti-dumping system:

- Investigations, including anti-circumvention investigations, are conducted too slowly and industry is further injured during the investigation.
- The Commission should take a more stringent approach to determining whether exporters are cooperative or non-cooperative.
- The Commission should make more adverse findings in regard to non-cooperating exporters, recognising that often the available information is limited and assumptions must be made.
- The Commission should limit the extensions provided to exporters to submit information.
- In some cases, the Commission should interpret the legislative provisions to better reflect the intent of the anti-dumping framework. For example, the Commission's interpretation of when final duty can be determined has had the effect of delaying when an application for an anti-circumvention inquiry into the avoidance of the intended effect of duty can be made.
- The Commission should conduct in-person verification for all exporters. If this is not feasible, the Commission should adopt sampling procedures. In-country experts could be used as part of verification processes.
- Exemption processes should be rationalised to lessen the burden on the Commission and industry.
- More assistance should be provided to industry in the pre-application phase.
- There should be better reporting of data and statistics.
- The Commission should update the Dumping and Subsidy Manual.

Attachment 3: Overview of Australia's trade remedy system

Australia's trade remedy system is concerned with goods imported into Australia that are 'dumped' into Australia or subsidised in the country of origin. If such imports cause material injury to an Australian industry that produces like goods, then trade remedies in the form of anti-dumping or countervailing duties can be imposed on the imported goods.

What is dumping?

Dumping occurs when an exporter sells goods to Australia at a price that is below the 'normal value' of the goods. The normal value will usually be the domestic price of the goods in the country of export. The margin of dumping is the amount by which that normal value exceeds the 'export price' of the goods.

Dumping is not prohibited under international trade agreements and it is not illegal. Consistent with WTO rules, anti-dumping duties may be imposed when dumping causes, or threatens to cause, material injury to an Australian industry.

What is subsidisation?

Subsidisation occurs when imported goods benefit from government assistance in the country of export. Subsidisation can be:

- an export subsidy that encourages export performance and/or
- a domestic subsidy that assists all production of the goods in the industry concerned including export production.

Commonly found subsidies include: preferential loans; grants; tax incentives; and the provision of goods or services.

A countervailing duty can be imposed to offset the amount of the subsidy where the subsidy applies to a specific firm, group of firms or industry. Export subsidies, and subsidies contingent on the use of domestic over imported goods, are prohibited under WTO rules.

Dumping or subsidisation must cause material injury to be actionable

In order for dumping or subsidisation to be actionable under Australian law, the dumped or subsidised imports must be shown to cause material injury to the relevant Australian industry.

What is material injury?

Material injury is assessed through relevant indices and factors that demonstrate the state of the relevant Australian industry including:

- volumes of dumped or subsidised imports
- price effects of dumped or subsidised imports
- consequent economic effects on, for example, profit, capacity utilisation, and market share.

Material injury may be current material injury, threatened material injury, or material hindrance to the establishment of an Australian industry.

There must be a causal link between material injury and dumped or subsidised goods

Consistent with WTO rules, trade remedies may not generally be imposed unless there is evidence of a causal link between material injury and the dumped or subsidised imports.

Any injury caused by a factor other than by the dumped or subsidised goods being imported (such as contractions in demand, imported goods that are not dumped or subsidised, or developments in technology) must not be attributed to allegedly dumped or subsidised goods.

The form of Australian trade remedies

Where dumped or subsidised goods have caused material injury to an Australian industry, remedial action may be taken by the Minister in the form of anti-dumping or countervailing duties, or price undertakings by the exporter.

Anti-dumping duties can be ad valorem, fixed, floor price, or a combination of fixed and variable duties. Countervailing duties can be ad valorem, a fixed amount per unit or a combination of the two.

Price undertakings are an agreement by the exporter to sell at a minimum price. In this case, anti-dumping duties are not collected on the imported goods. The acceptance of an undertaking is at the Minister's discretion.

Administration of Australia's trade remedy system

The Anti-Dumping Commission administers Australia's anti-dumping system. The Commission investigates the dumping and subsidy claims lodged by an Australian industry applicant.

The investigation includes examination of the alleged dumping or subsidies (as applicable), the injury suffered by the Australian industry concerned, and the causal link between the dumping or subsidy and the injury found. The Commissioner of the Anti-Dumping Commission recommends to the Minister whether anti-dumping or countervailing duties should be imposed.

What is the connection between government interventions or influence in markets and trade remedies?

Trade-exposed Australian industries often seek trade remedies in circumstances where government interventions or influence in markets distort market behaviour and result in dumped or subsidised goods being exported to Australia.

In investigating alleged dumping or subsidisation, the Commission considers foreign government interventions or influence in the following ways:

- **Directly:** In the course of investigations into alleged subsidisation, the Commission directly assesses whether a foreign government has intervened in or influenced the relevant market by providing subsidies to a specific exporting firm, group of firms or industry.
- **Indirectly:** In the course of an investigation into alleged dumping, the Commission may assess whether a 'market situation' exists in the relevant foreign market or markets for key inputs. A market situation may be found where a foreign government has intervened in or influenced the relevant market such that it does not function as a competitive market. In those circumstances the Commission may determine the normal value of the relevant goods by reference to information other than the domestic price of the goods in the country of export.