



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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Abbreviations

\$	Australian dollars
ABF	Australian Border Force
the Act	<i>Customs Act 1901</i>
ABS	Australian Bureau of Statistics
ADA	Anti-Dumping Agreement
ADIS	Anti-Dumping Information Service (a function within the Commission)
AHECC	Australian Harmonised Export Commodity Classification
AIP	Australian Industry Participation
ANZSIC	Australian and New Zealand Standard Industrial Classification
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
IGVA	Industry Gross Value Add
ITRF	International Trade Remedies Forum
LME	London Metals Exchange
the Minister	the Minister for Industry, Innovation and Science
mt	million tons
mtpa	million tons per annum
NIP	non-injurious price
OECD	Organisation for Economic Development and Co-operation
PAD	Preliminary Affirmative Determination
R&D	research and development
RET	Renewable Energy Target
RMB	Chinese renminbi
RUB	Russian rouble
SMEs	small and medium enterprises
STP Act	<i>Steel Transformation Plan Act 2011</i>
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 large 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, 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.

However, 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. In administering Australia's trade remedies system, the Commission's operational policies and practices aim to create a level playing field by remedying the injury to Australian industries from the unfair trade practices of dumping and subsidisation.

A strong and effective anti-dumping system supports 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.

While Australia's anti-dumping system is generally effective in addressing proven cases of dumping and subsidisation, the Commission is committed to a process of continuous improvement to ensure that its administration of the system remains fit for purpose and reflects international best practice. The Commission will continue to consult with Australian industry and other stakeholders to identify ways in which it can improve the efficiency of the Commission's investigations and anti-circumvention inquiries and the effectiveness of measures.

The Commission will also continue to work with other government agencies, particularly the Department of Immigration and Border Protection, to ensure a strong whole-of-government approach to implementing trade remedies, including compliance.

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 (the Commissioner) in preparing his response to a request by the Minister for Industry, Innovation and Science and the Assistant Minister for Industry, Innovation and Science for an economic analysis of Asian steel and aluminium markets and the implications for the administration of Australia's anti-dumping system.
- This report is an update of the market analysis undertaken by the Commission in early 2016 in response to a request by the Commissioner.
- 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.
- Such interventions have the potential to cause material injury to the Australian industries through dumping and subsidisation. 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 is committed to a process of continuous improvement to ensure that its administration of the system remains fit for purpose and reflects international best practice. The Commission will continue to consult with Australian industry and other stakeholders to identify ways in which it can improve the efficiency of the Commission's investigations and anti-circumvention inquiries and the effectiveness of measures.
- The Commission will also continue to work with other government agencies, particularly the Department of Immigration and Border Protection (DIBP), to ensure a strong whole-of-government approach to implementing trade remedies, including compliance.

1.1 The Commission's purpose in preparing this market analysis

On 17 February 2016, the then 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 that identified trends in dumping and circumvention behaviour in steel and aluminium markets, and options for improving the efficiency of investigations of potential dumping and circumvention and effectiveness of the form of measures. On 4 April 2016, the Commissioner provided a report to the then Minister in response to his request.

On 2 August 2016, the Minister for Industry, Innovation and Science, the Hon. Greg Hunt MP, and the Assistant Minister for Industry, Innovation and Science, the Hon. Craig Laundy MP, asked the Commissioner to prepare a new report on global steel and aluminium markets, taking into account recent developments in those markets. The Ministers directed that the report should inform them about the current state of steel and aluminium markets, particularly in Asia, and recent high-level international discussions and analyses of trading conditions in those markets.

The Ministers asked that the Commissioner brief them on implications for the administration of Australia's anti-dumping system, using the information and evidence presented in the report as well as the Commissioner's own expertise and experience in administering the system. The Ministers asked that the Commissioner complete the report by 31 August 2016.

The Commissioner directed the Commission to prepare this report to assist him in preparing his response to the Ministers' request. In preparing this report, the Commission has updated its analysis of steel and aluminium markets prepared for the Commissioner in early 2016.

1.2 Government's policy context

Australia's trade remedies system operates within the context of the government's overall economic strategy to promote business growth, employment and global competitiveness. The government's National Innovation and Science Agenda and Industry Innovation and Competitiveness Agenda support 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.

The system includes a number of checks and balances to ensure that trade remedies are limited to remedying the material injury caused by dumped and subsidised imports. These include ensuring that the Commission's operational policies and practices are consistent with the WTO framework.

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 their domestic 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 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). Such 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 Implications for the administration of 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 is committed to a process of continuous improvement in its operational policies and practices. The Commission will work with stakeholders through various consultation mechanisms, including the International Trade Remedies Forum (ITRF), the Regulators Performance Framework, and regular meetings and other forms of engagement, to identify options for improving the efficiency and effectiveness of the system.

The Commission will also continue to work with other government agencies, particularly DIBP, to ensure a strong whole-of-government approach to implementing trade remedies, including compliance.

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

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.

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. The ADIS was assisted by other areas of the Commission in preparing 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.

In this report, the Commission has summarised the findings of specialist quantitative analysis undertaken by an economic consultant (Cadence Economics) engaged by the Commission. The consultant analysed the impacts of government interventions in steel and aluminium markets that lead to market behaviours that diverge from those characterising competitive markets.

In February and March 2016, the Commission conducted targeted industry consultation seeking information and evidence on 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 has used the information and evidence gained during its industry consultation, and information and evidence subsequently submitted by industry participants, in preparing this report.

The Commission has also 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 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 an 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 Harmonised 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)

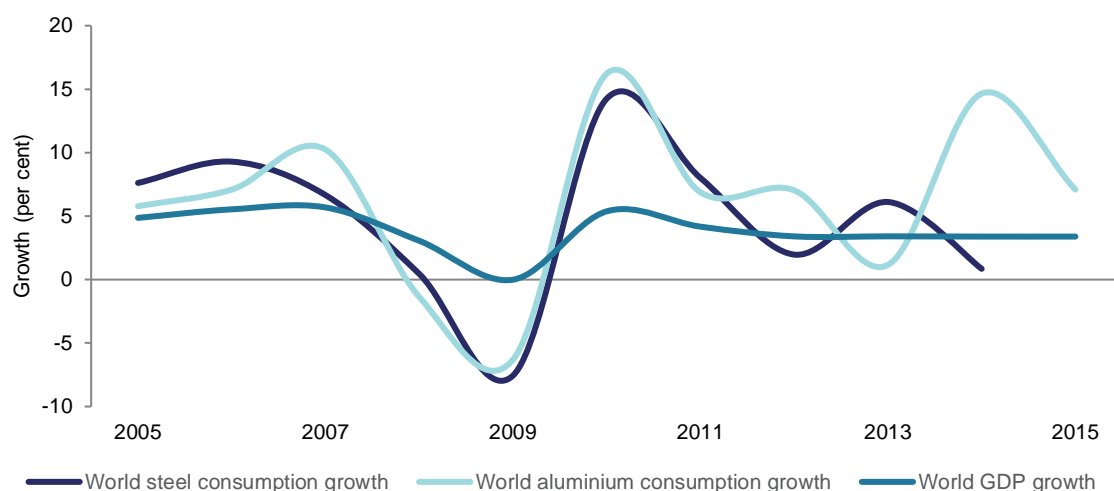
Similarly, data from the World Bureau of Metal Statistics and AME Group only includes primary aluminium.

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 GFC, demand for steel and aluminium reached record levels. Steel consumption growth has been volatile 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 2015



Notes: World steel consumption data unavailable for 2015.

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

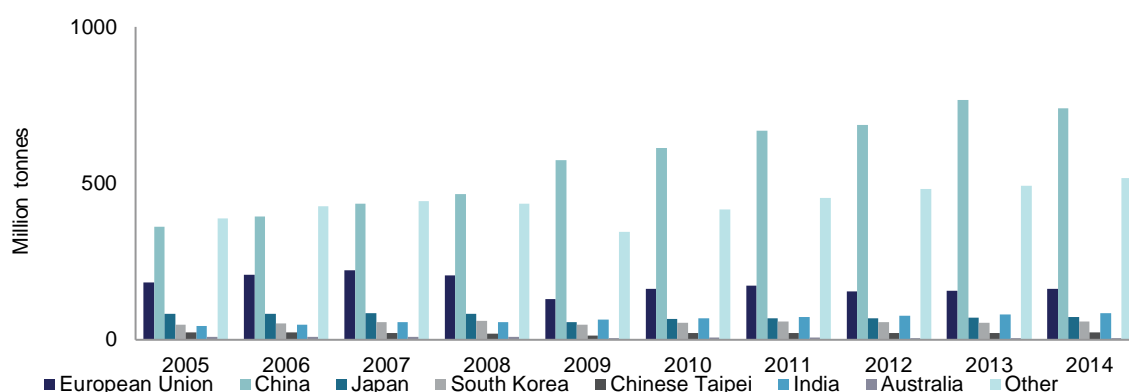
This section outlines how the demand for steel and aluminium products has changed over the last decade, globally and in Australia.

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, almost 97 per cent of steel products are purchased by three industries. These are:

- Manufacturing (48.7 per cent)
- Construction (42.6 per cent)
- Mining (5.3 per cent)

Combined, these industries purchased \$17.5 billion of iron and steel manufacturing inputs in 2013-14. 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, 2013–14

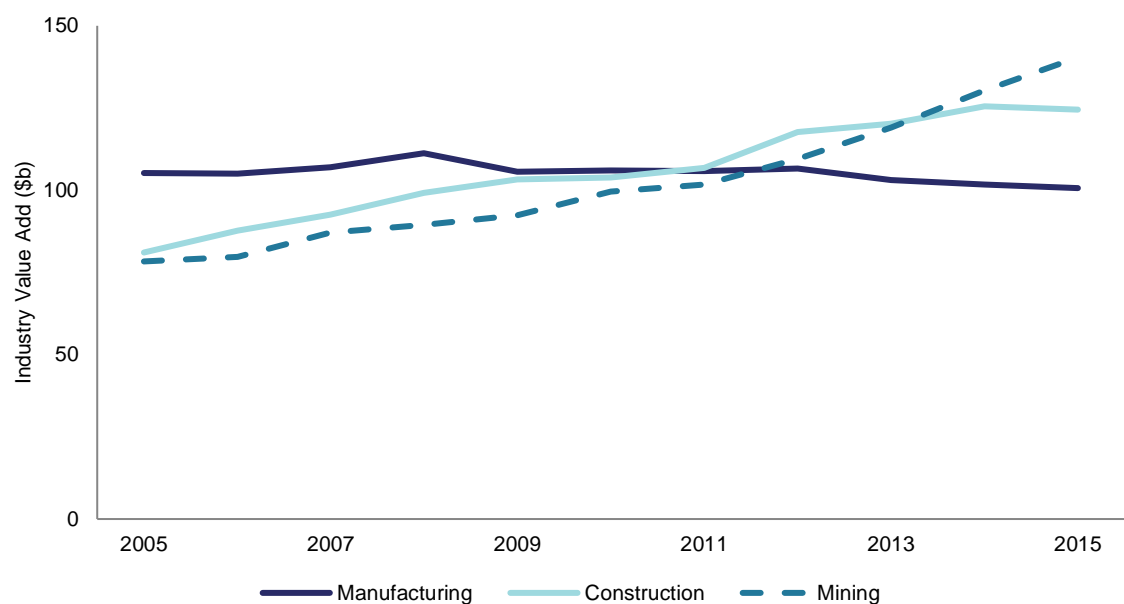
<i>Industry</i>	<i>Steel supply (\$ millions)</i>	<i>Share of steel input (per cent)</i>	<i>Import supply (\$ millions)</i>	<i>Import share of supply (per cent)</i>
Manufacturing	8,832.1	48.7	2,726.4	30.9
Construction	7,722.8	42.6	2,701.3	35.0
Mining	964.8	5.3	509.7	52.8
Top three industries by value	17,519.7	96.7	5,937.4	33.9

Notes: Industries that have the highest demand, by value, for iron and steel manufacturing products.

Source: ABS, Australian National Accounts: Input-Output Tables, 2013-14 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 illustrate how these three sectors have grown over time in terms of output and employment. The Construction industry, which is the second largest consumer of steel products, has grown at 3.7 per cent per year for the past five years in terms of Industry Value Add. Over the last decade, employment in the industry has grown from around 880,000 persons to nearly 1,080,000.

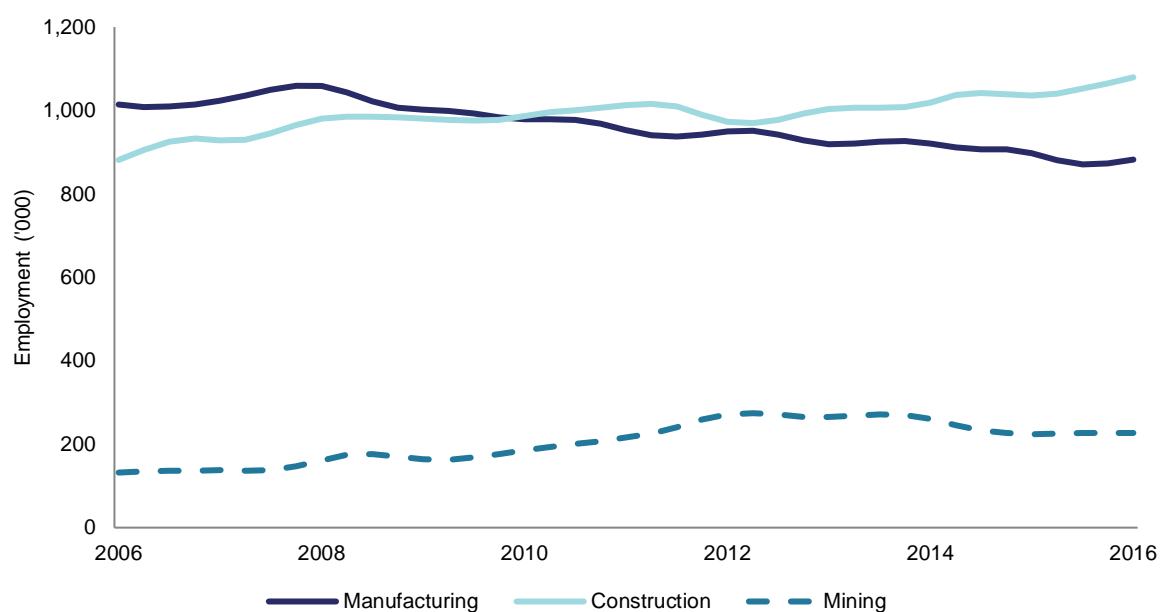
Figure 2.3: Industry Value Added for top three industries purchasing iron and steel manufacturing products, by value, 2004-05 to 2014-15



Notes: Chain volume measures. Chain volume measures only vary with changes in the quantities of commodities produced or sold. Chain volume measures value quantities by using prices in a base period which is updated annually.

Sources: ABS, Australian System of National Accounts, 2014-15, cat. no. 5204.0.

Figure 2.4: Employment for top three industries purchasing iron and steel manufacturing products, May 2006 to May 2016



Note: Trend data.

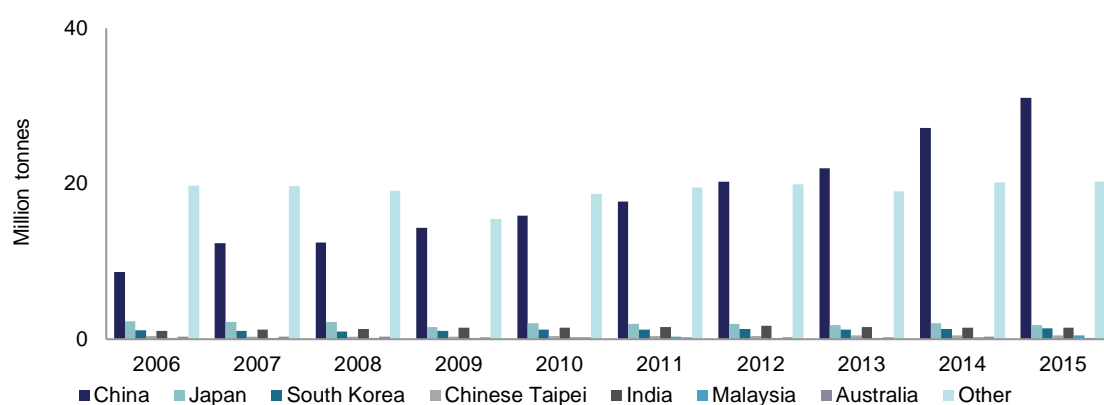
Source: ABS, Labour Force, Australia, Detailed, Quarterly, May 2016, cat. no. 6291.0.55.003.

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 can be ascribed to 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 Manufacturing industry purchased 83.6 per cent of aluminium products in 2013–14, followed by Construction with 7.7 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, 2013–14

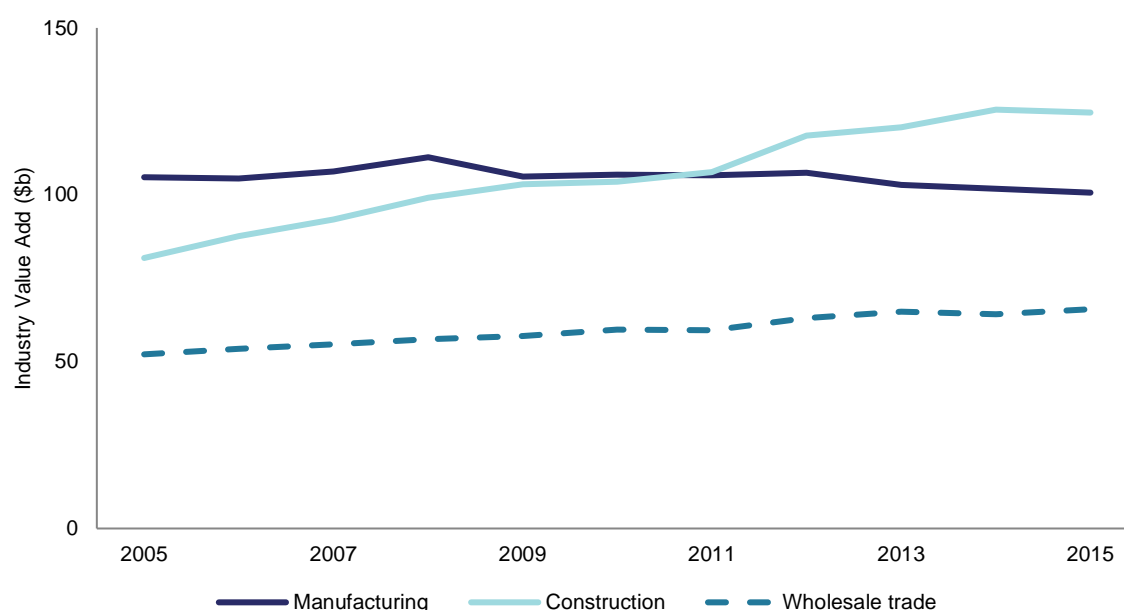
Industry	Aluminium supply (\$ millions)	Share of aluminium of input (per cent)	Import supply (\$ millions)	Import share of supply (per cent)
Manufacturing	1,636.3	83.6	677.1	41.4
Construction	150.9	7.7	98.8	65.5
Wholesale Trade	74.3	3.8	5.0	6.8
Top three industries by value	1,861.4	95.1	781.0	42.0

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

Source: ABS, Australian National Accounts: Input-Output Tables, 2013-14 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. Overall, employment numbers have remained largely constant (increasing for Construction, decreasing for Manufacturing), the value of output produced by these industries has generally increased.

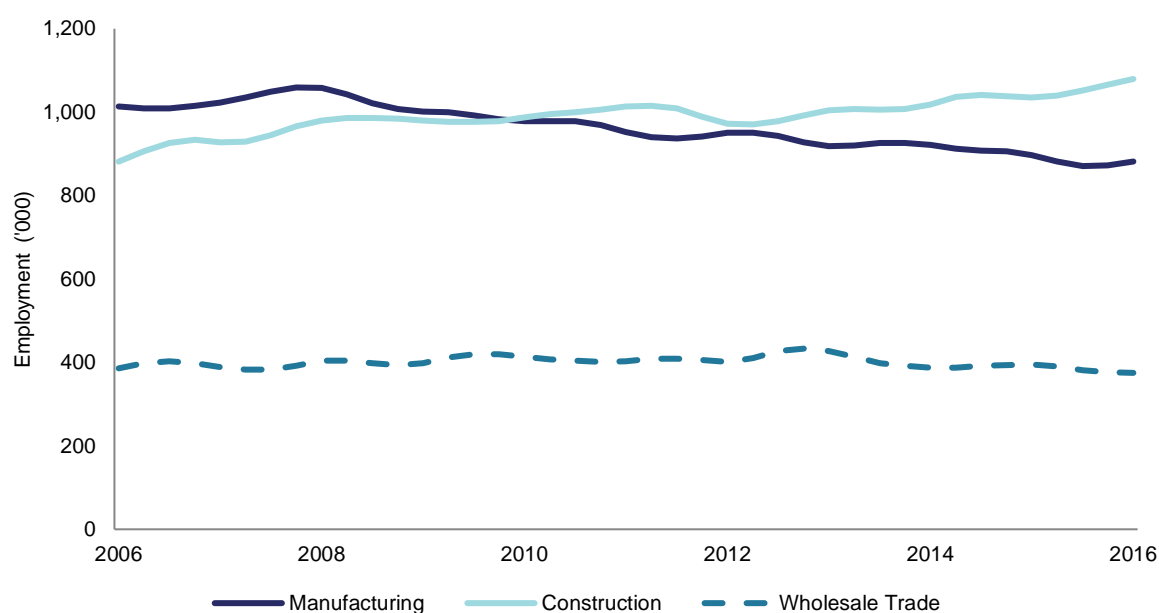
Figure 2.6: Industry Value Add for top three industries purchasing aluminium products, by value, 2004–05 to 2014–15



Notes: Chain volume measures. Chain volume measures only vary with changes in the quantities of commodities produced or sold. Chain volume measures value quantities by using prices in a base period which is updated annually.

Sources: ABS, Australian System of National Accounts, 2014-15 cat. no. 5204.0; ABS, Australian Industry, 2014–15 cat. no. 8155.

Figure 2.7: Employment for top three industries purchasing aluminium products, May 2006 to May 2016



Source: ABS, Labour Force, Australia, Detailed, Quarterly, May 2016, cat. no. 6291.0.55.003.

In 2015, Australia was 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

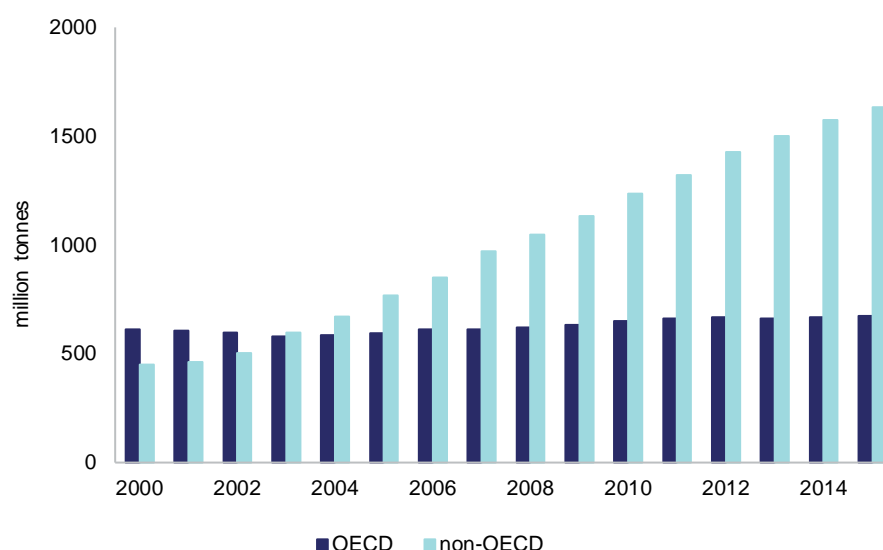
In 2015, China was the world's largest producer of crude steel, producing 804 million tonnes or 50 per cent of global production. The European Union represented 10 per cent of global production, while Japan represented 6.5 per cent and the United States represented 4.9 per cent. Australia produced 4.9 million tonnes of crude steel in 2015, 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)

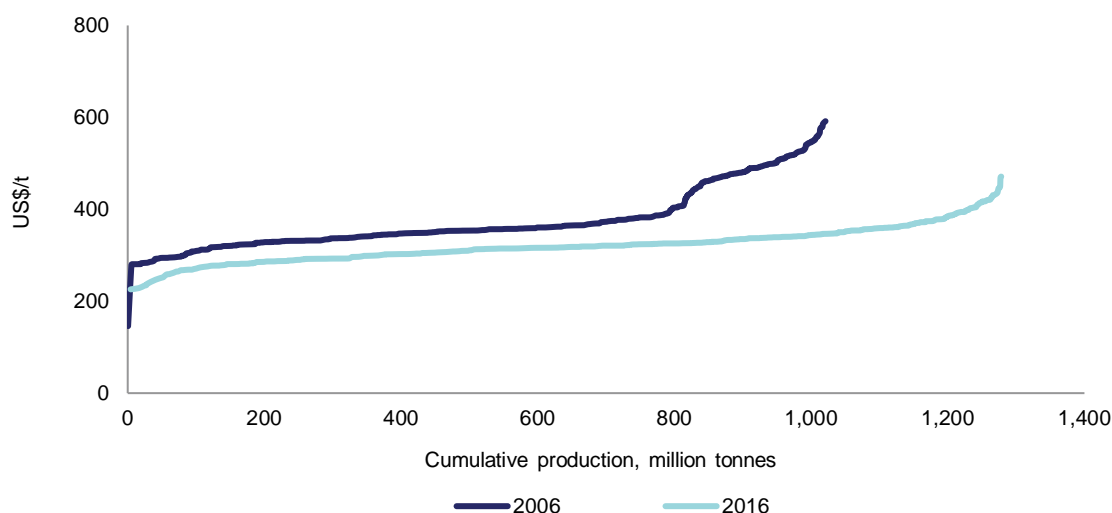
Figure 2.8: World steel production capacity: OECD vs Non-OECD, 2000 to 2015



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

As would be expected, much of the new production 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



Notes: 2016 estimate.

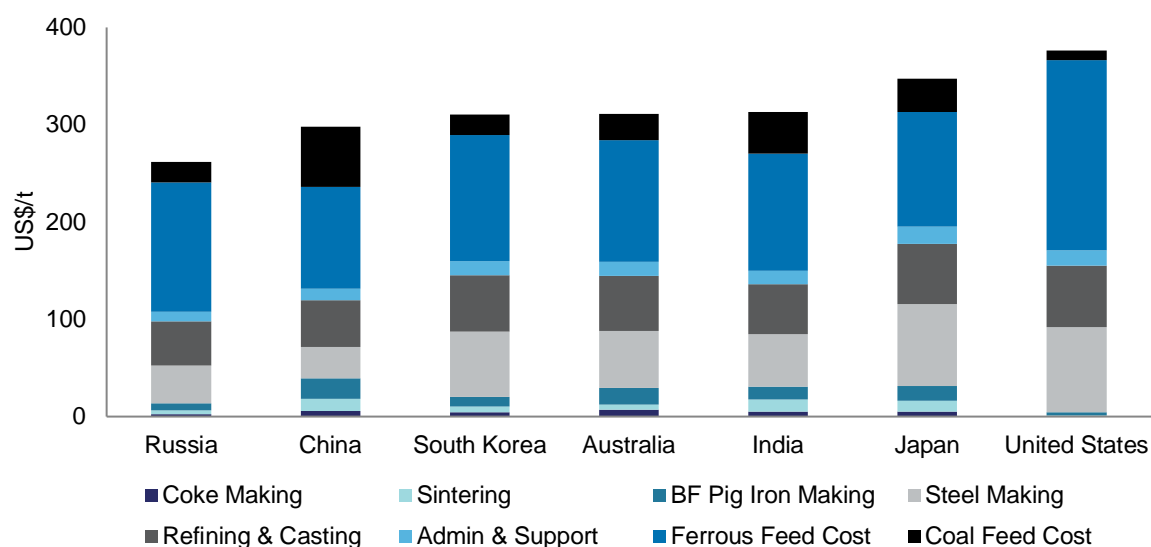
Source: AME Group; Department of Industry, Innovation and Science.

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 China and South Korea—although there are notable differences in the costs of production within a country. The United States and Japan are the higher cost producers on average.

In 2016, the cash cost (excluding depreciation) of producing a tonne of crude steel in Australia is estimated to be 12 per cent lower than in Japan and 21 per cent lower than the United States. However, steel is estimated to be 4 and 16 per cent cheaper to produce in China and Russia, 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, 2016



Notes: 2016 estimate.

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

2.3.2 Australian steel production

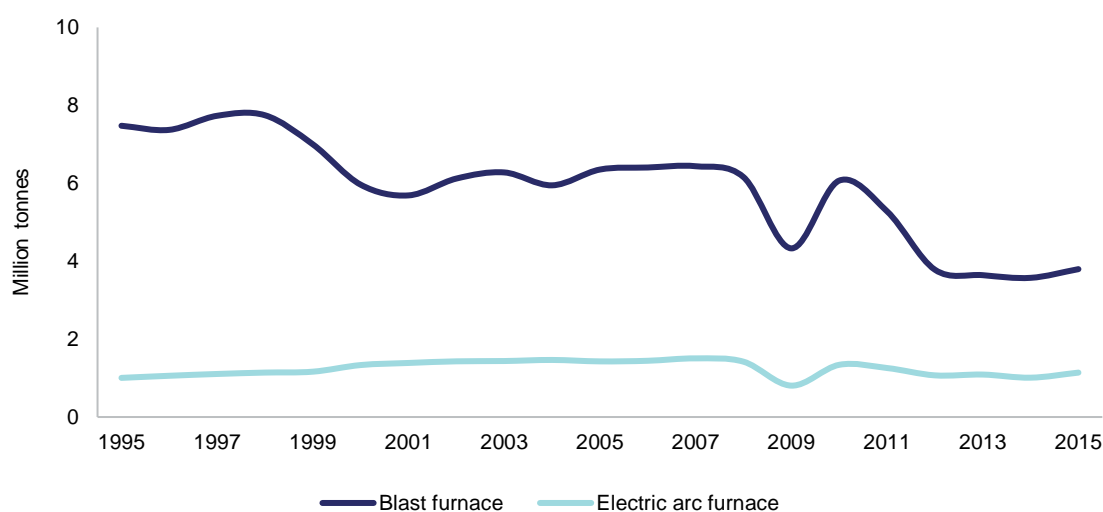
Figure 2.11 shows Australia's crude steel production over the last two decades. Australian crude steel output was 7.6 million tonnes in 1980, reaching a peak of 8.9 million tonnes in 1998. Australian steelworks produced 7.3 million tonnes in 2010. The volume of Australian crude steel production has fallen in recent years, to be approximately 4.9 million tonnes in 2015.⁴

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

Industry Gross Value Add (IGVA) has been declining at an annual average rate of 5.5 per cent for the past five years. The sector's IGVA for 2014-15 is estimated at \$5.9 billion—about 5.9 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 35,000 workers, of which approximately 8,000 work for Arrium Mining and Materials (Arrium) and BlueScope Steel (BlueScope)—Australia's only producers of crude steel.

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 Table 2.3.

Table 2.3. Summary of Australia steel producers

Company	Major Product Type	Product Description	Output Capacity
Arrium	Steel long products	Reinforcing bar and rod, structural, merchant bar, rail and wire products Hot rolled structural bars, rail and sleepers	2.5 Mt
BlueScope	Steel flat products	Hot rolled coils, plate, metal coated and painted steel	2.6 Mt

Source: Company website ^{5 6} (annual report)

⁵ Arrium Mining and Materials. <http://www.arrium.com/our-businesses/arrium-steel>

⁶ BlueScope Steel. <https://www.bluescope.com/about-us/our-business/bluescope-australia-and-new-zealand/>

Outside of BlueScope and Arrium, the industry is represented by a large number of small to medium businesses. These businesses are engaged in downstream activities such as cutting and bending and are supplied by domestic crude steel producers Arrium and BlueScope, or in some cases they import their crude steel from overseas. 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 10 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 that total (full- and part-time) employment in the steel manufacturing industry was above 40,000 between 2006 and 2011. The fall in employment between 2006 and 2016 was around 28 per cent, compared with 13 per cent for manufacturing over the decade. Steel production employment as a share of total manufacturing employment has consequently fallen since 2006.

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

Industry	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Basic ferrous metal manufacturing	45.3	43.8	43.8	42.6	41.5	43.1	39.9	33.6	38.0	36.9	32.5
Basic ferrous metal product manufacturing	3.0	2.5	3.1	4.3	2.6	2.4	2.4	2.1	2.0	2.9	2.6
Total	48.3	46.3	47.0	46.8	44.2	45.4	42.2	35.7	40.1	39.7	35.0

Notes: Based on four quarter averages to May. Steel employment is defined as ANZSIC sub-division 21.

Source: ABS, Labour Force, Australia, Detailed, Quarterly, May 2016, cat.no. 6291.0.55.003, EQ06.⁷

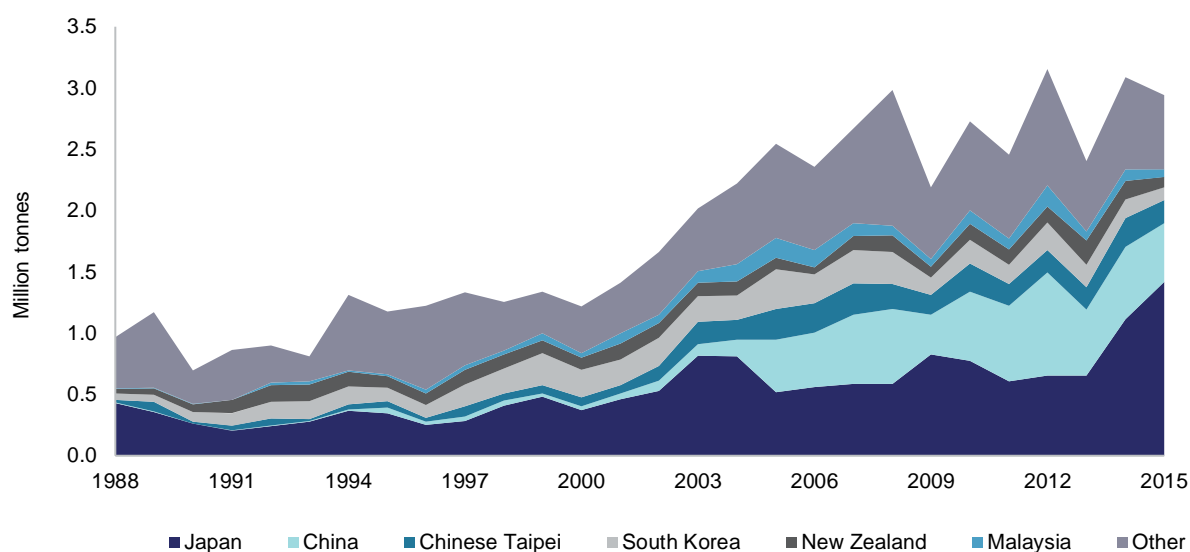
The Australian steel manufacturing industry has been significantly impacted by policy reforms over the past few decades. Phased reductions in imported steel tariffs and the floating of the Australian dollar have exposed steel manufacturers to direct competition from overseas markets and fluctuations 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 steel imports are presented in Figure 2.12.

⁷ <http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/6291.0.55.003May%202016?OpenDocument>

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

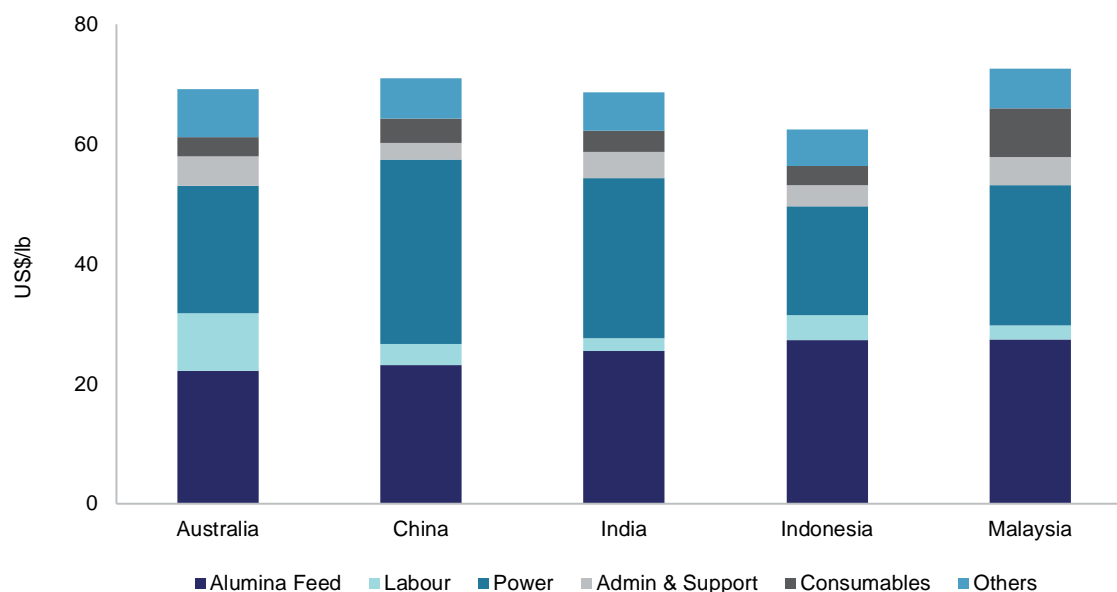
In 2015, China was the world's largest producer of primary aluminium (excluding recycled aluminium), producing 31 million tonnes or 55 per cent of global production. Russia represented 7 per cent of global production, Canada 5 per cent and the United Arab Emirates 4 per cent. Australia produced 1.65 million tonnes of aluminium in 2015, approximately 3 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 2015.

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 2015, Russia was the world's largest exporter of aluminium, exporting 3.4 million tonnes, or 18 per cent of world exports. The world's largest importer in 2015, was Germany, which imported 2.59 million tonnes, or 11 per cent of the world's total imports.

Figure 2.13 illustrates the six main cost categories for primary aluminium production: alumina feed, labour, power, administration and support, consumables and others. Australia has the 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. It is higher than the unit cost of Indonesia and lower than the unit cost of Malaysia.

Figure 2.13: Cost components for aluminium production, 2015

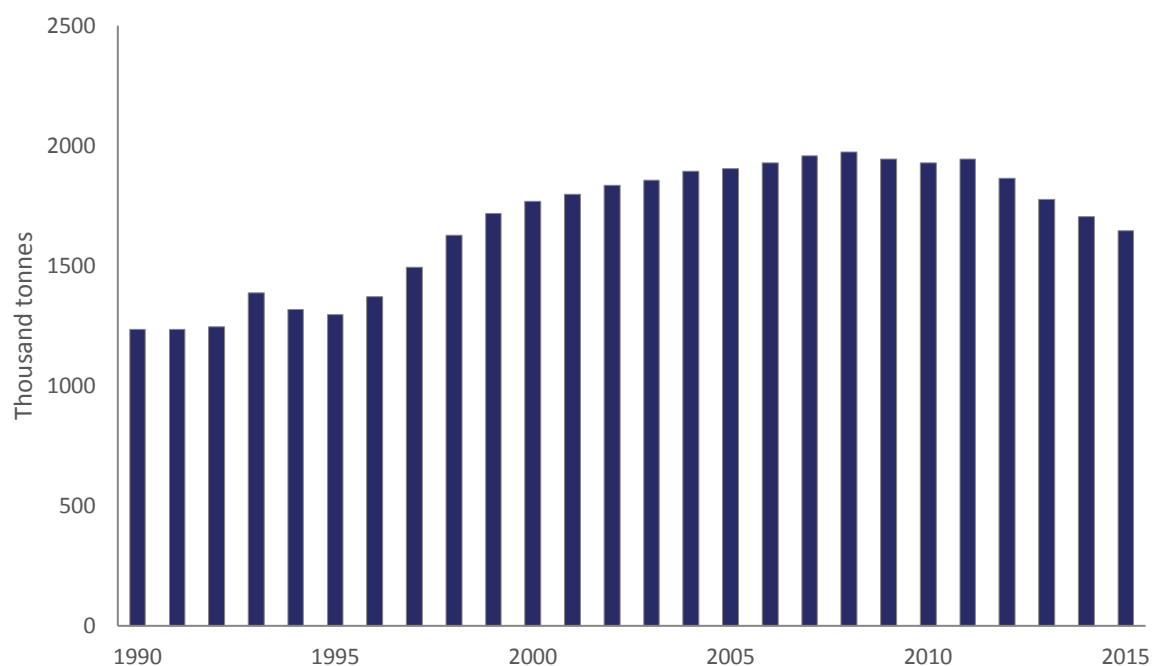


Source: AME; Department of Industry, Innovation and Science.

2.3.4 Australian aluminium production

Total Australian aluminium production accounted for around 3 per cent of world output in 2015, approximately 1.65 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 2.14.

Figure 2.14: Australian primary aluminium production, 1990 to 2015



Source: Department of Industry, Innovation and Science.

Aluminium's IGVA in 2014-15 is estimated at around \$600 million. The sector's IGVA has been in decline over the last five years, falling at an average annual rate of 11.6 per cent.

The Australian aluminium sector comprises 11,000 workers. The industry's major players are Rio Tinto Plc–Rio Tinto Limited (Rio Tinto), Alcoa of Australia (Alcoa), 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.

Alcoa 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 2016, aluminium employment has fallen by 44 per cent, compared to 13 per cent for Manufacturing employment. In 2006, aluminium employment accounted for 1.9 per cent of all Manufacturing employment, and its share had declined to 1.2 per cent in 2016.

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

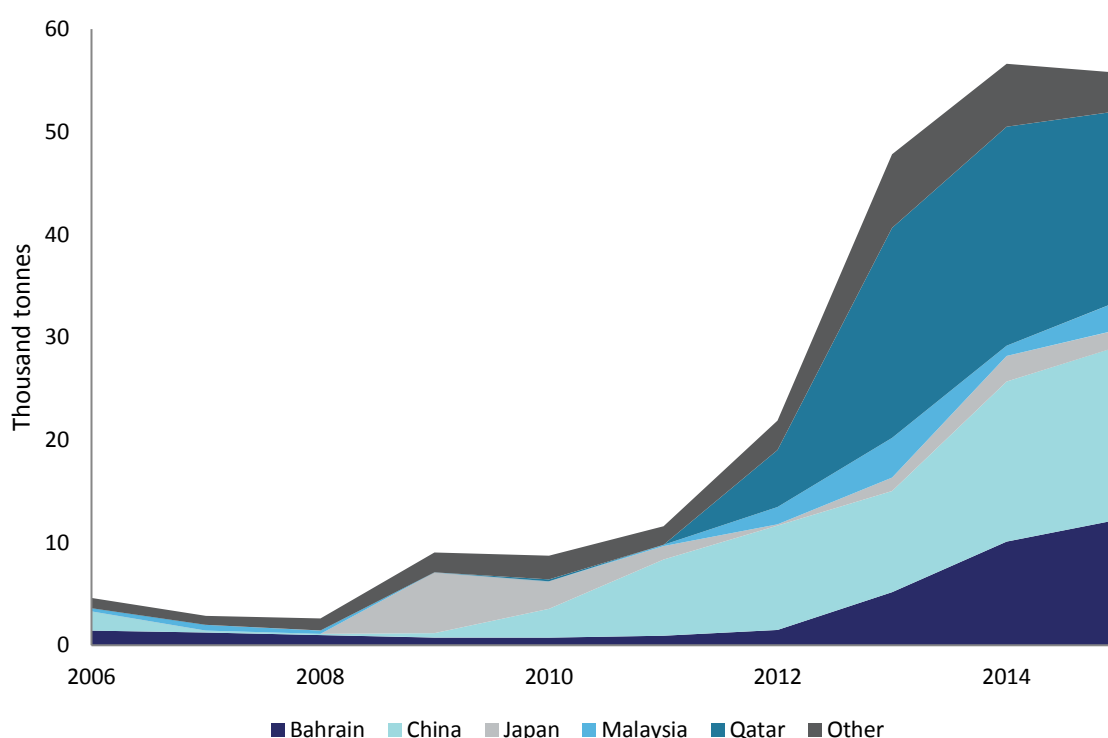
Industry	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Aluminium Smelting	12.3	12.6	10.5	11.3	9.9	10.4	11.0	11.0	9.2	7.3	6.8
Aluminium Rolling, Drawing, Extruding	6.6	5.7	4.9	3.1	4.0	4.5	4.9	3.9	3.3	3.8	3.7
Total aluminium	18.9	18.3	15.4	14.4	13.9	14.9	15.9	14.9	12.5	11.1	10.6

Notes: Based on four-quarter averages to May 2016. 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, May 2016, cat.no. 6291.0.55.003, EQ06;⁸ ABS, 2011 Census of Population and Housing (TableBuilder extract); ABS, 2006 Census of Population and Housing (TableBuilder extract).⁹

Australia is the fourth largest exporter of aluminium in the world. As a result, Australia is a relatively small importer of aluminium, importing around 56 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 (32 per cent), followed by China (30 per cent) and Bahrain (21 per cent). The supply of imports from the Middle East has grown rapidly since 2011–12, rising from 1.2 thousand to 30 thousand tonnes over this period.

⁸ <http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/6291.0.55.003May%202016?OpenDocument>

⁹ <http://www.abs.gov.au/ausstats/abs@.nsf/ViewContent?readform&view=productsbyCatalogue&Action=Expand&Num=2.1>

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.

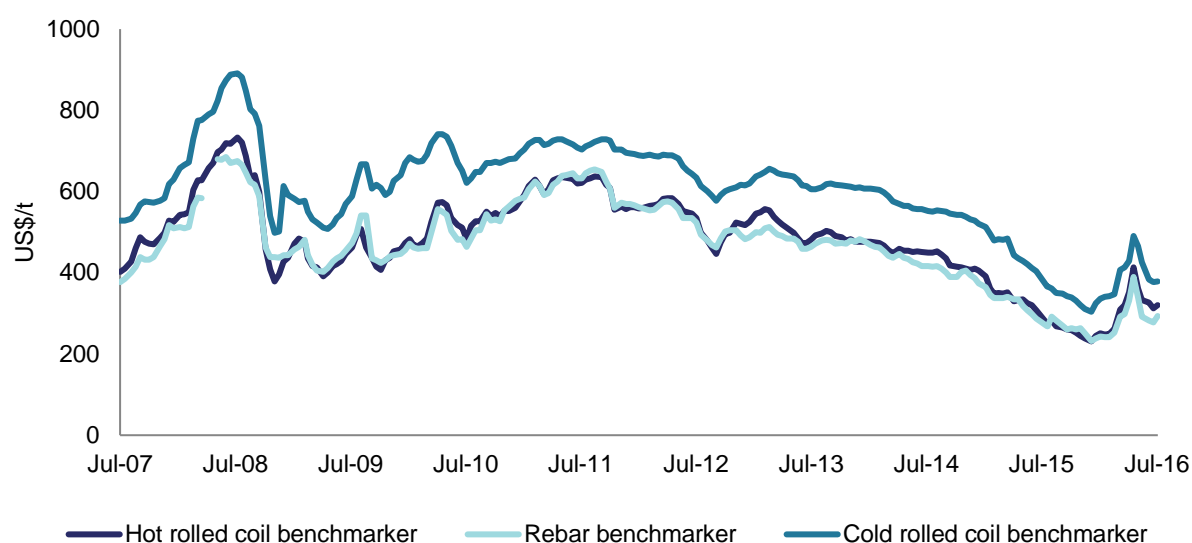
2.4.1 Prices

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

Prices for steel are presented in Figure 2.16. 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 continued to decline, reaching a new low in 2015. Steel prices increased at the start of 2016 as a result of the Chinese government's stimulus measures, which increased infrastructure and residential construction, along with authorities reaffirming plans to reduce excess capacity in China. However, overcapacity remains a problem, and as effects from the stimulus packages wears off, the higher prices may not be sustained.

Figure 2.16: China steel prices, March 2007 to July 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 2015



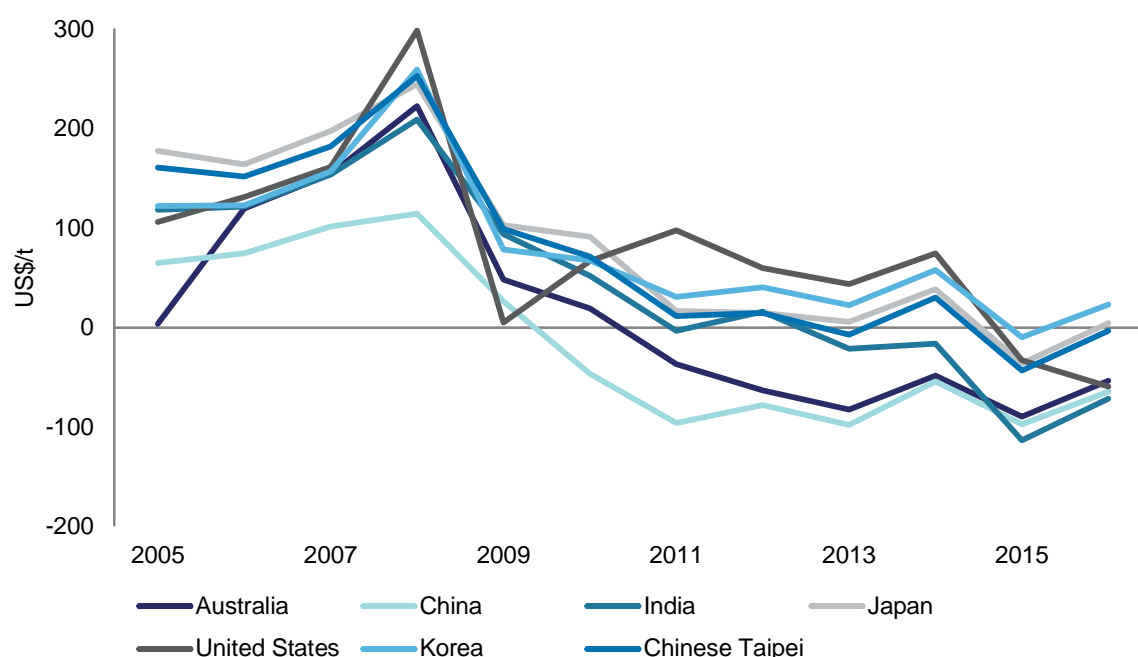
Source: Bloomberg.

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 2016, margins in a number of countries—including Australia, China and India—remained negative suggesting that the average costs of production were above average revenues. Notably, while margins in each country have declined over the 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

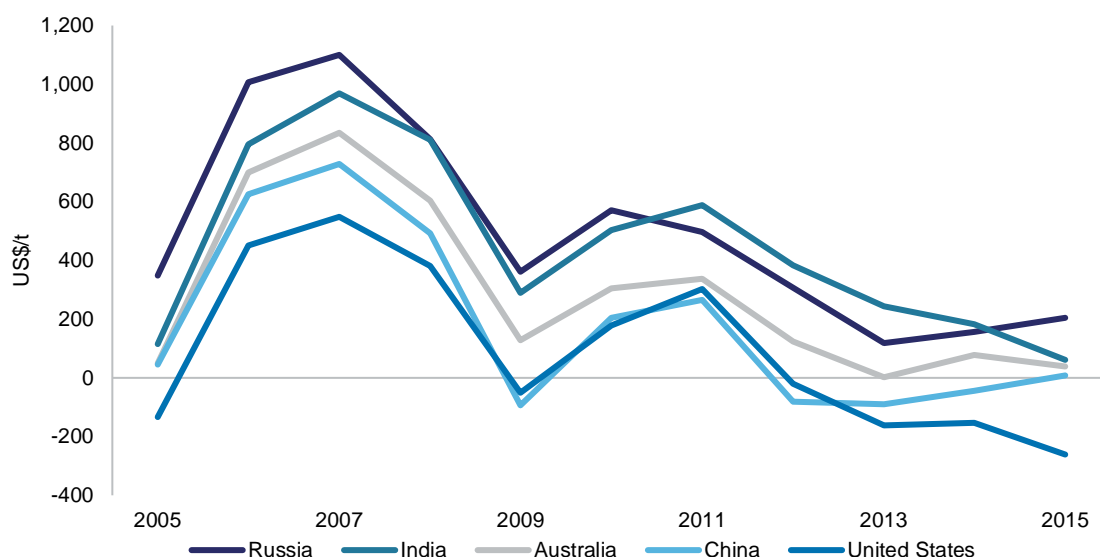


Notes: Production margins are total revenue per tonne minus total production costs before credit per tonne. Total production costs before credit includes cash costs and depreciation. 2016 estimate.

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 reflects 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.¹⁰

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.

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'.¹¹ 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.¹²

¹⁰ 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>.

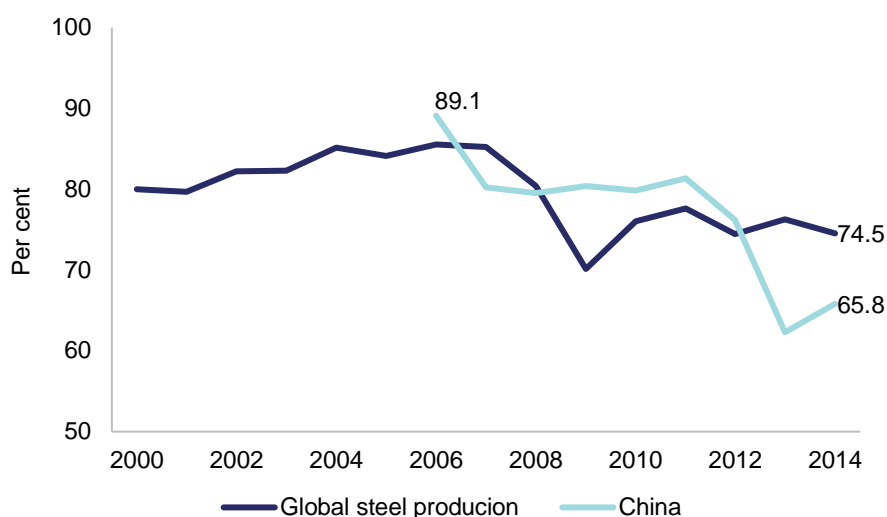
¹¹ OECD, 'Excess capacity in the global steel industry: The current situation and ways forward', 2015, p. 5.

¹² *ibid.*, p. 6.

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 shows 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.¹³ 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

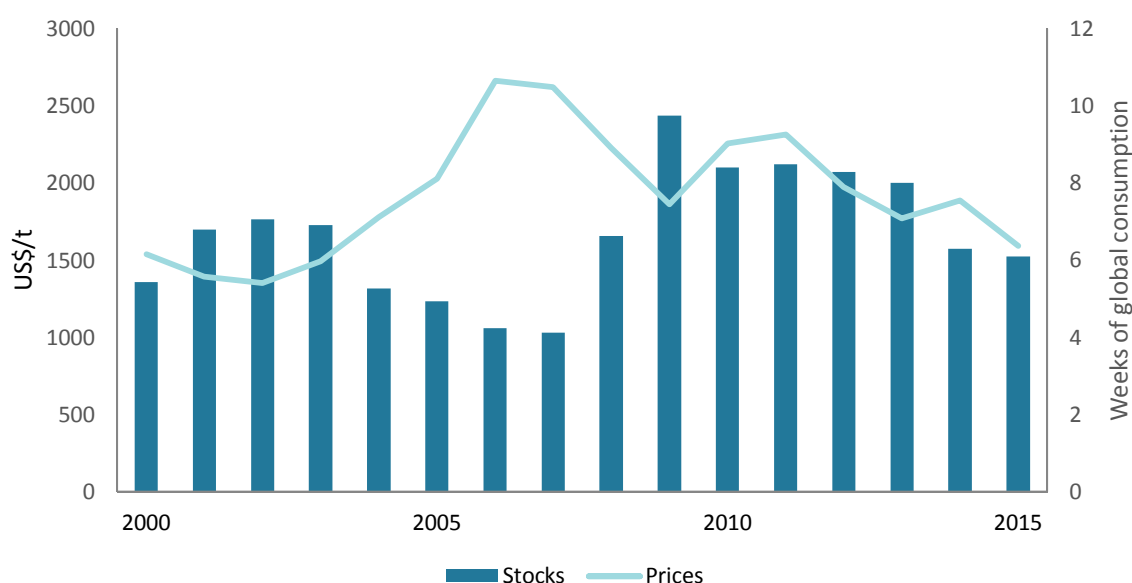


Source: OECD (25b); Li (2015); Department of Industry, Innovation and Science.

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 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.

¹³ It may not be economically viable 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.

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 per 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 a 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 Market-distorting government interventions and trading practices in 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 inefficient 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 of 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. It has cautioned that government interventions that lead to more market distortions would eventually create even more severe adjustment challenges in the longer term.

In preparing this report, the Commission sought to identify and analyse a broad range of global and Asian government interventions in steel and aluminium markets. However, its analysis has been limited by the availability of the necessary data and information. 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.

This chapter draws on information and analysis from a number of different sources:

- Commission investigations into allegations of dumping and subsidisation of steel and aluminium products¹⁴

¹⁴ Anti-Dumping Commission, Report No. 300: Alleged Dumping of Steel Reinforcing Bar Exported from The People's Republic of China, April 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,

- information and analysis by the Canada Border Services Agency (CSBA)¹⁵ and the United States Department of Commerce¹⁶
- reports produced by the Organisation for Economic Co-Operation and Development (OECD)¹⁷
- information and evidence supplied by Australian industry
- information from industry journals and from publicly available information sources
- supplementary information compiled by Cadence Economics for the Commission.

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 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 2002.¹⁸

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.

Similar views were also expressed at a recent OECD-sponsored High-Level Symposium on Excess Capacity and Structural Adjustment in the Steel Sector. The symposium, held in April 2016, brought together government and steel industry representatives with the primary objective of exchanging views on the policy actions that would help reduce steel excess capacity. A second objective was to share information and increase transparency about measures being taken to address excess capacity and promote structural adjustment in the steel industry.¹⁹

Review into Anti-Dumping Measures: Aluminium Road Wheels Exported from the People’s Republic of China, September 2015; Report No. 301: Alleged Dumping of Steel Rod in Coils Exported from The People’s Republic of China, April 2016; Statement of Essential Facts No. 316: Alleged Dumping and Subsidisation of Grinding Balls Exported from The People’s Republic of China, April 2016; Consideration Report No. 355: Alleged Dumping and Subsidisation of Steel Shelving Units exported by The People’s Republic of China, June 2016.

¹⁵ 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.

¹⁶ US Department of Commerce-International Trade Administration, *Global Steel Trade: Structural Problems and Future Solutions*, Report to the President, July 2000; and investigations reports.

¹⁷ 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>.

¹⁸ OECD, *Evaluating the Financial Health of the Steel Industry*, DSTI/SU/SC(2015)12/FINAL, 2016, p. 26.

¹⁹ OECD, *Outcomes from the High-Level Symposium on Excess Capacity and Structural Adjustment in the Steel Sector: Co-Chairs’ Summary*, April 2016, <http://www.oecd.org/sti/ind/steel-excess-capacity-outcomes.htm>.

Symposium participants noted that the outlook for the global steel market has weakened significantly, due to cyclical factors associated with sluggish global economic activity and industry-specific structural problems such as overcapacity. Background notes for the symposium highlighted that the estimated capacity-demand gap widened significantly in 2015, to a level in excess of 700 million tonnes.²⁰ Symposium participants also highlighted the need to address the current excess capacity so as to promote more stable business conditions and facilitate the longer term adjustment of the global steel industry.²¹

Symposium participants noted that excess capacity is a global challenge that needs to be reduced, and highlighted the need for pursuing effective solutions. They highlighted ‘the important role of market-based restructuring without government interventions that distort markets, and mechanisms to enhance information exchange’.²²

The OECD Steel Committee²³ 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.²⁴ 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.²⁵

²⁰ OECD, *Background Note No. 2: Capacity Developments in the World Steel Industry*, April 2016, p.3. http://www.oecd.org/sti/ind/Background%20document%20No%202_FINAL_Meeting.pdf.

²¹ OECD, *Background Note No. 2: Capacity Developments in the World Steel Industry*, April 2016, p.1. http://www.oecd.org/sti/ind/Background%20document%20No%202_FINAL_Meeting.pdf

²² OECD, *Outcomes from the High-Level Symposium on Excess Capacity and Structural Adjustment in the Steel Sector: Co-Chairs' Summary*, April 2016.

²³ 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>.

²⁴ OECD, ‘Excess capacity in the global steel industry: The current situation and ways forward’, 2015.

²⁵ *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 minimise 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>.

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’.²⁶

²⁶ OECD, ‘Excess capacity in the global steel industry: The current situation and ways forward’, 2015, p. 4.

These concerns were also emphasised at the April 2016 OECD high-level steel symposium. Background notes drew attention to the significant increase in the use of trade defense instruments to address ‘unfair trade resulting from current global excess capacity’, noting that these instruments would only provide temporary relief against unfair trade and not long-lasting solutions for the broader industry.²⁷ Measures identified as being of particular concern included increased import duties, government subsidies and other support measures, export incentives, trade financing, investment measures, import quotas, minimum import prices, and surveillance mechanisms.²⁸

Some government policies, however, such as policies to promote efficient industry restructuring or assist workers displaced from these industries, have been identified by the OECD as potentially ‘useful tools’ to address the problem of global overcapacity and promote greater stability in global steel markets.²⁹

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. Preliminary dumping margins of 23.25 per cent were imposed on BlueScope in March 2016. This investigation is expected to be completed in September 2016.

²⁷ OECD, *Background Note No. 3: Trade and Trade Policy Developments*, April 2016, p.2.
http://www.oecd.org/sti/ind/Background%20document%20No%203_FINAL_Meeting.pdf

²⁸ OECD, *Background Note No. 3: Trade and Trade Policy Developments*, April 2016, p.2.
http://www.oecd.org/sti/ind/Background%20document%20No%203_FINAL_Meeting.pdf

²⁹ *ibid.*, p. 1.

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 penalise exporters selling below cost.³⁰

In the current downturn, US steelmakers and aluminium product producers have actively sought trade remedies and the number of trade remedy investigations against steel products has grown substantially (see chapter 5). For example, in early 2016, the US Department of Commerce found a combined preliminary dumping and countervailing rate applicable to Chinese imports of corrosion resistant steel of up to 491 per cent.³¹ Similarly, in May 2016 the US Department of Commerce found a combined dumping and countervailing rate applicable to Chinese imports of cold rolled flat steel of up to 522 per cent.³² In August 2016, tariffs of up to 64.7 per cent were imposed on certain Korean imports of cold rolled steel sheets.

The US government has provided Trade Adjustment Assistance for steel workers displaced as a result of production cutbacks and plant closures.³³ 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.³⁴

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.³⁵

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

³⁰ 'Steel industry', *International Encyclopedia of the Social Sciences*, 2008, www.encyclopedia.com

³¹ Dumping Notification:

https://www.usitc.gov/trade_remedy/731_ad_701_cvd/investigations/2015/Corrosion-Resistant%20Steel%20from%20China,%20India,%20Italy,%20Korea,%20and%20Taiwan/Preliminary/crs-determination-ad-prelim-pr_china.pdf

Countervailing Notification:

https://www.usitc.gov/trade_remedy/731_ad_701_cvd/investigations/2015/Corrosion-Resistant%20Steel%20from%20China,%20India,%20Italy,%20Korea,%20and%20Taiwan/Preliminary/core_cvd_prelim_ita.pdf

³² Dumping Notification: <https://www.gpo.gov/fdsys/pkg/FR-2016-05-24/pdf/2016-12186.pdf> Countervailing Notification: <https://www.gpo.gov/fdsys/pkg/FR-2016-05-24/pdf/2016-12183.pdf>

³³ 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.

³⁴ OECD, *Steel Market Developments, Q4 2015*, 2016, p. 12.

³⁵ 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.

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 2015.³⁶

There are several ongoing investigations of government interference to prevent capacity closures in some European nations. For example:

the European Commission recently concluded that a public authority controlled by the government in the Walloon region of Belgium “repeatedly granted support measures amounting to €211 million in state aid to companies of the Duferco group between 2006 and 2011”, which “artificially boosted the companies’ revenues and postponed the difficult yet necessary capacity adjustments in the Walloon steel industry”.

... the Italian government took steps in recent years to prevent the closure of steelmaker Ilva SpA’s plant in Taranto, Italy, the largest steelmaking facility in Europe. The European Commission is now investigating the consistency with European state aid rules of the Italian government’s actions, which reportedly totalled approximately €2 billion and included “state guarantees on loans, a law giving loans granted to Ilva an absolute payment priority in case of bankruptcy, including over debt to public entities, a law allowing Ilva access to funds seized during ongoing criminal proceedings against Ilva’s shareholders and former management before those proceedings have established who owns these funds, and the settlement by payments to Ilva of a long standing dispute between State-owned Fintecna and Ilva.”³⁷

European nations have been subject to anti-dumping and countervailing investigations, with a number currently ongoing, including in the Ukraine (3), France (2), Germany (1), United Kingdom (1), Austria (1), Belgium (1), Belarus (1), Italy (1), the Netherlands (1), Romania (1) Slovakia (1) and Serbia (1).³⁸ Turkey is subject to four ongoing anti-dumping and countervailing investigations, three of which were initiated by the United States. Products covered by ongoing investigations concerning European countries include: hot rolled coil, sheet and plate; rebar and cut to length plate.³⁹ The Commission is not aware if claims of government intervention are factors in these investigations and will monitor the outcomes.

European nations have implemented other trade-related measures in relation to steel, which may or may not restrict trade. For example, in May 2016, the European Union imposed ‘prior union surveillance on imports of certain iron and steel products (excluding imports from Iceland, Norway and Liechtenstein), effective until 15 May 2020.’⁴⁰

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.

³⁶ OECD, *Steel Market Developments, Q4 2015*, 2016, p. 12.

³⁷ A Price, C Weld, L El-Sabaawi and A Teslik, *Unsustainable: Government intervention and overcapacity in the global steel industry*, April 2016, p. 20, http://www.wileyrein.com/media/publication/204_Unsustainable-Government-Intervention-and-Overcapacity-in-the-Global-Steel-Industry-April-2016.pdf.

³⁸ Bracketed numbers refers to the number of ongoing investigations.

³⁹ Sourced from Platts World Steel Review 27 July 2016, pp. 9-10.

⁴⁰ WTO, *Report to the Trade Policy Review Body from the Director-General on Trade-Related Developments*, (mid-October 2015 to mid-May 2016), WT/TPR/OV/W/10, 4 July 2016, p. 106, https://www.wto.org/english/news_e/news16_e/trdev_22jul16_e.htm.

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.⁴¹

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, 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.⁴²

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.⁴³

It was reported in April 2016 that Russian steel producers planned to add more than nine million tons of crude steel capacity in coming years, despite a 'deep recession' in the Russian economy, including highly depressed levels of steel demand and an average capacity utilisation rate in the steel industry of around 61 per cent.⁴⁴

At present there are four ongoing investigations into steel exports from Russia. Investigations have been initiated by the European Union, Brazil, Turkey and India. Products covered by ongoing investigations concerning Russia include hot rolled coil, hot rolled sheet and hot rolled plate.⁴⁵

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.⁴⁶

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 2015.⁴⁷

⁴¹ US Department of Commerce-International Trade Administration, *Global Steel Trade: Structural Problems and Future Solutions*, Report to the President, July 2000, pp. 37-64.

⁴² United States Trade Representative, *2015 Report on the Implementation and Enforcement of Russia's WTO Commitments*, December 2015, www.ustr.gov.

⁴³ 'VTB expands partnership with Konar Group', June 2014, www.vtb.com/group/press/news/releases/392694.

⁴⁴ A Price, C Weld, L El-Sabaawi and A Teslik, *Unsustainable: Government intervention and overcapacity in the global steel industry*, op. cit., pp. 8-9.

⁴⁵ Sourced from Platts World Steel Review 27 July 2016, pp. 9-10.

⁴⁶ 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.

⁴⁷ 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.

However, despite falling steel consumption in 2014 and 2015, Brazilian steelmakers were planning significant capacity increases, including a new blast furnace mill with three million tons of annual capacity, which is expected to fire up in the second quarter 2016. The mill, to be operated by a joint venture between Vale, Dongkuk and POSCO, will be located in the state special export zone of Ceará, where it reportedly will benefit from ‘advantages on shipments abroad.’⁴⁸ It has been reported that BNDES announced that it would provide steel company Companhia Siderúrgica do Pecém (CSP) with up to USD 1 billion to build the mill at the Pecém Industrial Port Complex As CSP is partially owned by POSCO and Dongkuk Steel, the Korean Export-Import Bank is also reportedly lending significant support to the construction of the new mill.⁴⁹

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.⁵⁰ At present there are five ongoing investigations into steel exports from Brazil. They have been initiated by the United States, the European Union and India. Products covered by these investigations include hot rolled coil, hot rolled sheet and hot rolled plate.⁵¹

3.2.6 Turkey

The Turkish steel industry has grown rapidly, jumping from the 17th largest crude steel-producing country in the world in 2000 to the 9th largest in 2015. This dramatic growth was facilitated by significant subsidies from the Turkish government, including low-interest development bank loans, export credits and insurance, tax benefits, and the provision of low-cost inputs to suppliers. In addition, Turkish steel producers that generate power with their own coal-fired or natural gas power plants benefit from state-controlled pricing schemes, resulting in artificially low energy costs for such producers.⁵²

In May 2016, it was reported that Turkey had increased its import tariffs on certain flat rolled stainless iron and steel products from 8 to 10 per cent.⁵³

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,⁵⁴ 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 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

⁴⁸ A Price, C Weld, L El-Sabaawi and A Teslik, op. cit., p. 9.

⁴⁹ *ibid.*, p. 21.

⁵⁰ 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.

⁵¹ Sourced from Platts World Steel Review 27 July 2016, pp. 9-10.

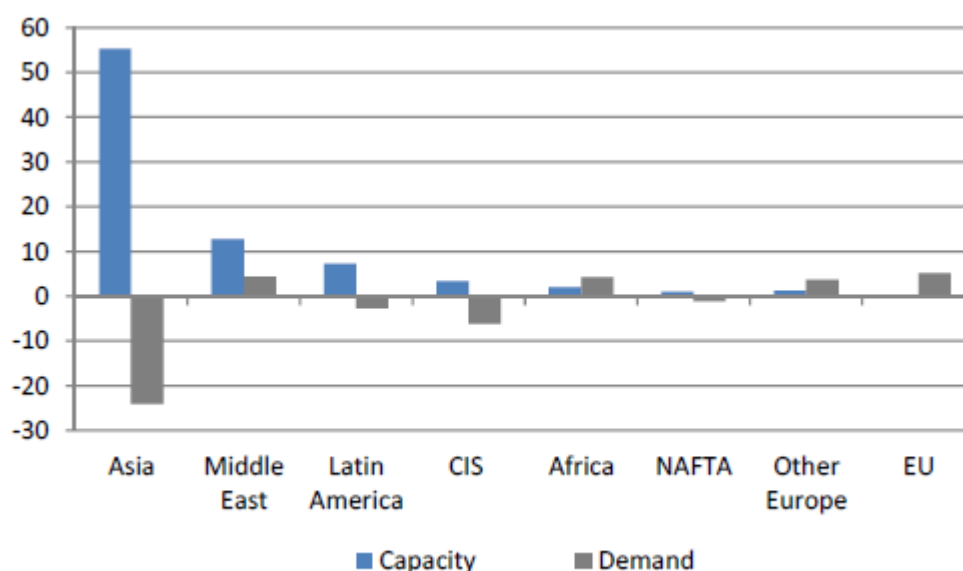
⁵² A Price, C Weld, L El-Sabaawi and A Teslik, op. cit., p. 19.

⁵³ World Trade Organisation, WT/TPR/OV/W/10, 4 July 2016.

⁵⁴ 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.

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.⁵⁵

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.

A 2014 CBSA report noted that the Chinese Government classified the 'Iron and Steel Industry' as a 'fundamental or pillar' industry.⁵⁶ 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,⁵⁷ subsidy programs, taxation arrangements and the

⁵⁵ 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.

⁵⁶ CBSA, 2014, p 14.

⁵⁷ 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),

significant number of state owned steel companies, and the National Development Reform Commission's (NDRC) responsibility for approving all large steel projects.⁵⁸ More information on these interventions is set out below.

Concerns regarding the role of the Chinese Government involvement within the Chinese steel sector have been expressed by five American trade associations.⁵⁹ Analysis by these associations identified numerous programs through which the Chinese Government is alleged to have provided support to the sector and directly contributed to high levels of overcapacity and producer fragmentation. Support mechanisms included: cash grants; equity infusions; government-mandated mergers and acquisitions; preferential loans and directed credit; land use subsidies; subsidies for utilities; raw material price controls; tax policies; currency policies; and lax enforcement of environmental regulation.

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:⁶⁰

- 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.

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.

⁵⁸ CBSA, 2014, p. 17.

⁵⁹ Steel Industry Coalition, Steel Industry Coalition Report on Market Research into the People's Republic of China Steel Industry, Part 1, Final Report, 2016. Associations contributing to the report included the: American Iron and Steel Institute; Steel Manufacturers Association; Committee on Pipe and Tube Imports; Speciality Steel Industry of North America; and the American Institute of Steel Construction.

⁶⁰ 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.

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.⁶¹ While these VAT rebates have been reduced, they remain in place for other additives such as chromium.⁶² 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.⁶³

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.⁶⁴ 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.

The Chinese Government was reported to be planning to reduce the export tax on steel with effect from 1 January 2016, from 25 per cent to 20 per cent for steel billet and 10 per cent for pig iron.⁶⁵ 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. As at August 2016, the Commission has not been able to confirm whether export taxes applied to Chinese steel billet and pig iron were reduced.

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.⁶⁶ 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.

⁶¹ Department of Industry and Science, *Resources and Energy Quarterly*, March 2015, p. 24.

⁶² Metals Insight, 14 May 2015, p. 4.

⁶³ Anti-Dumping Commission calculations.

⁶⁴ 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.

⁶⁵ <http://finance.yahoo.com/news/chinas-export-tax-cuts-could-worsen-global-steel-082427033--business.html>

⁶⁶ 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.

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-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.⁶⁷ As noted in chapter 2 of this report, average margins for Chinese steel producers 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).⁶⁸ 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).⁶⁹

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).

Early plans and directives focussed on developing the Chinese steel manufacturing industry, supporting economic stability and employment (particularly during the 2009 GFC).

However, 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 were expected to be released later in the year; as at August 2016, they were yet to be released.

Media summaries of the 13th Five Year Plan⁷⁰ 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. Actions to address overcapacity in Chinese industry include reforms to state-owned enterprises and greater

⁶⁷ OECD, *Steel Market Developments, Q4 2015*, 2016, p. 17.

⁶⁸ 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.

⁶⁹ *ibid.*

⁷⁰ A final translated version of the 13th Five Year Plan was not publicly available at the time of writing this report.

market discipline. Similar objectives for the Chinese steel industry were identified by the Chinese Ministry of Industry and Information Technology in the draft Steel Industry Adjustment Policy (2015 Revision).

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.

The difficulties facing the Chinese Government in restructuring the industry were demonstrated in the first four months of 2016, when an estimated 50 million tonnes of previously closed Chinese capacity was restarted. A Chinese news portal, MySteel, reported that the restarting of this capacity, as a result of improved profitability and access to credit, accounted for almost all of the 60 million tonnes of capacity taken off line in 2015.⁷¹

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; rationalisation of steel production capacity; lift in capacity utilisation rates to 80 per cent by 2017; guidance for market exit; industry consolidation; orientation and oversight of mergers and reorganisations; 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](http://www.eurofer.eu/Issues%26Positions/Trade/ws.res/Steel%20Industry%20Adjustment%20Policy%20Comments%20Appendix.fhtml/Steel%20Industry%20Adjustment%20Policy%20Appendix.pdf); Dept. of Industry and Science, 2015, *China Resources Quarterly*, Southern Autumn – Northern Spring, p. 15.

⁷¹ Australian Financial Review, 'China reopens steel mills as profits surge', 28/04/2016, p. 11.

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.⁷² 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 that a recovery in steel (and aluminium) prices would allow them to return to profitable operation.⁷³ The Commission considers that such actions are likely to further delay the necessary structural adjustment within the Chinese steel industry.

Such actions have been identified as explaining, in part, the limited success of China’s 2013 plan to reduce steel capacity, supporting doubts about China’s ability to reduce steel-making capacity and steel production:

The limited attempts that were made to reduce capacity in accordance with the 2013 plan were largely ineffectual. For example, in late 2013, China’s Hebei province staged an event during which demolition squads blew up blast furnaces owned by 15 mills, all on Chinese state television. According to the Wall Street Journal, however, “[a]ll of the furnaces targeted for destruction turned out to be so outmoded that the companies that owned them didn’t consider them spare capacity, steel-industry officials [said], meaning they didn’t help reduce the province’s extra volume.” In part due to the lack of progress closing capacity in Hebei, “there is no reason to assume that [the government’s 80-million ton closure] target will be met,” let alone the larger level of capacity closure envisioned by China’s newly announced plan.⁷⁴

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.

⁷² 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.

⁷³ <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/>

⁷⁴ A Price, C Weld, L El-Sabaawi and A Teslik, *Unsustainable: Government intervention and overcapacity in the global steel industry*, op. cit., pp. 7-8.

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.⁷⁵ 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').⁷⁶ 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 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.⁷⁷

⁷⁵ 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>.

⁷⁶ *OECD Economic Surveys: Japan 2015*, DOI:[10.1787/eco_surveys-jpn-2015-en](https://doi.org/10.1787/eco_surveys-jpn-2015-en).

⁷⁷ US Department of Commerce-International Trade Administration, *Global Steel Trade: Structural Problems and Future Solutions*, Report to the President, July 2000, pp. 85-97

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 small and medium sized enterprises (SMEs).⁷⁸

A 2014, investigation by the CSBA found little or no government intervention in the Korean steel industry.⁷⁹ 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 export subsidies, reduced duties on imported capital goods, export financing subsidies, and a passback scheme to avoid paying duties on imports.⁸⁰

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.⁸¹

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'.⁸² There is significant state ownership of steel production capacity, including Steel Authority of India Limited (SAIL), which is the market leader.

⁷⁸ 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>.

⁷⁹ 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.

⁸⁰ US Department of Commerce-International Trade Administration, *Global Steel Trade: Structural Problems and Future Solutions*, Report to the President, July 2000, pp.162-3.

⁸¹ 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>.

⁸² 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](http://steel.gov.in/Outcome%20Budget%20(2015-16)/Outcome-Budget-English-2015-16.pdf).

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).⁸³ 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 2014-15.⁸⁴ 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—extended for two years in March 2016 until March 2018 (phasing down to 10 per cent over the period)⁸⁵
- imposition of minimum import prices on 173 steel products for a period of six months in February 2016—extended for a further two months for 66 of these products in August 2016. Products on which safeguard or anti-dumping duties have been imposed were removed from this list⁸⁶
- notification of Steel and Steel Product (Quality Control) Orders to ensure only quality steel is produced or imported.⁸⁷

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.⁸⁸

There are currently five ongoing investigations into Indian exports of steel products, one of which involves a claim of subsidisation. The investigations are being undertaken by the United States and Indonesian authorities.⁸⁹

⁸³ Government of India, Ministry of Steel, 'The Policy Framework', <http://steel.gov.in/policy.htm#pol3>.

⁸⁴ Government of India, *Outcome Budget of Ministry of Steel 2015-2016*, p. 1

⁸⁵ 'Government extends safeguard duty on some steel products till March 2018', *The Economic Times*, 30 March 2016, <http://economictimes.indiatimes.com/industry/indl-goods/svs/steel/government-extends-safeguard-duty-on-some-steel-imports-till-march-2018/articleshow/51617311.cms>; WTO document G/SG/N/8/IND/28 Suppl. 1 of 5 April 2016.

⁸⁶ M Manchanda & S Chakraborty, 'Govt prunes MIP list to 66 steel products', *Business Standard*, 5 August 2016, http://www.business-standard.com/article/economy-policy/govt-prunes-mip-list-to-66-steel-products-116080500037_1.html; Gazette of India, Extraordinary, Part II, Section 3, sub-section (i), Government of India, Ministry of Finance (Department of Revenue), Notification No. 44/2016-Customs (ADD), New Delhi, 8 August 2016.

⁸⁷ '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, agmetalliner.co/2016/03/15/india-enters-the-anti-dumping-fray-in-aluminium-and-steel.

⁸⁸ 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.

⁸⁹ Sourced from Platts World Steel Review 27 July 2016, pp. 9-10; World Trade Organisation, WT/TPR/OV/W/10, 4 July 2016.

At the 15 April 2016 meeting of WTO Council for Trade in Goods, new trade concerns were raised on India's trade restrictions, including minimum import prices for steel products, the increase in customs duties for tariffs for 96 tariff lines, and the safeguard measures applied to the steel sector.⁹⁰

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.⁹¹

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.⁹²

3.5.7 Thailand

In late 2014, the Board of Investment of Thailand introduced a seven-year Investment Promotion Strategy, with effect from January 2015.⁹³ 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.

Thai authorities have imposed a number of safeguard measures in recent years. In 2014, safeguard measures were imposed on imports of hot rolled flat steel.⁹⁴ Thai authorities also commenced a safeguard investigation into imports of structural hot rolled H-beam in February 2016. It is the Commission's understanding that this investigation is ongoing.⁹⁵

Thailand is reportedly working on a reform of anti-dumping laws and expects to have a draft law by the end of 2016.⁹⁶

⁹⁰ WTO, *Report to the Trade Policy Review Body from the Director-General on Trade-Related Developments*, op. cit., p. 51.

⁹¹ '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.

⁹² www.mida.gov.my/home/basic-metal-products/posts;
www.mida.gov.my/env3/uploads/images/invest/invest-pdf/APP1_02032012.pdf.

⁹³ New Policy on Investment Promotion, December 2014,
www.britcham.org.sg/files/images/pdfs/new_boi_policy.pdf.

⁹⁴ Global Trade Alert, 'Thailand: Definitive safeguard duty on imports of certain types of non alloy hot rolled steel flat product', June 2 2015. <http://www.globaltradealert.org/measure/thailand-definitive-safeguard-duty-imports-certain-types-non-alloy-hot-rolled-steel-flat-pro>

⁹⁵ World Trade Organisation, WTO document G/SG/N/6/THA/5,
https://www.wto.org/english/news_e/news16_e/safe_tha_09feb16_e.htm.

⁹⁶ Metal Miner, 'Southeast Asian Neighbours Begin tariffing Chinese Steel, Too', June 23 2016.
<https://agmetminer.com/2016/06/23/southeast-asian-neighbors-begin-tariffing-chinese-steel/>.

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.⁹⁷ These incentives include tax concessions for the first 15 years of revenue generation for new investments, tax exemptions for large scale investments or investments in an Economic Zone, and land subsidies.⁹⁸

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 an 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.⁹⁹

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 were expected to be released later in the year; as at August 2016, they had not yet been released.

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.

⁹⁷ 'List of Sectors Entitled to Investment Incentives', vietnamembassy-usa.org/basic-page/list-sectors-entitled-investment-incentives.

⁹⁸ 'Investment Incentives', Foreign Investment Agency, Vietnam, fia.mpi.gov.vn/detail/689/investment-incentive.

⁹⁹ Anti-Dumping Commission, Report No. 263 – Aluminium Road Wheels, 2015.

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 prevented from bankruptcy by local governments, in the hope that a recovery in aluminium prices would allow them to return to profitability.¹⁰⁰

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.¹⁰¹

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.¹⁰² 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.¹⁰³

¹⁰⁰ <http://www.theaustralian.com.au/business/economics/debt-laden-zombie-companies-imperil-chinas-growth/news-story/4083e25e12ae4cff07cb447551079eac>; <http://www.ejinsight.com/20160312-how-china-could-put-zombie-companies-to-rest/>

¹⁰¹ Variety of sources including Aluminium Association market intelligence, Bloomberg, Metal Bulletin.

¹⁰² Anti-Dumping Commission, Report No. 263 – Aluminium Road Wheels, 2015.

¹⁰³ *ibid.*

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.¹⁰⁴

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).¹⁰⁵

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

In early 2016, the Indian government increased trade protection for aluminium products through a 2.5 per cent increase in import duties on certain primary aluminium and aluminium products.¹⁰⁶ On 19 April 2016, India initiated a safeguard investigation on imports of unwrought aluminium.¹⁰⁷

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.

¹⁰⁴ <http://www.smh.com.au/business/how-beijing-kicked-an-own-goal-on-aluminium-20090705-d96e.html>

¹⁰⁵ <http://az-china.com/archives/7433>

¹⁰⁶ WTO, *Report to the Trade Policy Review Body from the Director-General on Trade-Related Developments*, op. cit., p. 107.

¹⁰⁷ World Trade Organisation, WTO document G/SG/N/6/IND/43.

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 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.¹⁰⁸

¹⁰⁸ OECD, *Steel Market Developments, Q4 2015*, 2016, p. 21.

4 Australian steel and aluminium markets 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 relatively low 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 estimated the 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 depressed prices.¹⁰⁹ The Australian aluminium industry, which exports a significant proportion of its production, was adversely impacted by the relatively strong Australian dollar prior to its decline over 2015.

¹⁰⁹ 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 6.2 and 2.8 per cent a year for the steel and aluminium industries respectively.¹¹⁰

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. The competitiveness of Australian exports is also an important factor.

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.¹¹¹

The Australian steel and aluminium industries generally have a competitive advantage in access to key raw materials.¹¹² 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.¹¹³

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 Australia were estimated to be between 19 and 55 per cent higher than the average costs of non-Australian steel producers.¹¹⁴ 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.

¹¹⁰ IBISWorld Industry Report C2110, February 2016, p. 5; IBISWorld Industry Report C2142, September 2015, p. 4.

¹¹¹ Purchase costs relate to input costs such as iron ore and coking coal for steel production and alumina and electricity for aluminium production.

¹¹² 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.

¹¹³ IBISWorld Industry Report C2110, February 2016, p. 20; IBISWorld Industry Report C2142, September 2015, p. 20.

¹¹⁴ Department of Industry, Innovation and Science, *Submission to the inquiry into the future of Australia's steel industry*, February 2016, p. 13.

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 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 2015 decline in the Australian dollar, and its continuing relatively low level (despite this year's rise from its 2015 low), has also helped to increase domestic cost competitiveness. However, world steel and aluminium prices generally declined around the same time as the exchange rate 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 have been 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.¹¹⁵ 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.¹¹⁶

In February 2016, BlueScope announced that it had achieved cost savings of \$95 million in the first half of the 2016 financial year, compared to the same period in 2015. It is targeting cost reductions totalling \$270 million in 2016-17 relative to 2014-15.¹¹⁷ Some of these savings will be achieved through rationalising employment and employee supported wage freezes.¹¹⁸

¹¹⁵ BlueScope – responding to structural change, Sept 2011, p. 3, https://s3-ap-southeast-2.amazonaws.com/bluescope-corporate-umbraco-media/media/1362/paul_omalley_asl_presentation.pdf.

¹¹⁶ 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>.

¹¹⁷ Bluescope 1H-FY2016 Financial Results Presentation, p. 9.

¹¹⁸ 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.

On 14 July 2016, BlueScope also advised the Australian Stock Exchange that earnings before interest and tax (EBIT) for the year ended 30 June 2016 are expected to be around \$570 million, compared with \$302 million in the year to 30 June 2015. The company has previously advised that 'the stronger performance has been driven largely by earlier delivery of cost reductions, growth in Australian domestic despatches and better margins'.¹¹⁹

Following a strategic review, on 22 February 2016, Arrium announced an agreement with GSO Capital Partners to provide Arrium with \$927m as part of a recapitalisation plan. However, the recapitalisation plan was not supported and Arrium entered voluntary administration on 7 April 2016. Arrium's administrator, KordaMentha, has examined Arrium's operations, in particular the steelworks and mining operations in Whyalla. KordaMentha is targeting \$300m in total annualised cost savings since the commencement of savings initiatives in October 2015 (prior to Arrium entering administration).

KordaMentha is currently preparing for a sale or recapitalisation of the Arrium Group.

The Australian and South Australian Governments have announced assistance measures for Arrium. These are detailed in sections 4.3.4 and 4.3.5.

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'.¹²⁰

Actions by Australian industry to reduce costs and improve their competitiveness should assist them to weather the current cyclical global downturn.

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.

¹¹⁹ BlueScope ASX Release, *BlueScope expects full year underlying EBIT lift to \$570m – net debt reduced by approximately \$600m (preliminary unaudited results)*, 14 July 2016, <http://www.asx.com.au/asxpdf/20160714/pdf/438ks815tcjbsp.pdf>

¹²⁰ Capral 2015 Full Year Results Presentation, 19 February 2016, <http://www.capral.com.au/Results-Presentations>.

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 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.¹²¹

¹²¹ <http://www.industry.gov.au/industry/IndustryInitiatives/AustralianIndustryParticipation/Pages/Australian-Jobs-Act-2013.aspx>.

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.

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 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). 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.¹²²

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. Employment facilitators have been appointed in the Illawarra for affected BlueScope workers and the Whyalla/Port Augusta region and Adelaide for affected Arrium workers.

In March 2016, the Australian government, through the Australian Rail Track Corporation, awarded Arrium a contract for 1 200 km of rail track (estimated to be worth around \$80 million).

The government made an election commitment to provide a \$49.2m loan to Arrium for beneficiation equipment for its iron ore operations. The loan is being implemented by the Export Finance and Insurance Corporation through its National Interest Account.

¹²² <http://www.minister.industry.gov.au/ministers/macfarlane/media-releases/strengthening-illawarras-economic-future>.

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.¹²³

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 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.¹²⁴ 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.¹²⁵

On 9 June 2016, the South Australian government committed \$50 million to a new owner of the Whyalla steelworks. The funding will be placed in a facility that can only be accessed by a new owner if it is used to support the operations at Whyalla¹²⁶.

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 chapter 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.¹²⁷ 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

¹²³ http://www.treasury.nsw.gov.au/_data/assets/pdf_file/0005/126941/20152610_Gladys_Berejiklian_med_rel_-_NSW_Government_supports_Illawarra_steelworkers.pdf.

¹²⁴ <http://www.statedevelopment.sa.gov.au/news-releases/all-news-updates/high-powered-steel-taskforce-to-secure-whyallas-future>.

¹²⁵ <http://www.statedevelopment.sa.gov.au/news-releases/all-news-updates/high-powered-steel-taskforce-to-secure-whyallas-future>.

¹²⁶ <http://www.premier.sa.gov.au/index.php/mediacentre/679-state-government-commits-50-million-to-ensure-future-of-whyalla-steelworks>

¹²⁷ Anti-Dumping Commission, *Dumping and Subsidy Manual*, section 21.

- 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.

Case study: 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 injury¹²⁸ and that goods were dumped by certain Indian exporters in quantities that were not negligible.¹²⁹

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.¹³⁰ 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.¹³¹ 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.¹³²

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

In March 2016, the Commission engaged Cadence Economics to estimate the economic impacts of dumping and subsidisation on the Australian steel and aluminium industries. Cadence Economics provided a report to the Commission that explains in detail 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.

¹²⁸ Anti-Dumping Commission, Termination Report 249, 28 July 2015, section 7.

¹²⁹ Termination Report 249, section 6.

¹³⁰ Termination Report 249, section 8.6.1.

¹³¹ Termination Report 249, sections 8.6.1, 8.7.

¹³² Termination Report 249, section 9. The investigation was terminated in respect of Vietnam due to negligible volumes.

- 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.
- 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 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.¹³³

¹³³ 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.

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

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.¹³⁴ The risk of renewed dumping and subsidisation in the next cyclical industry downturn could also deter investments in rebuilding capacity particularly where there are large sunk costs. However, if profit margins were large enough that could offset the business risks associated with dumping and subsidisation.

¹³⁴ 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.

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.

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.

In a 2014 report, 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.¹³⁵

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.¹³⁶

The report presented empirical evidence on the economy's performance in shifting resources in response to structural adjustment pressures, using employment outcomes for displaced automotive workers (see a summary of the case study below). As noted in the report, while the outcomes were largely positive, the impact of structural change can be severe for certain groups of workers and regions.

¹³⁵ Department of Industry, Office of the Chief Economist, *Australian Industry Report 2014*, p. 123, www.industry.gov.au.

¹³⁶ *ibid.*

Case study: Employment outcomes for displaced automotive workers

Using data from the 2006 and 2011 Australian Censuses, the employment outcomes for displaced automotive workers was analysed. 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.

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.¹³⁷

Conclusions about the potential impacts on regional output and employment of the closure of a significant regional manufacturing industry can also be drawn from 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. The modelling found large negative impacts on regional output and employment from the scenarios considered by the researchers.

Hypothetical case study: Economic modelling estimates of the impacts of a hypothetical closure of the BlueScope Steel Operations in Port Kembla

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,¹³⁸ 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.

¹³⁷ *ibid.*, p. 117.

¹³⁸ 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'.

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.

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. As at February 2016, the EU had 37 trade remedy measures imposed on steel with nine investigations on foot.¹³⁹

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.

¹³⁹ European Commission, 2016, [Commission launches new anti-dumping investigations into several steel products](#), 12 February 2016.

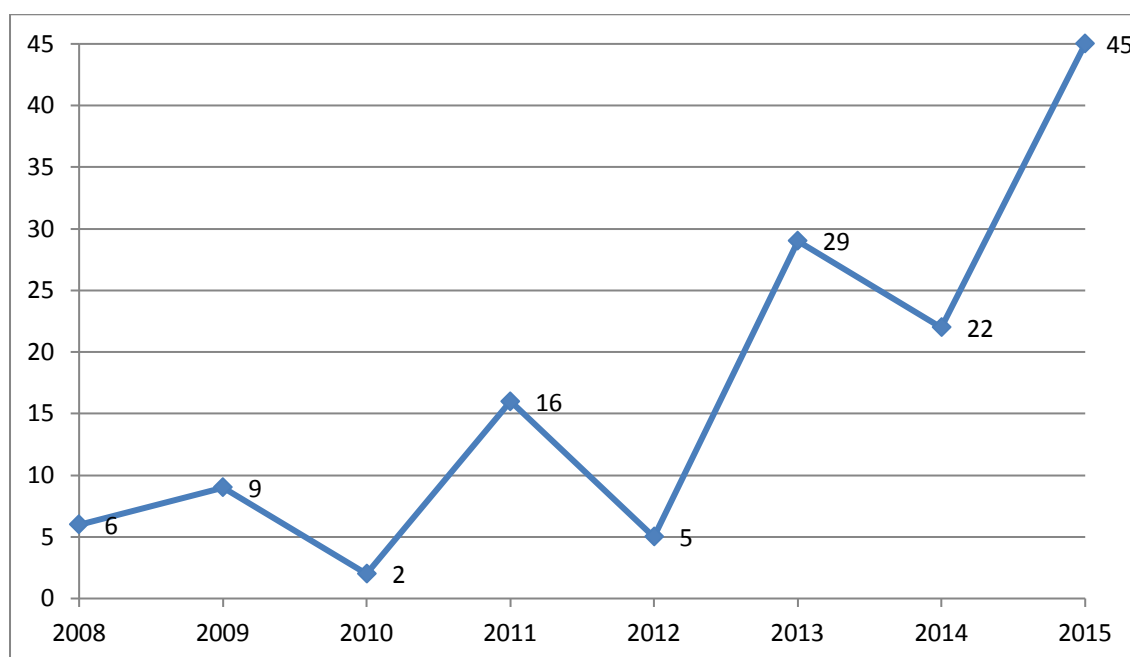
5.2 International trends in trade remedy investigations and measures

This section provides more detailed information on trends in trade remedy investigations and measures in the United States, the European Union, G-20 countries, the 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 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 2015.¹⁴⁰

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

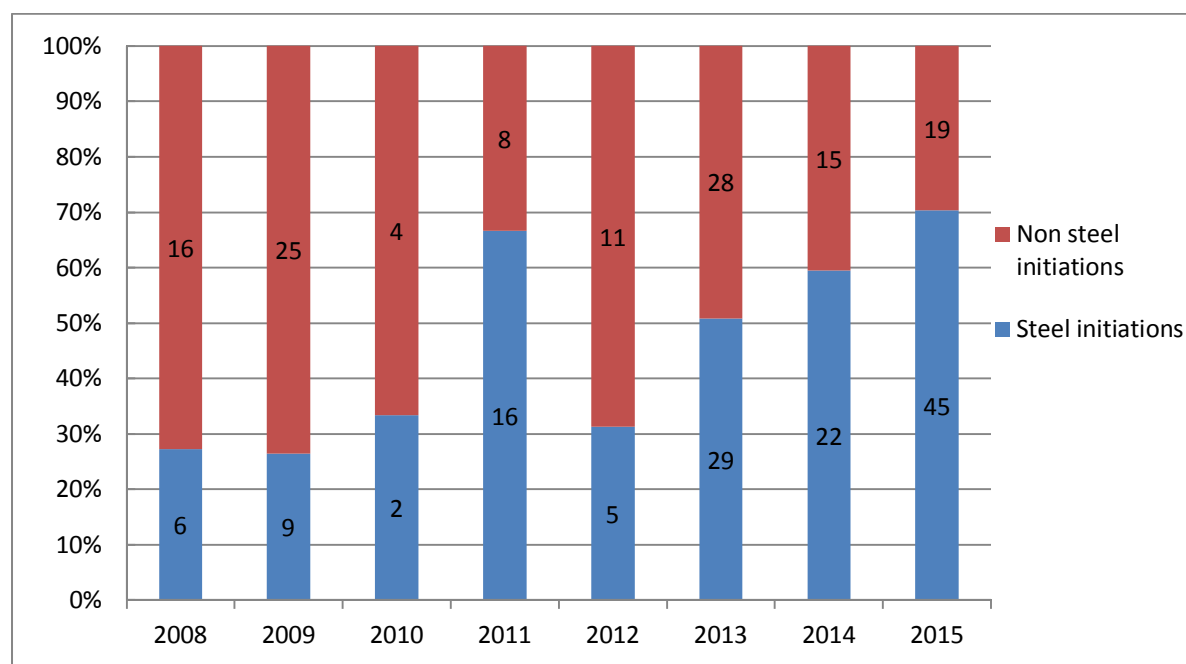


Source: United States Department of Commerce, International Trade Administration, Enforcement and Compliance website at <http://enforcement.trade.gov/stats/inv-initiations-2000-current.html>

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 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.

¹⁴⁰ 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.

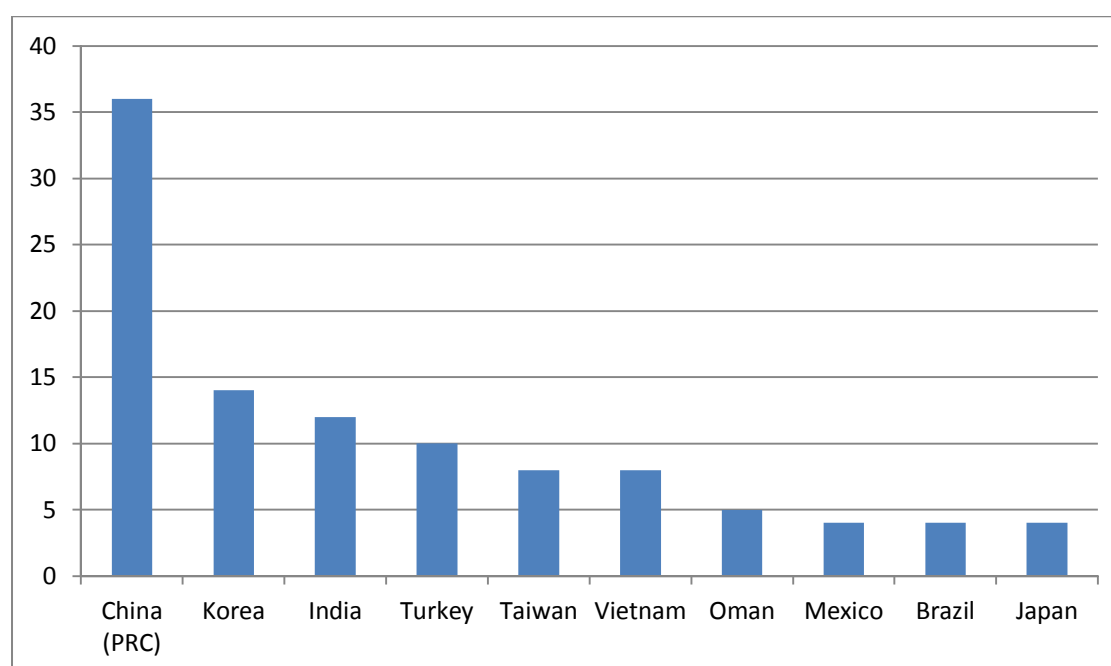
Figure 5.2: United States anti-dumping and countervailing investigations initiated against steel products as a proportion of total investigations initiated



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 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)

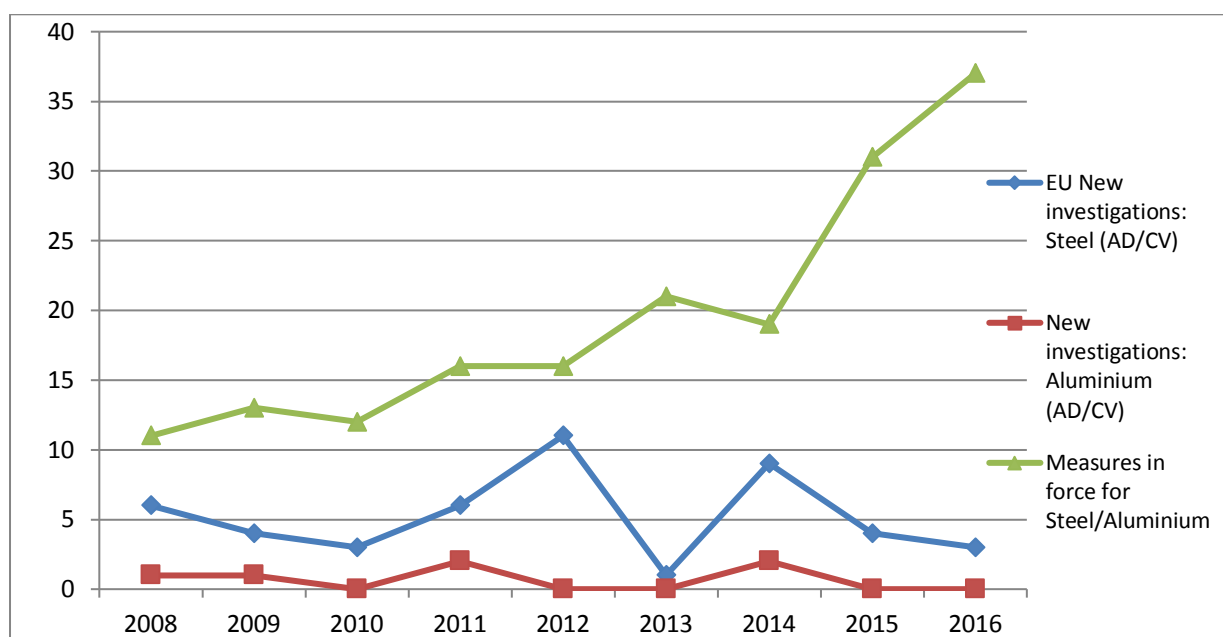


Source: United States Department of Commerce, International Trade Administration, Enforcement and Compliance website at <http://enforcement.trade.gov/stats/inv-initiations-2000-current.html>

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. 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 per cent of anti-dumping investigations initiated by G-20 economies in the period July 2013 to July 2016. Of those investigations, steel accounted for a substantial proportion, approximately 80 per cent 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 per cent 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.¹⁴¹ A total of 117 measures are currently in force among the Asian region countries shown in Table 5.1. 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.

¹⁴¹Global 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.

Why do rates differ between jurisdictions?

There are multiple reasons why dumping or countervailing duty rates applied to seemingly similar products can differ significantly between jurisdictions.

Differences can result from investigation-specific factors such as how goods are specified (the size of the good), the investigation period, whether certain countries are treated as non-market economies, differences in market conditions between jurisdictions, different export prices of the good into different markets, and differences in trading behaviour by different exporters. As a result, there can be differences in the level of dumping by or subsidisation of different exporters found in investigations by different jurisdictions.

Differences in duty rates can also result from differences in domestic legislation and how legislative provisions are applied in different jurisdictions. Common differences include the treatment of non-market economies and uncooperative exporters. The form of measures applied can also contribute to differences in the effective duty rate applied between jurisdictions.

A recent example of where significantly different levels of duties were applied to similar products in different jurisdictions was Chinese exports of cold rolled coil. While Chinese exports to the United States attracted a dumping duty of 266 per cent, exports to the EU and Malaysia attracted rates of up to 22 per cent and 24 per cent respectively.

In contrast, recent investigations undertaken by the European Union, Canadian and Australian authorities into Chinese exports of steel reinforcing bar resulted in similar duties being applied. Duties applied were up to 22, 27 and 30 per cent respectively.

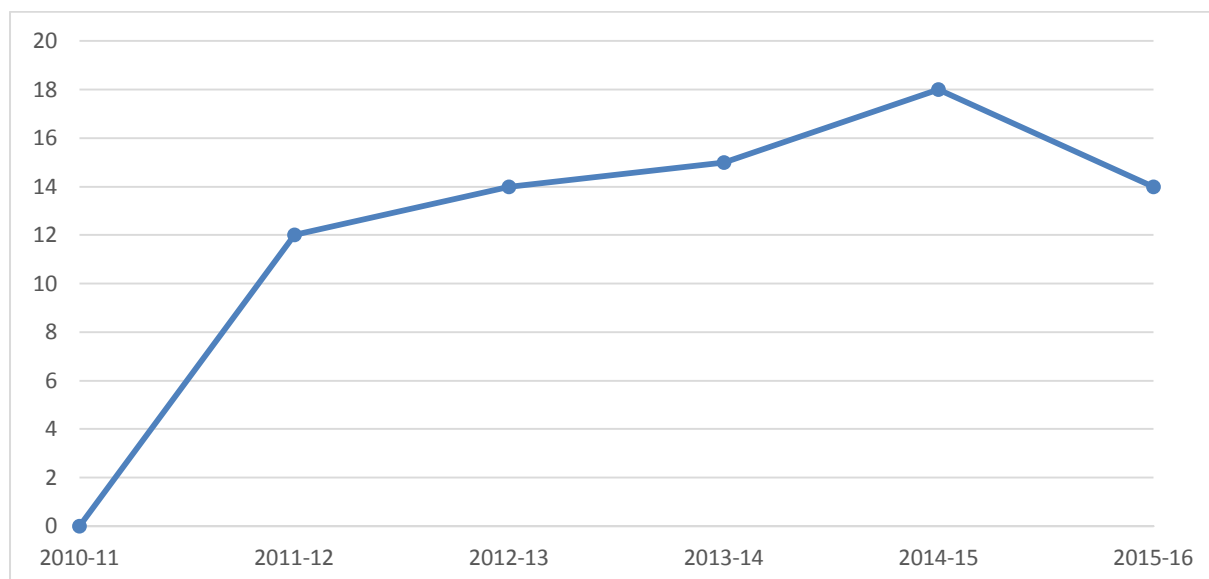
5.3 Australian trends in trade remedy investigations and measures

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).¹⁴²

¹⁴² Figures include anti-dumping, countervailing and anti-circumvention investigations.

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

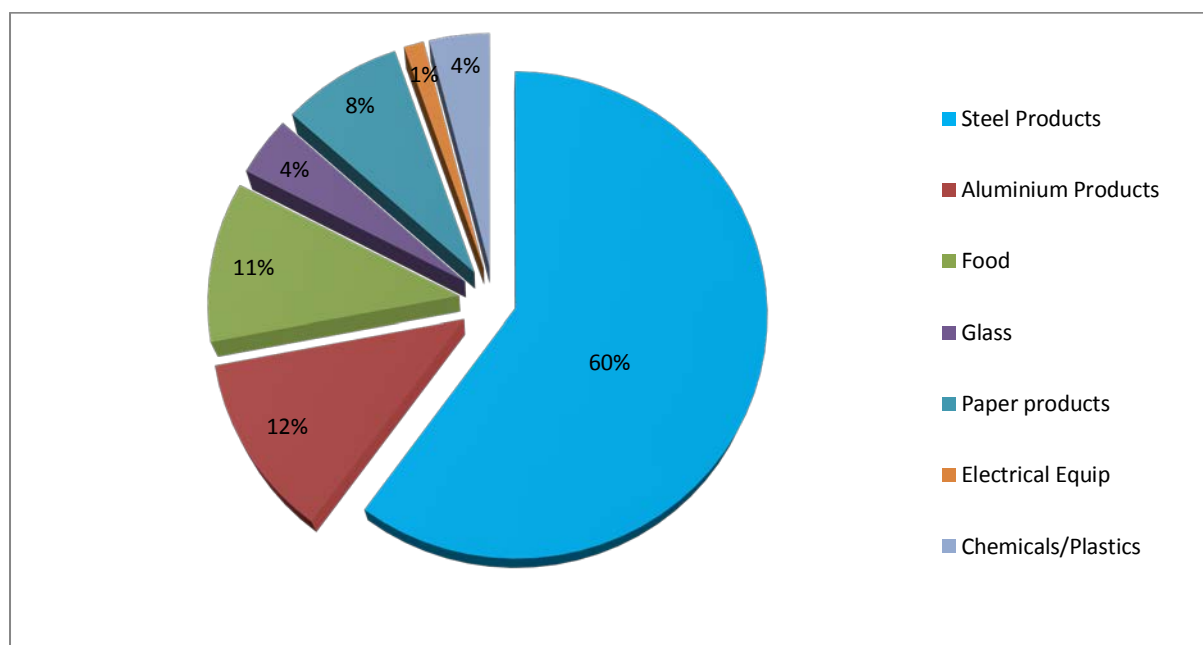


Source: Anti-Dumping Commission

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 14 in 2015-16. 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 shows a snapshot of Australian trade remedy cases (all types including investigations, reviews and inquiries) as at July 2016 broken down by industry. Investigations for steel, at 60 per cent, and aluminium, at 12 per cent, together comprise 72 per cent of the Commission's current caseload.

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

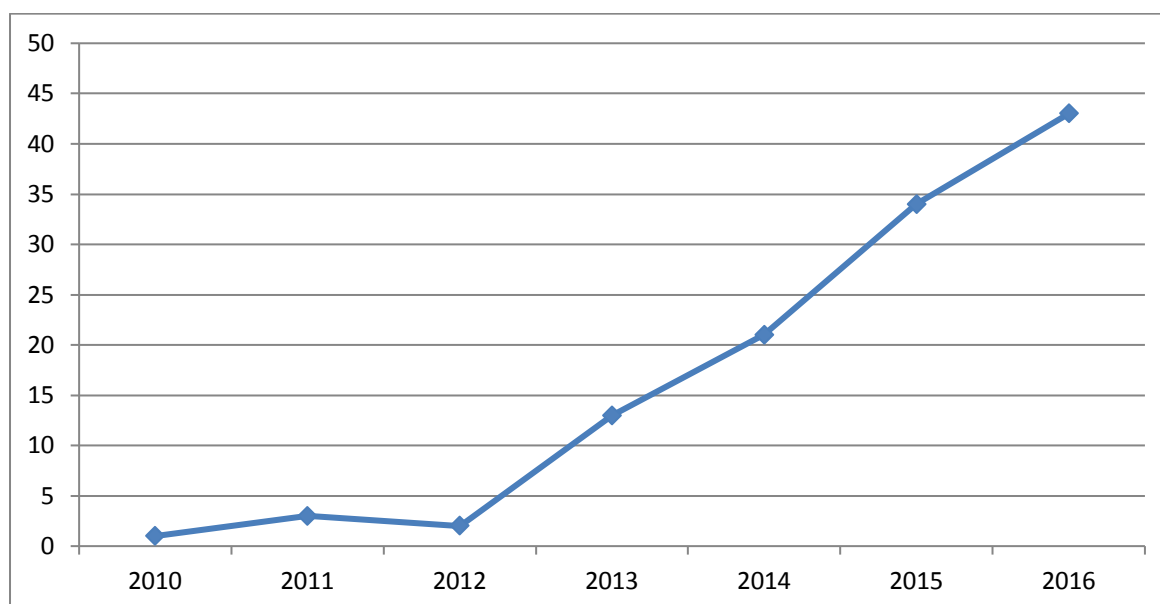


Source: Anti-Dumping Commission

5.3.2 Trade remedy measures in force in Australia

As a result of completed investigations, there were, as at July 2016, 43 trade remedy measures in force for steel and aluminium. Figure 5.7 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 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

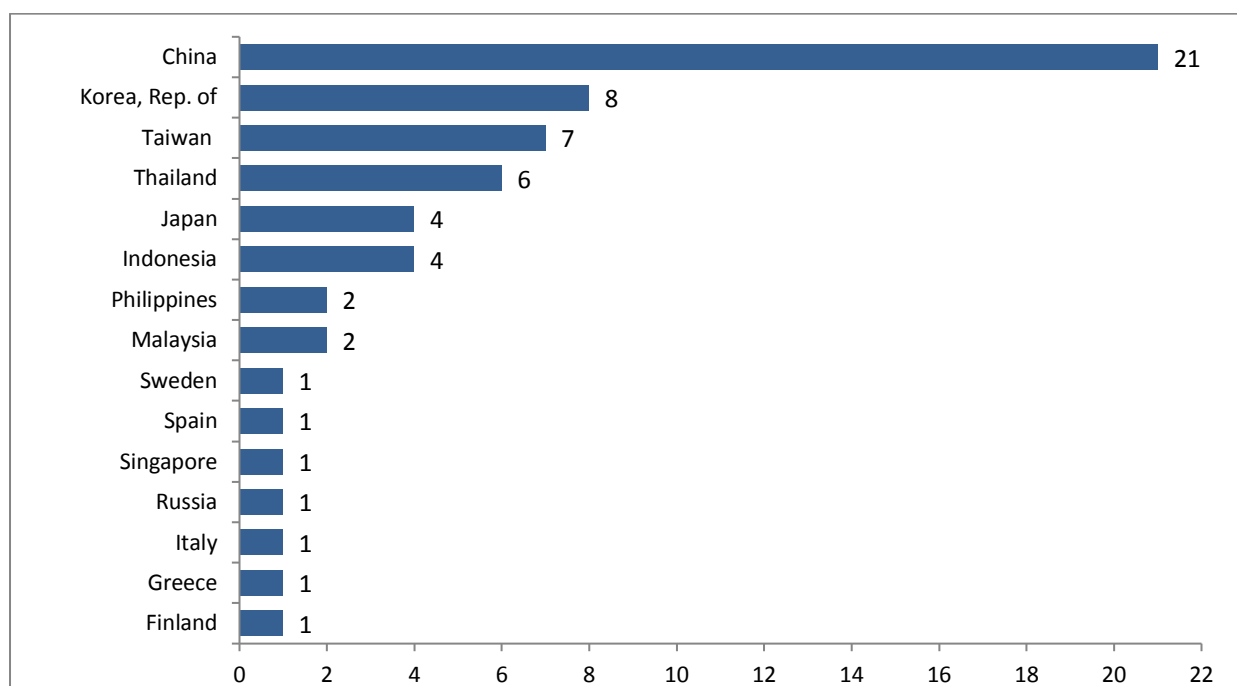
Year (at February)	Steel and aluminium measures as percentage of total measures
2010	4.3%
2011	13.0%
2012	8.0%
2013	36.1%
2014	47.7%
2015	60.7%
2016	70.5%

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 July 2016 by country.

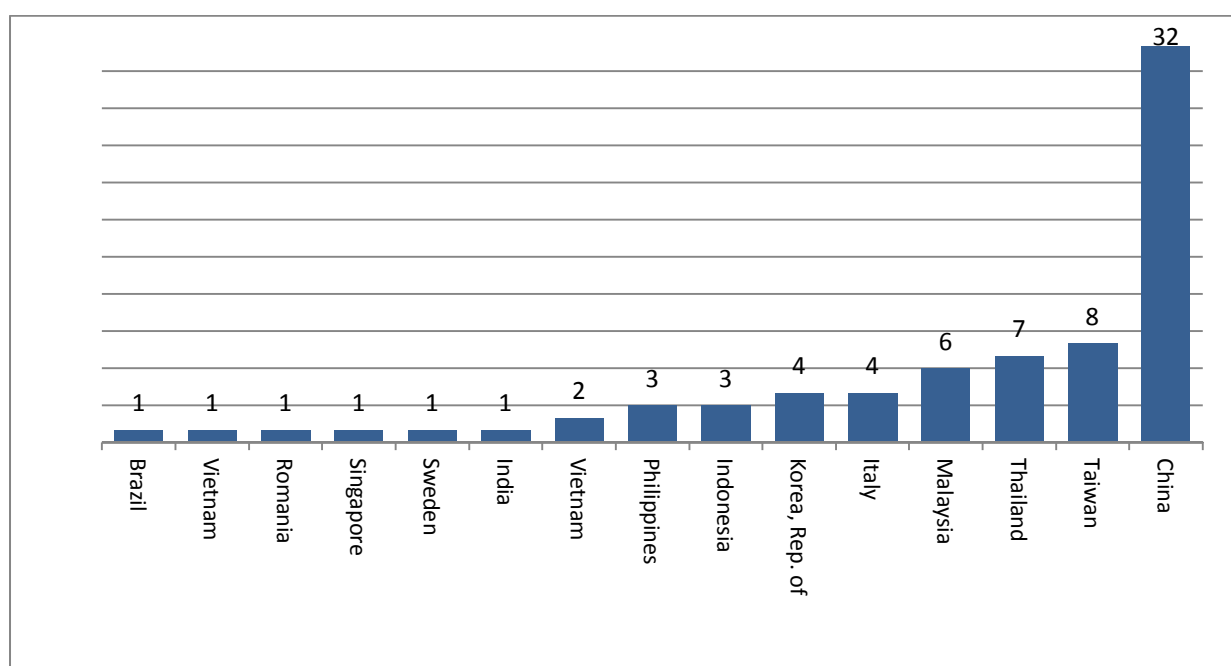
Figure 5.8 Australian trade remedy measures in force by country as at July 2016



Source: Anti-Dumping Commission

Cases 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 cases as at July 2016 by country.

Figure 5.9 Australian trade remedy investigations on hand as at July 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 operational 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

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.

The Commission has 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.

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*.

Consistent themes were identified on the effectiveness of measures and circumvention and compliance.

Taking this information together, the Commission has assessed the effectiveness of Australian anti-dumping and countervailing duties, and set out its conclusions in this chapter.

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 2014.¹⁴³

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.

¹⁴³ BlueScope Steel submission, p. 3.

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,¹⁴⁴ 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:** 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 the possible export of goods through one or more third countries.
- **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 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.
- **Assembly of parts in Australia:** This activity captures circumstances where parts representing a significant value of the assembled goods are manufactured in a country subject to measures and exported to Australia as parts, which do not attract interim dumping or countervailing duty. The parts are then used in the manufacture of the assembled goods in Australia that would have been subject to interim dumping or countervailing duty, had they been exported to Australia in the assembled state.
- **Assembly of parts in a third country:** This activity is similar to assembly of parts in Australia (described above); however for this activity, the assembly of the goods that would have been subject to measures occurs in a third country which is not subject to measures. The goods are subsequently exported to Australia from the third country in their assembled state and do not attract interim dumping or countervailing duty.

¹⁴⁴ An ad valorem measure applies duty as a proportion of the actual export price of the goods.

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.

DIBP is responsible for collecting anti-dumping and countervailing duties and 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 circumstances¹⁴⁵). This behaviour may minimise duty payable and undermine the effectiveness of measures.
- **‘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

¹⁴⁵ Section 269TN of the Customs Act.

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.

- **'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.

6.3 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.

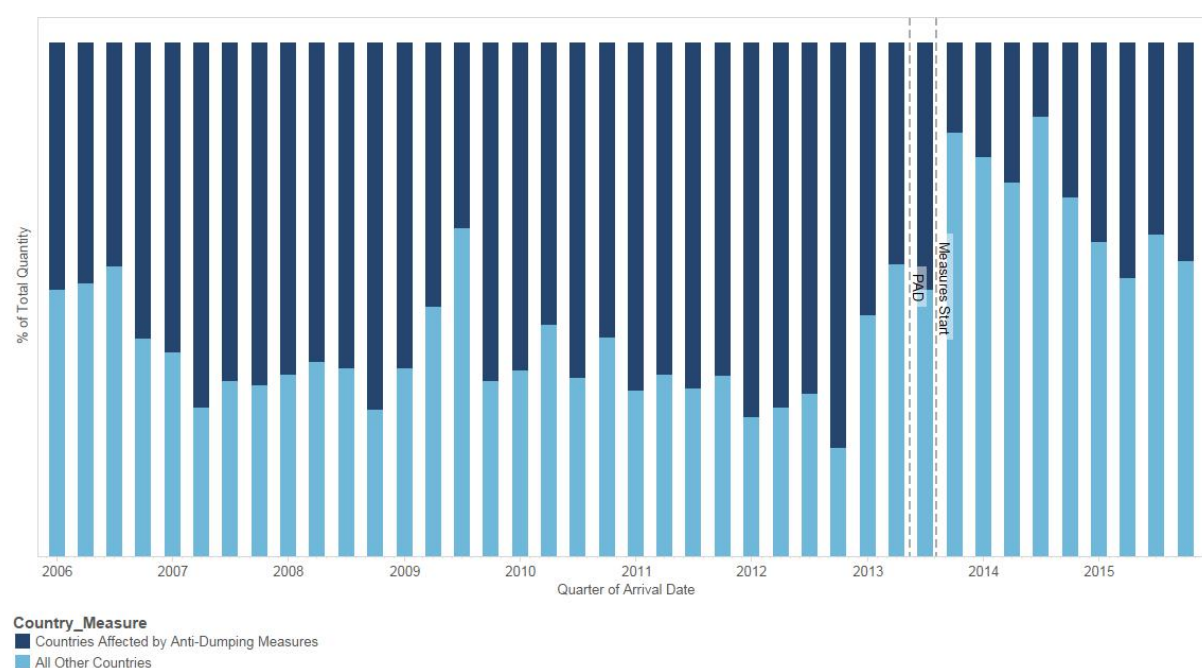
The analysis of the import data in this section focuses on identifying how the imposition of measures has affected the composition of imports. In the next section, the Commission reports on its analysis of import data in combination with data from the Australian industry—this analysis gives a fuller 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)



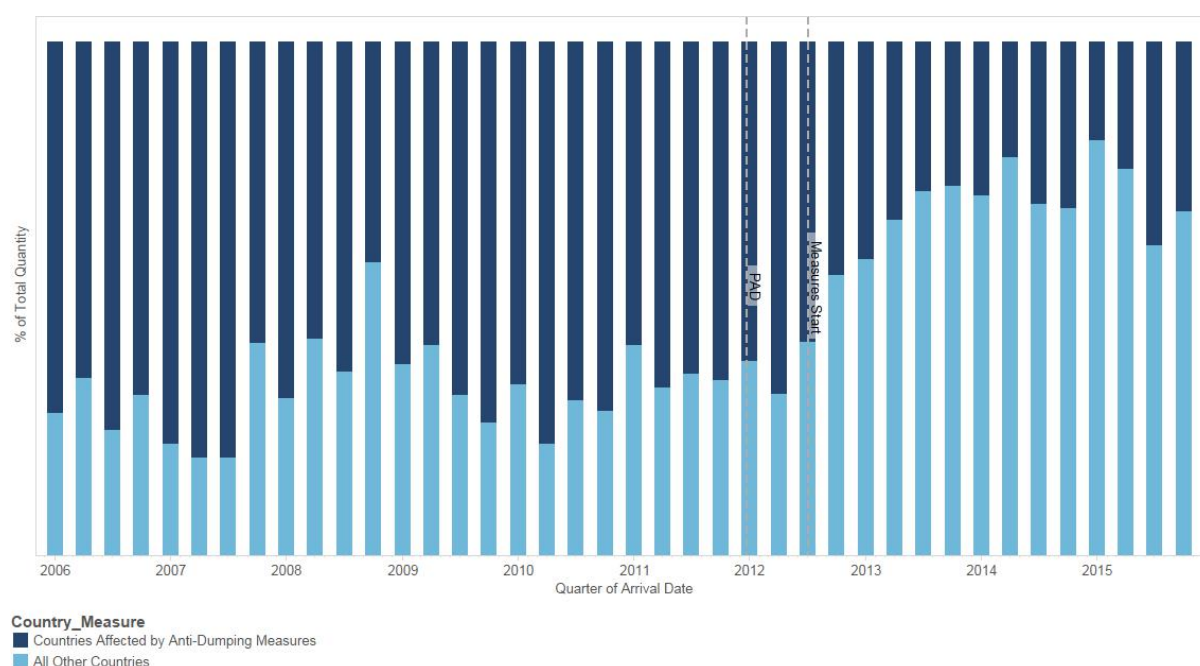
Source: DIBP trade data

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)



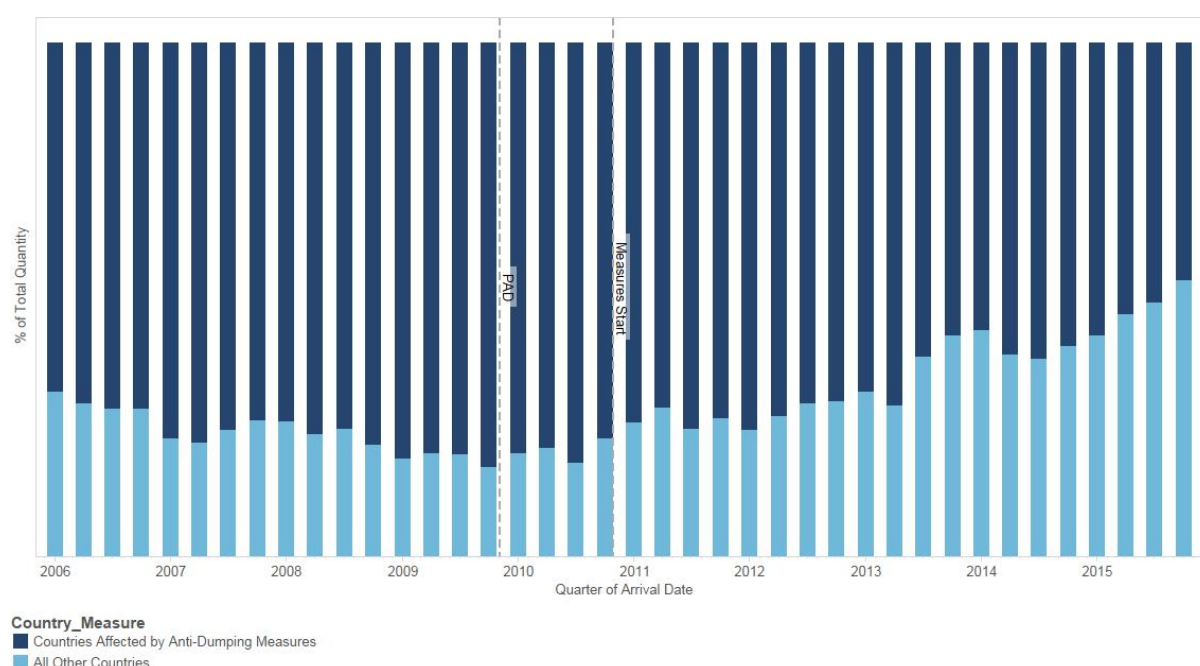
Source: DIBP trade data

Similar to zinc coated (galvanised) 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 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.

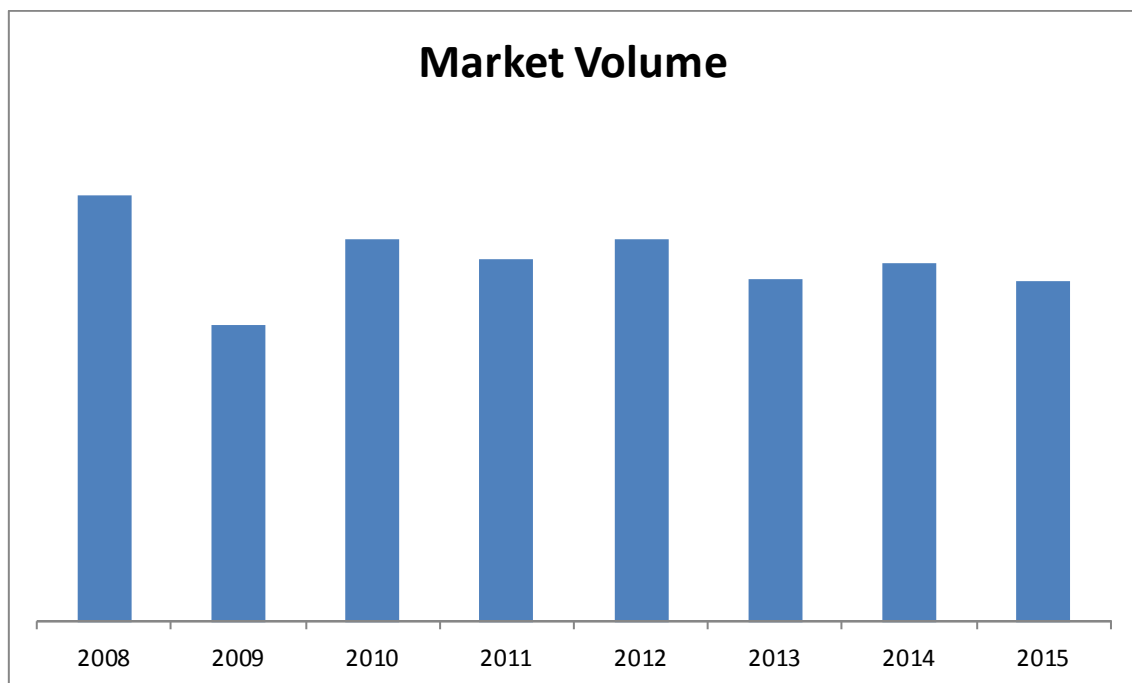
The data does not cover the entire Australian steel and aluminium market, but the Commission considers that the coverage of the products listed above provides a reasonable basis for a preliminary assessment of the effectiveness of measures.

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).

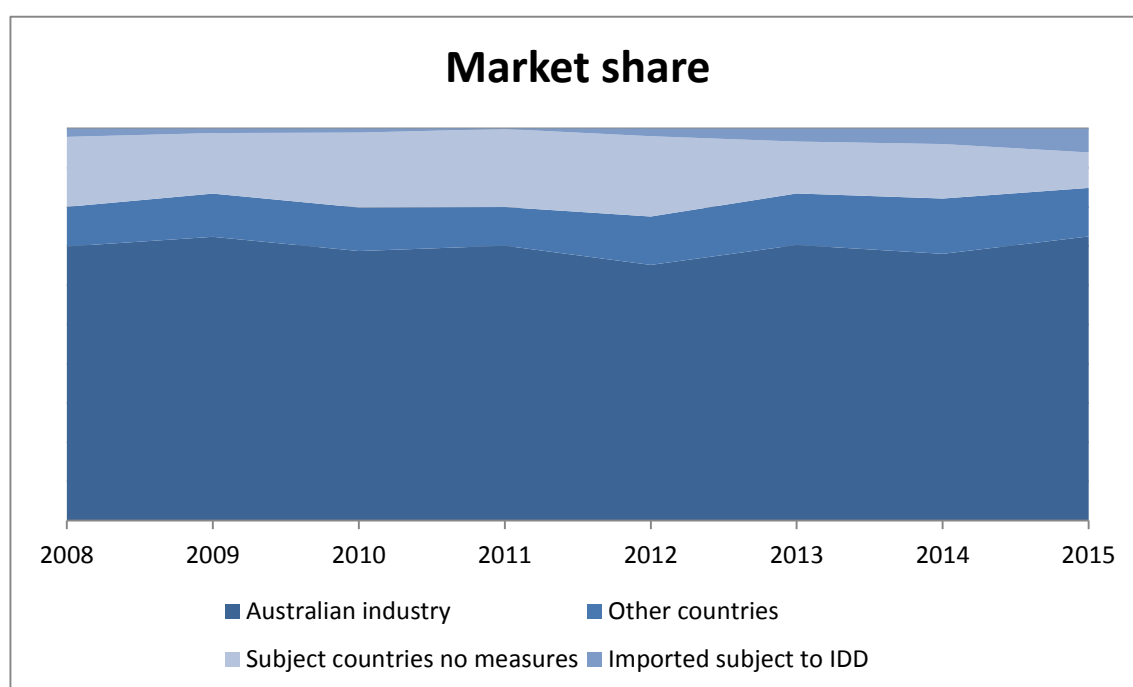
Figure 6.4: Total sales volumes of Australian manufactured and imported steel



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



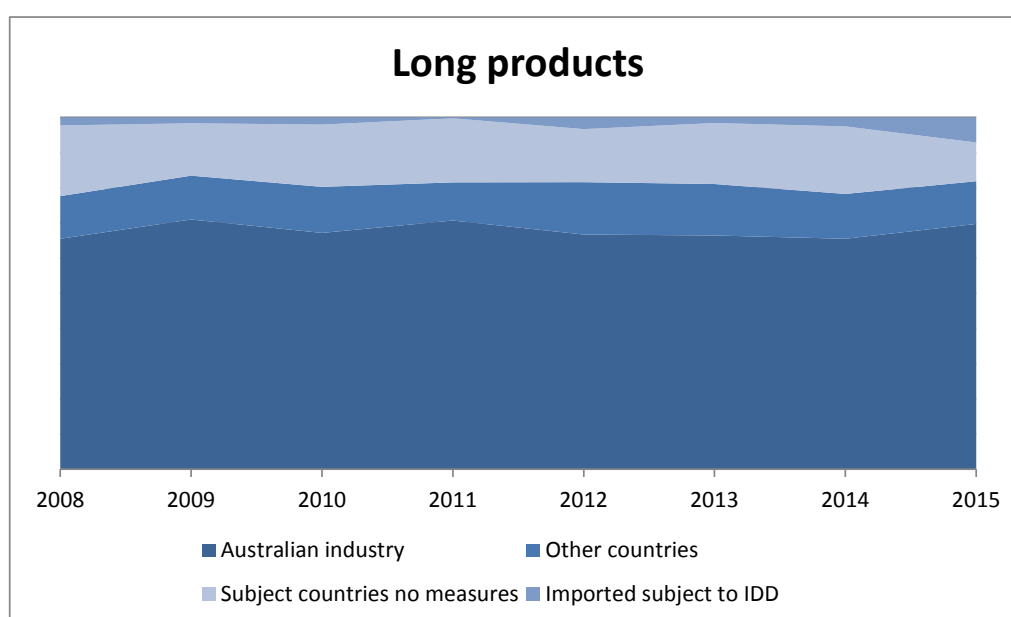
Note: IDD refers to import anti-dumping duties

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

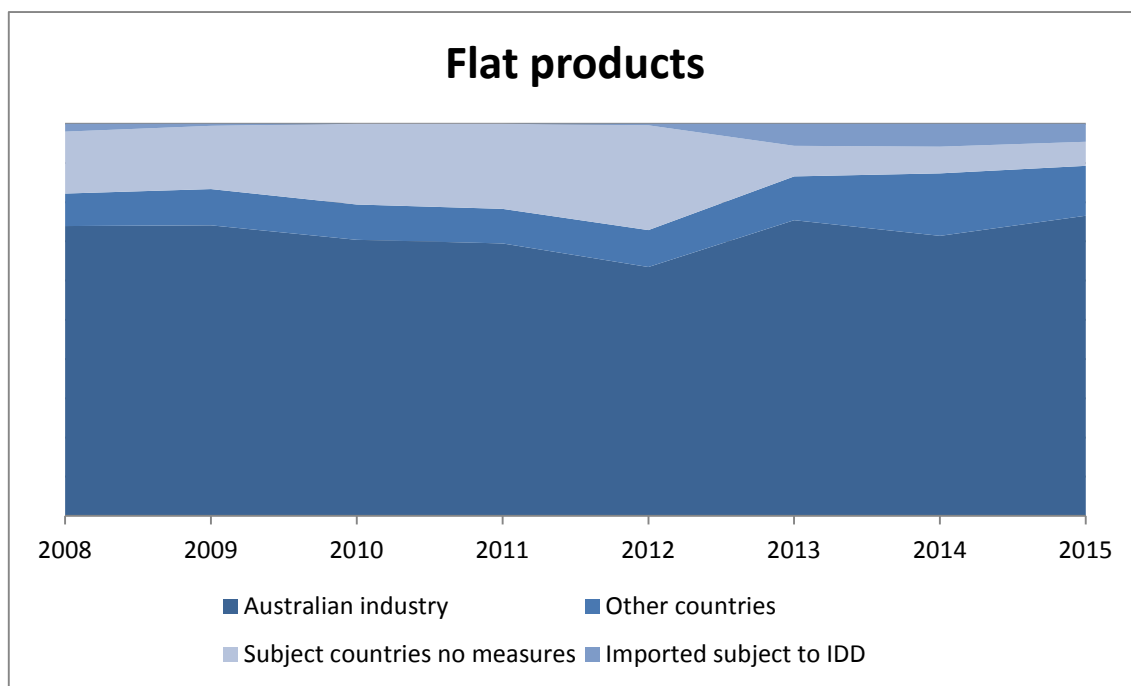


Note: IDD refers to import anti-dumping duties

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

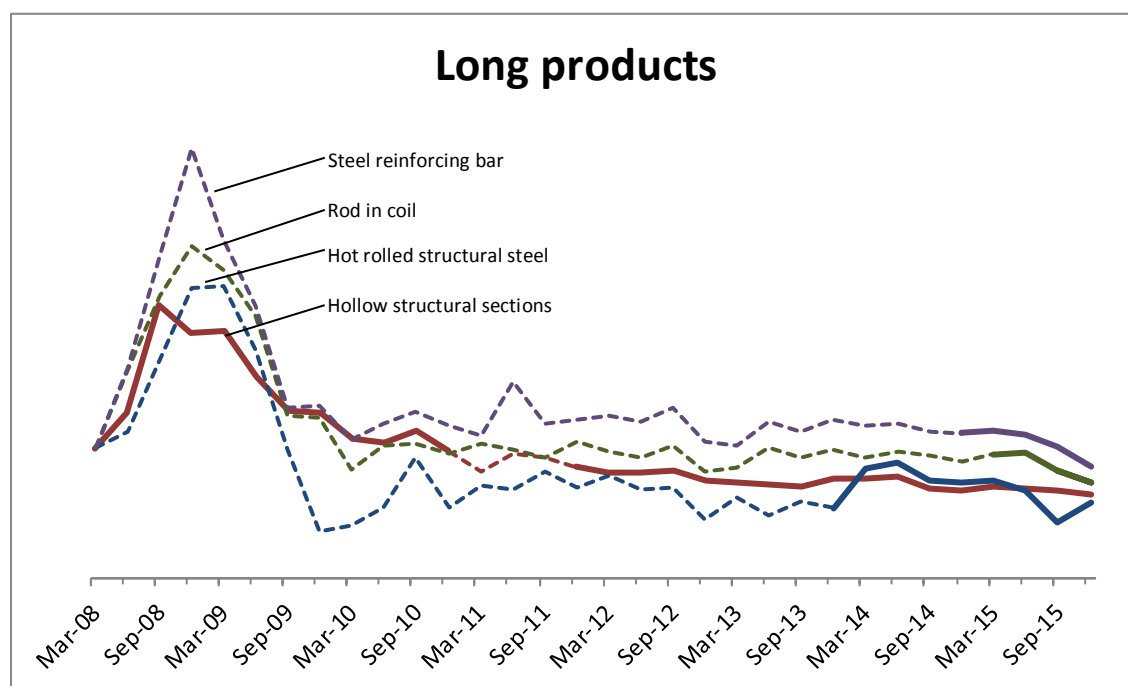
6.4.3 Steel selling prices

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.

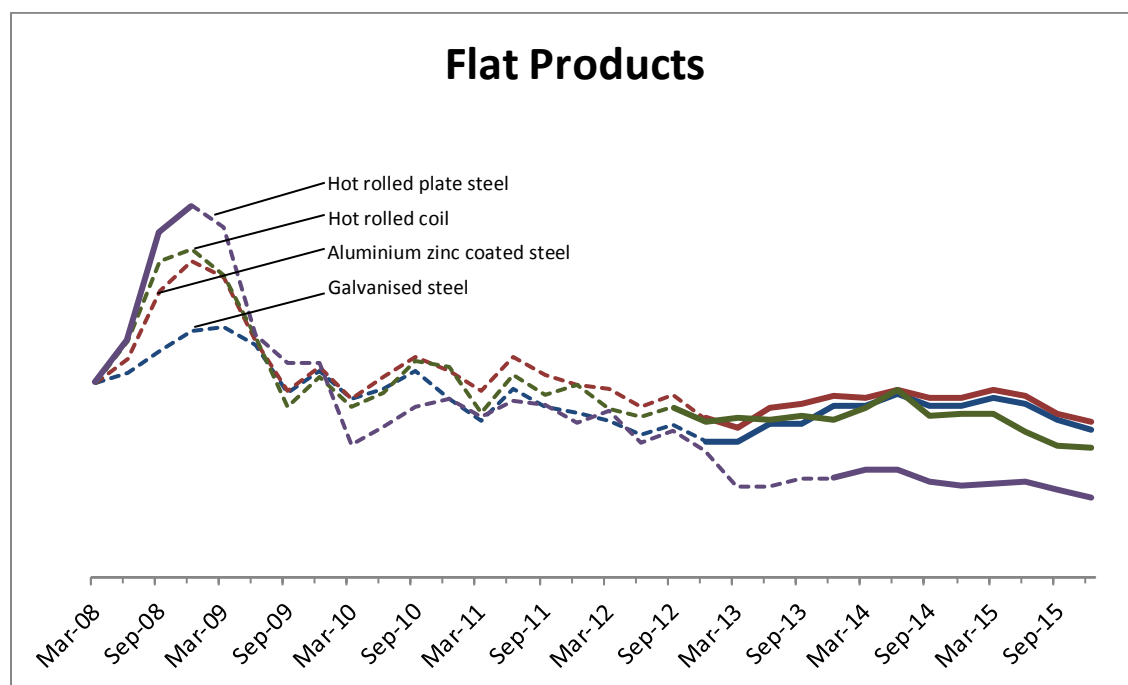
Figure 6.8: Weighted average prices of long steel products sold by the Australian industry, indexed to March 2008



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

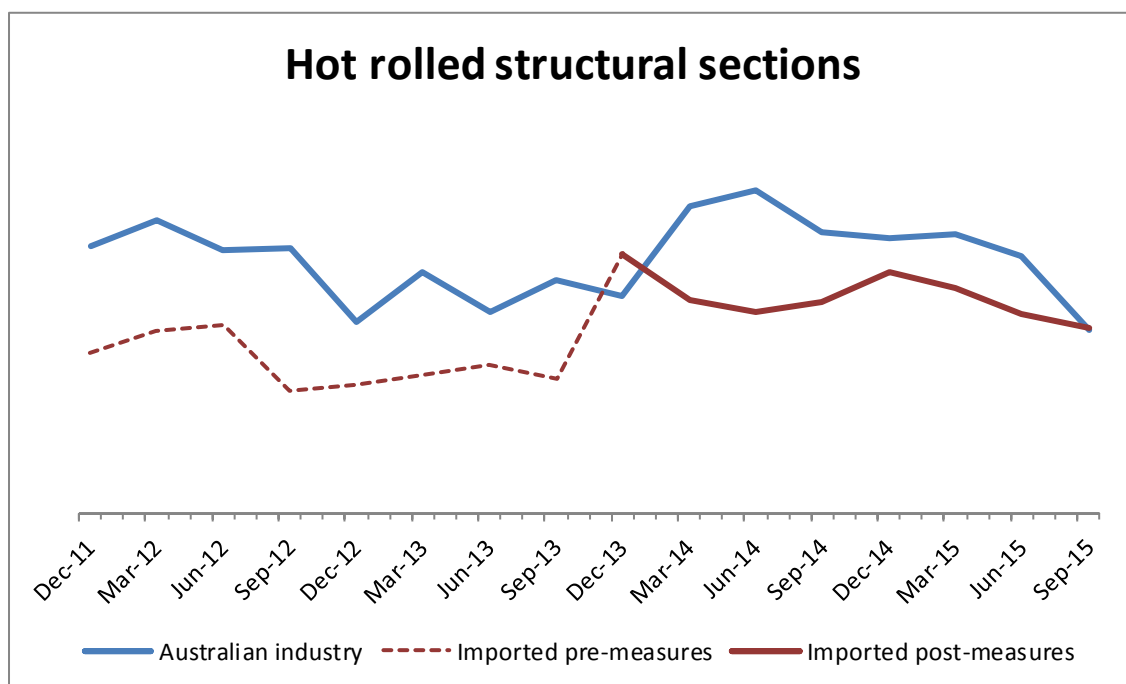


Source: Anti-Dumping Commission using DIBP trade data and industry sales data

Note: Solid line signifies measures in place.

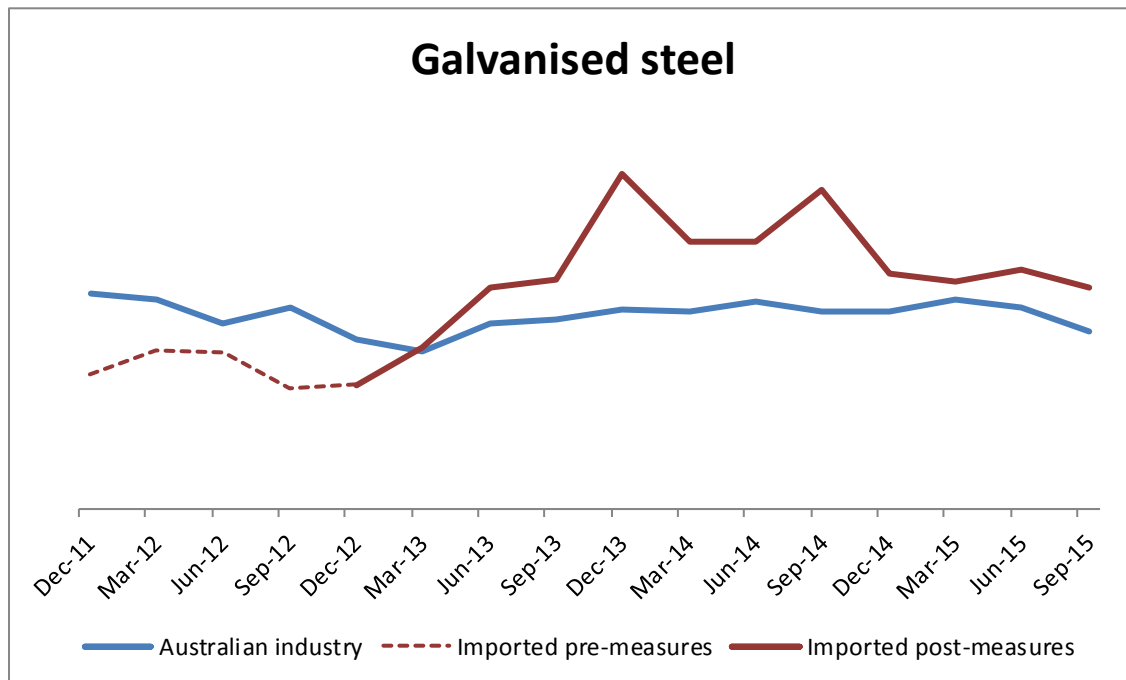
Comparing Australian industry's selling prices and landed import prices (inclusive of securities and duties), the available data for hot rolled structural sections and galvanised steel (Figures 6.10 and 6.11 respectively) indicate that measures have been effective in raising the landed import price for 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

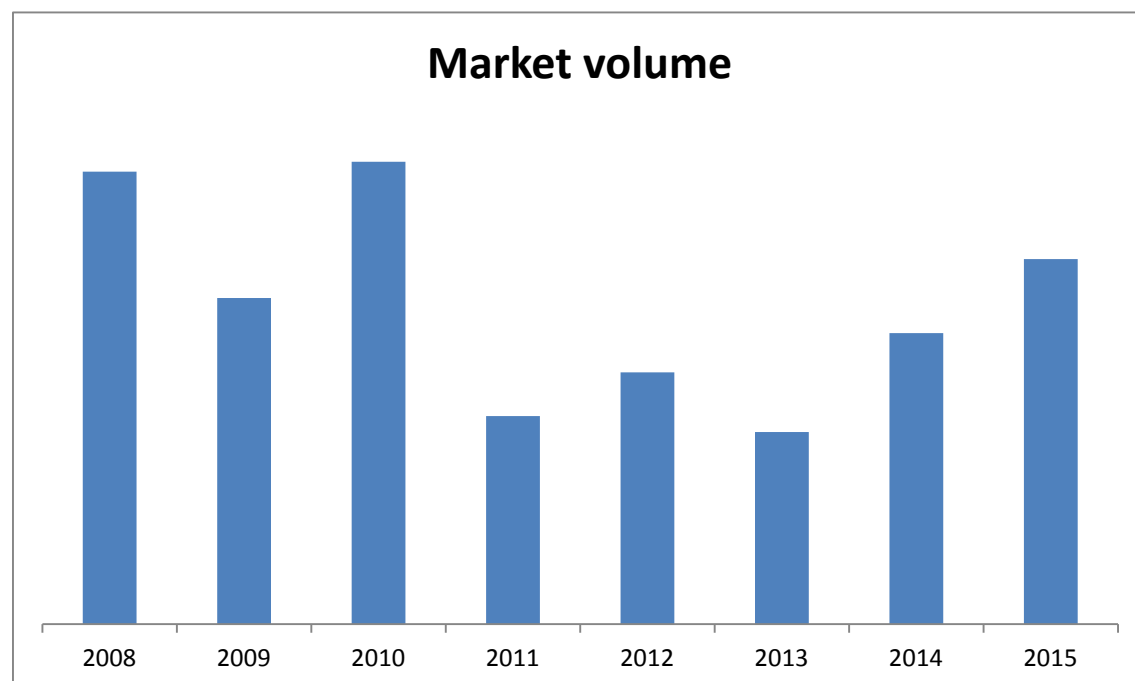


Source: Anti-Dumping Commission using DIBP trade data and industry sales data

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.

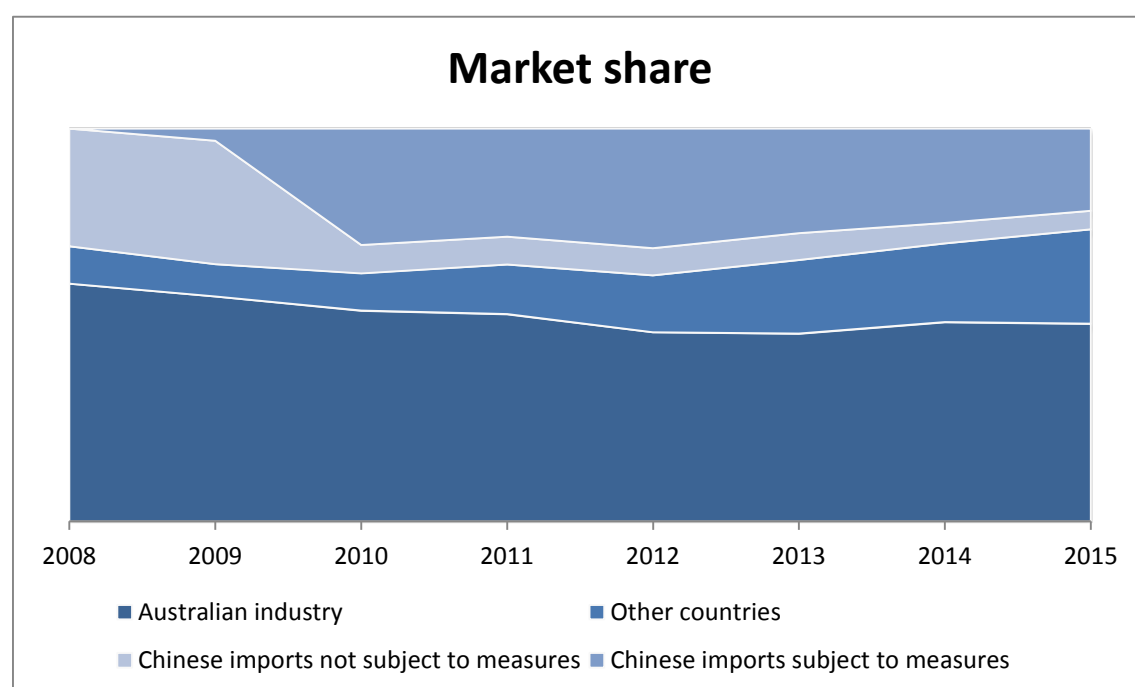
Figure 6.12: Sales volumes of Australian manufactured and imported aluminium extrusions



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



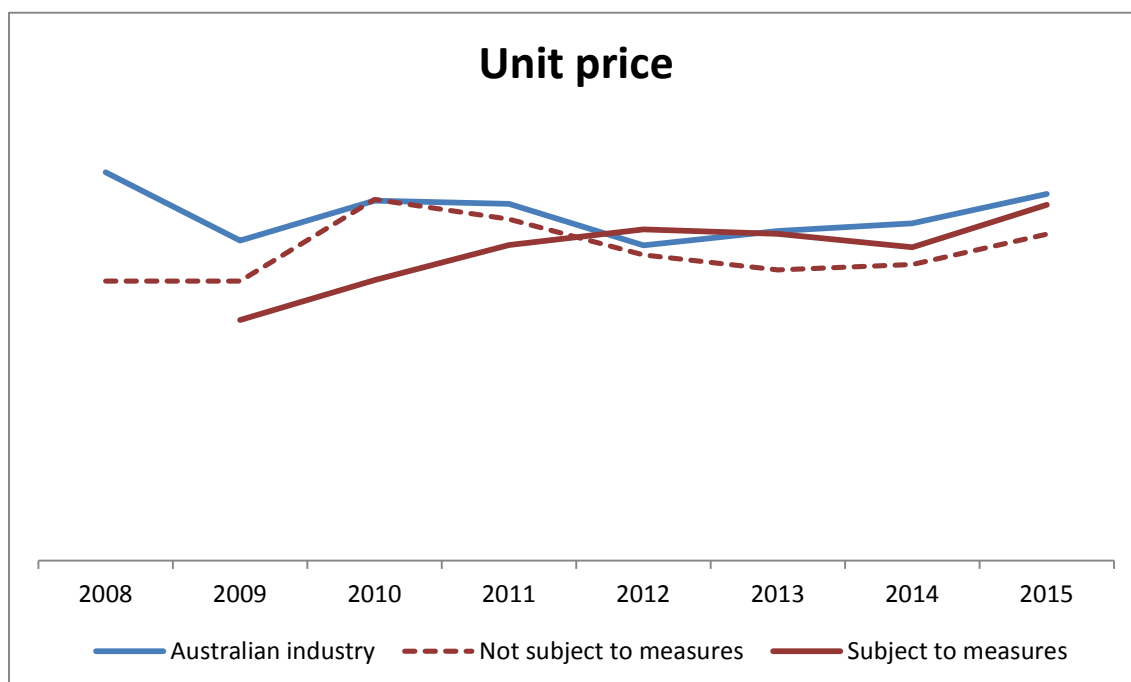
Source: Anti-Dumping Commission using DIBP trade data and industry sales data

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

Attachment 1: 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.