Australian Government
Department of Foreign Affairs and Trade

IMPACT OF ABS CONFIDENTIAL RESTRICTIONS ON EXPORTS OF NICKEL – UPDATE FOR 2018

Introduction

This article updates analysis of the impact of confidentiality restrictions in Australian Bureau of Statistics (ABS) international merchandise trade statistics on exports of Australian nickel products. These restrictions have led to some significant distortions in the time series for exports of nickel products and by extension, *Simply transformed manufactures (STM)*.

Attachment A provides an update on the methodology used to calculate Australian *Nickel* and *STM* exports using both ABS reported and partner country data for 2018.

Trends in Australian Nickel exports in 2018

Based on ABS reported and partner country data, DFAT estimates that Australian exports of *Nickel* rose by 57.8 per cent (or $1.6 billion) to $4.3 billion in 2018. This followed a rise of 13.9 per cent (or $337 million) to $2.7 billion in 2017.

The world *Nickel* price in 2018 rose to a yearly average of US$13,114 per tonne – see Chart 1. World Nickel prices surged in the first half of 2018 on the back of increased stainless steel production but have since abated somewhat due to the announcement of several large new nickel projects overseas.

Chart 1: World Nickel prices

Source: London Metal Exchange – Nickel spot price.

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In the 2018-19 financial year (Department of Industry, Innovation & Science) forecast, Australian nickel mine production to rise by 3.1 per cent while Australian refined and intermediate-use nickel production will rise 2.2 per cent.[1]

The rises in both Australian production and average world prices, contributed to the increase in Australian *Nickel* exports in 2018. Within *Nickel* the major export components recording rises included:

- *Nickel & nickel alloys unworked,* which rose 55.3 per cent (or $1.2 billion) to $3.3 billion
- *Nickel powders & flakes*, which rose 280.8 per cent (or $279 million) to $378 million.

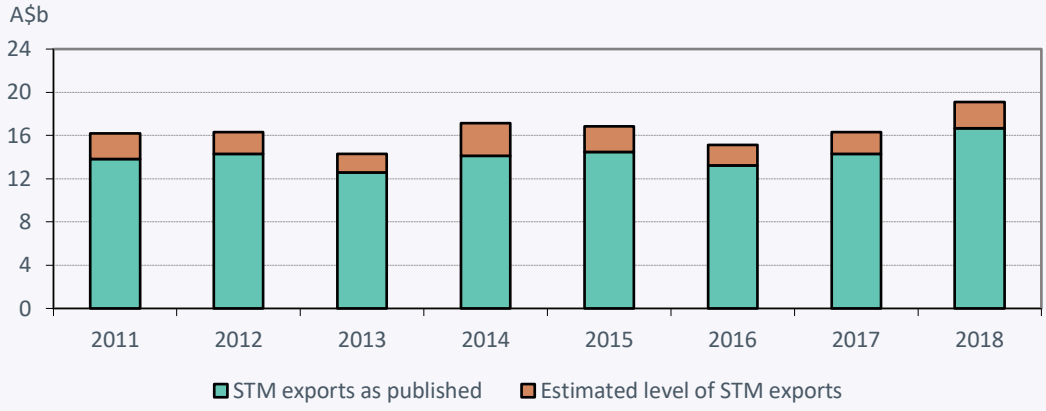
These rises were partly offset by *Nickel ores & concentrates,* which fell 0.9 per cent (or $3 million) to $277 million.

Impact of confidential Nickel exports on Australian STM exports in 2018

The large value of confidential *Nickel* exports in ABS trade statistics has meant that the total value of Australian *STM* exports has been understated since February 2003 in ABS reported data. From July 2018, *Unwrought Nickel alloys, not alloyed* will be included in ABS data at the Australia total level only as the confidential restriction has been eased from 'No commodity details' to 'No country details'. The total value of *Primary products* exports is also affected, but to a lesser extent.

DFAT estimated the level of Australian *STM* exports (including confidential *Nickel*) was valued at $19.1 billion in 2018 (compared to $16.7 billion using *STM* exports compiled from ABS reported data alone). *STM* exports were therefore under-reported by around 15 per cent in 2018 – see Chart 2.

Chart 2: STM exports as compiled from ABS data vs DFAT estimated level of STM exports



Sources: ABS trade data on DFAT STARS database, Global Trade Atlas and UN Comtrade data.

When comparing the growth rates of *STM* exports in 2018, ABS data shows a rise of 16.4 per cent, while, based on DFAT estimates *STM* exports rose by 16.3 per cent.

As a result of these differences in the value and growth rates of *STM* exports, *STM* exports compiled from ABS reported data alone are identified as *STM (excl. Nickel)* in all DFAT trade statistical publications.

[1] Department of Industry, Resources and Energy report, December qtr 2018 and March qtr 2019

Next update

This analysis will be updated on an annual basis. The next update will be published in mid-2020.

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Updated: July 2019

ATTACHMENT A: METHODOLOGY FOR ESTIMATING NICKEL EXPORTS

Background

The ABS has a legal obligation to confidentialise data from an individual or organisation that is identifiable if that individual or organisation has requested that the data be suppressed. These restrictions affect the level of detailed merchandise trade data that is potentially available for release.

The ABS publishes monthly a list of merchandise trade commodities with confidential restrictions in its publication *International Merchandise Trade: Confidential Commodities List* (ABS catalogue 5372.0.55.0.01). More detail on how the ABS applies confidentiality in merchandise trade statistics is available in the ABS information paper *International Trade – Request to Confidentialise data* (ABS catalogue 5497.0.55.001). These products are available on the ABS website at www.abs.gov.au.

Impact of confidentiality on exports of Nickel products

In ABS statistics *Nickel mattes*, *Unwrought nickel & nickel alloys* and *Nickel powders & flakes* have the restriction applied of no commodity details. No data relating to these Australian Harmonized Export Commodity Classification (AHECC) commodities are released by the ABS.

Table A lists the ABS confidentiality restrictions applied to these nickel products and the dates from when they came into effect. The table also shows the DFAT Trade Import and Export Classification (TRIEC) codes[2] and the Standard International Trade Classification (SITC) codes which are affected by these restrictions. In this publication confidential nickel trade is classified to *Confidential items* (TRIEC code 3041 and SITC code 988).

Table A. Nickel products items subject to ABS confidentiality restrictions

TRIEC group	TRIEC code	SITC code	ABS AHECC codes	Restriction applied	From	Included in confidential TRIEC or SITC code (a)
PPP	1222	284.21	75011000 Nickel mattes	No commodity details	Jan-88	3041 & 988
STM	2313	683.11	75021000 Unwrought nickel, not alloyed	No commodity details	Feb-03 to Jun-18	3041 & 988
STM	2313	683.11	75021000 Unwrought nickel, not alloyed	No country details	Jul-18	3041 & 988
STM	2313	683.12	75022000 Unwrought nickel alloys	No commodity details	Feb-03	3041 & 988
ETM	2414	683.23	75040000 Nickel powders and flakes	No commodity details	Feb-03	3041 & 988

(a) At the Australia level only from June 2013 onwards.

Source: ABS catalogue 5372.0.55.001 - International Merchandise Trade: Confidential Commodities List.

[2] ABS AHECC data is used to compile the DFAT TRIEC classification.

Table B shows exports of *Nickel* products as published under the TRIEC classification from 2016 to 2018. It shows where the ABS confidential nickel restrictions impact on the TRIEC export data in this publication.

Table B: Australia's exports of Nickel products as published in ABS merchandise trade statistics

	Total exports			% growth	
TRIEC	2016 A$m	2017 A$m	2018 A$m	2017 to 2018	5 year trend
Total Nickel products	**346**	**350**	**1,246**	**..**	***-20.3***
Unprocessed primary products					
Other metalliferous ores & concentrates					
Nickel ores & concentrates	291	280	277	*-0.9*	*-25.0*
Processed primary products					
Metallic minerals, processed					
Nickel mattes	np	np	np	..	..
Nickel sinters	16	0	3	..	..
STM					
Non-ferrous metals, simply transformed					
Nickel & nickel alloys unworked	np	np	841	..	..
Unwrought nickel, not alloyed	np	np	841	..	..
Unwrought nickel alloys	np	np	np	..	..
ETM					
Non-ferrous metals, elaborately transformed					
Nickel bars, rods and profiles	37	69	122	*78.0*	*-35.5*
Nickel powder & flakes	np	np	np	..	..
Other nickel alloys & articles	2	2	3	*72.2*	*-6.2*

Source: Derived from ABS trade data on DFAT STARS database.

Alternative sources of information on Australia's Nickel exports

By using partner country import data (e.g. Japan's imports from Australia) it is possible to get an idea of the size of Australia's exports of confidential nickel commodities.

It should be noted that data on *Nickel* products as published by our major trading partners are not fully compatible with data as published by the ABS. This is due to certain timing, coverage and valuation differences that will exist between the two data sets. (For more information on the quality of the data sourced from our trading partners please refer to the section on quality of these estimates at the end of this article.)

Based on partner country import data, Table C shows that our major trading partners imported around $2.4 billion of Australian *Nickel & nickel alloys unworked* in 2018 (excluding *Unwrought Nickel alloys, not alloyed* which is included in ABS data at the Australia total level from July 2018 onwards). Our major trading partners also imported $286 million of Australian *Nickel mattes* and $378 million of *Nickel powder & flakes*.

Table C: Imports of Australian Nickel products for those items classified as confidential in ABS statistics

TRIEC	2016 A$m	2017 A$m	2018 A$m
Processed primary products			
Nickel mattes	162	194	286
STM			
Nickel & nickel alloys unworked	**1,865**	**2,105**	**2,428**
ETM			
Nickel powder & flakes	40	99	378

Sources: Global Trade Atlas and UN Comtrade data.

Estimate of exports of Nickel products using both ABS and partner country data

DFAT has combined both ABS and partner country trade data to calculate an estimate of the level of exports of Australian nickel products and STM exports over time. The results of this analysis are shown in Table D below.

Table D: Australia's exports of Nickel products using both ABS and partner country data

TRIEC	2016 A$m	2017 A$m	2018 A$m	% growth 2017 to 2018	% growth 5 year trend
Total Nickel products	**2,412**	**2,749**	**4,338**	***57.8***	***-6.4***
Unprocessed primary products					
Other metalliferous ores & concentrates					
Nickel ores & concentrates	291	280	277	*-0.9*	*-25.0*
Processed primary products					
Metallic minerals, processed					
Nickel mattes	162	194	286	*47.2*	*-13.2*
Nickel sinters	16	0	3	*..*	*..*
STM					
Non-ferrous metals, simply transformed					
Nickel & nickel alloys unworked	1,865	2,105	3,269	*55.3*	*4.0*
ETM					
Non-ferrous metals, elaborately transformed					
Nickel bars, rods and profiles	37	69	112	*78.0*	*-35.5*
Nickel powder & flakes	40	99	378	*280.8*	*28.5*
Other nickel alloys & articles	2	2	3	*72.2*	*-6.2*
Impact on STM exports					
STM exports (ABS data only)	***13,247***	***14,322***	***16,670***	***16.4***	***3.3***
STM exports including Nickel unworked	***15,112***	***16,427***	***19,098***	***16.3***	***2.9***

Compiled using partner country import data.

Sources: ABS trade data on DFAT STARS database, Global Trade Atlas and UN Comtrade data.

Major markets for Nickel mattes and Nickel alloys unworked

Tables E and F show *Nickel mattes* and *Nickel alloys unworked* by major Australian market sourced from import data from our trading partners. In 2018, Australia's major markets for *Nickel mattes* were Norway, valued at $171 million (up 122.4 per cent) and Japan at $147 million (up 95.0 per cent).

Australia's major markets for *Nickel & nickel alloys unworked* in 2018 were China, valued at $1.3 billion (up 157.0 per cent), followed by EU28 valued at $722 million (up 161.4 per cent), Japan valued at $330 million (up 232.6 per cent) and Taiwan at $238 million (down 48.4 per cent).

Table E: Imports of Australian nickel mattes by major trading partner (a)

	2015 A$m	2016 A$m	2017 A$m	2018 A$m	% growth 2017 to 2018
Total imports (c)	**251**	**162**	**194**	**286**	***47.2***
China (a)	162	91	62	0	*-100.0*
European Union 28 (a)	65	26	0	0	*..*
Japan (a)	21	56	75	147	*95.0*
Norway (a)	31	6	77	171	*122.4*

(a) c.i.f. basis. (b) f.o.b. basis. (c) Adjusted to an f.o.b. basis.

Sources: Global Trade Atlas and UN Comtrade data.

Table F: Imports of Australian nickel & nickel alloys unworked by major trading partner

	2015 A$m	2016 A$m	2017 A$m	2018 A$m	% growth 2017 to 2018
Total imports (c)	**2,335**	**1,865**	**2,105**	**3,269**	***55.3***
China (a)	95	298	508	1,307	*157.0*
European Union 28 (a)	264	161	276	722	*161.4*
India (a)	150	68	123	86	*-29.9*
Indonesia (a)	0	2	1	90	*..*
Japan (a)	79	60	99	330	*232.6*
Republic of Korea (a)	30	71	70	183	*161.2*
Malaysia (a)	1,049	588	219	0	*-100.0*
Singapore (a)	494	324	175	53	*-69.6*
South Africa (b)	0	21	30	15	*-49.2*
Taiwan (a)	42	295	461	238	*-48.4*

(a) c.i.f. basis. (b) f.o.b. basis. (c) Adjusted to an f.o.b. basis.

Sources: Global Trade Atlas and UN Comtrade data.

Quality of these estimates

The reader should note the above analysis provides only an estimate of the actual value of Australian nickel products and *STM* exports. These estimates have a number of data quality issues:

- First, most partner country import data as published by our major trading partners are on a c.i.f. (cost, insurance and freight) basis, whereas the ABS export data are published on a f.o.b. (free on board) basis. As a result, a valuation on a c.i.f. basis will be higher than a valuation on an f.o.b. basis as it includes the additional cost of insurance and freight.
  - In an effort to overcome the issue of combining trade data on an f.o.b. and c.i.f. basis, DFAT has calculated a proxy f.o.b. value for commodities reported on a c.i.f. basis by deflating the reported value by 10 per cent for Nickel mattes and 5 per cent for nickel alloys[3]. This adjusted partner country data has been used in Table D – *Australia's exports of nickel products* using both ABS and partner country data to calculate Australia's total exports of *Nickel* on a consistent f.o.b. basis.
- Second, not all of Australia's export partners publish their own import trade data (for example only limited data is available for Middle East countries) and therefore some Australian confidential *Nickel* exports may not have been included. As Australia's major trading partners were covered in the calculation this should only have a small impact on the above estimates.
- Timing differences will also impact on the quality of the estimates, given the long distances to some of Australia's major trading partners.
  - For example a good that is exported and recorded in ABS trade statistics in December 2018 could be imported and recorded in partner country trade data in January 2019 due to the time it takes to ship the good to that country. As a result this good is recorded in ABS trade statistics in calendar year 2018, while in the partner country data it will be recorded in 2019. This will impact on the quality of these estimates as data sourced from partner country data may be allocated to the incorrect time period.
- It is possible that some *Nickel* products are not given the same classification code in ABS export statistics as in partner country import statistics. It is therefore possible that some of the confidential *Nickel* data sourced from partner country data is actually published in ABS export statistics under a non-confidential nickel code. This could lead to some double counting in these estimates
- It is a possible that in ABS export statistics the final country of destination for these shipments is incorrect (it may be going onto a third party country). This is unlikely for shipments of bulk goods, such as resources. However given the proximity of Singapore to Malaysia there may be some double counting of Australia's exports to these destinations.

3 This methodology is based on an analysis of various countries import data reported on both f.o.b. and c.i.f. basis.