REPORT

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# *The GST threshold for low value products*

## *Economic analysis*

*Prepared for*

*Conference of Asia Pacific Express Carriers*

*Centre for International Economics*
*Canberra & Sydney*

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# *Executive summary*

The CIE has been commissioned by CAPEC to undertake economic research and analysis supporting its submission to the Productivity Commission Economic Structure and Performance of the Australian Retail Industry Inquiry. CAPEC members transport a significant share of low value imports coming into Australia. CAPEC members have sought to provide evidence from their internal databases that the Productivity Commission can use to inform the appropriate low value threshold for GST exemption on the basis of Australia's national interest.

### Low value imports enter Australia via international mail, air and sea cargo

It is estimated that there were 44 million low value consignments, valued at $1.7 billion, entering Australia in 2009-10.

- Air cargo plays a leading role in terms of transport of low value goods imported to Australia, particularly at the upper end of the low value threshold, for which it is expected to make up the majority of consignments.
- International mail is the main avenue for low value consignments coming to Australia. However, most of these consignments are expected to have relatively low or zero value. There is little information on the value of consignments arriving through international mail, which is a key data gap.
- Sea cargo is a more relevant channel for the transport of bulk commodities than for low value imports.

CAPEC members are the dominant part of the air cargo market. They handled 91.1 per cent of the total air cargo consignments under $1000 in 2009-10.

### The recipients and the goods imported will determine the optimum level of the low value threshold

Goods destined to individuals make up between 40 and 70 per cent of the value of consignments depending on value range. The share of goods destined for individuals decreases when the value range increases, with businesses and other organisations receiving around 60 per cent of goods towards the $1000 end of the low value range.

Business and other organisations receive GST credits and hence no GST is lost from the exemption for these imports.

Individuals account for over 70 per cent of the value of clothing, software, sporting goods, cosmetics and food low value imports while businesses account for around 80 per cent of the value of imports of electronic goods, mechanical parts, printed and educational material, medical supplies and wine. Most low value goods imported by individuals would be subject to GST if there was no GST exemption.

The product type may also inform how the low value threshold alleviates other distortions in the Australian economy, such as restrictions on the parallel importation of books and the responsiveness of consumers to changes in price of low value imports.

### An ideal support for the national interest test is economic modelling

The best way to support the analysis of the impact of the low value GST exemption would be through a computable general equilibrium model as it allows for considering various effects together; the trade-off between the efficiency implications of differential application of GST, additional administrative costs and the impact of other distortions.

### The CIE estimates that the foregone revenue is likely to be small from lowering the threshold and resource costs large

Partial equilibrium estimates suggest there are likely welfare costs to Australia from lowering the threshold (see table 1).

- Revenue forgone is likely to be highly concentrated in the lower end of the low value range where there are many small consignments. The resource costs of formally processing these very low value imports would be immense. Hence it can reasonably be expected that this would never happen and the Productivity Commission will focus on whether or not there is a case for smaller adjustments in the threshold.
- Lowering the threshold would lead to extra GST and import duty collections. The more the threshold is lowered the greater the additional GST collected from imports. Lowering the threshold also increases the resource costs. The resource costs per dollar of extra GST collected rises from about $1 moving from $1000 to $900 to $4 moving from $200 to $100.
- All reductions in the low value threshold appear to lead to higher resource costs than the likely economic efficiency gains, making them a net welfare cost to Australia. This is the case under a wide range of assumptions about the responsiveness of demand for low value imports to their price.

1 **Revenue forgone and resource cost imposed under alternative thresholds**

| *Threshold* | *No behavioural change* | | *Behavioural change GST forgone revenue (direct)* | | | |
|---|---|---|---|---|---|---|
| | Total revenue[a] | Resource Cost | $\varepsilon_d = 0.5$ | $\varepsilon_d = 1.0$ | $\varepsilon_d = 2.0$ | $\varepsilon_d = 5.0$ |
| | $m | $m | $m | $m | $m | $m |
| $0 | 315 | 3 755 | 135 | 89 | 50 | 19 |
| $100 | 133 | 278 | 70 | 60 | 44 | 19 |
| $200 | 100 | 153 | 52 | 46 | 35 | 16 |
| $300 | 79 | 102 | 40 | 36 | 28 | 14 |
| $400 | 63 | 73 | 32 | 28 | 23 | 12 |
| $500 | 50 | 53 | 25 | 22 | 18 | 10 |
| $600 | 38 | 38 | 19 | 17 | 14 | 7 |
| $700 | 28 | 26 | 14 | 12 | 10 | 6 |
| $800 | 19 | 16 | 9 | 8 | 7 | 4 |
| $900 | 8 | 7 | 4 | 4 | 3 | 2 |

**a** Refers to revenue forgone from GST and import duty collection.

Note: $\varepsilon_d$ refers to the elasticity of demand.

*Source:* CIE calculations.

Detailed economic modelling and collection of data on international mail will provide greater certainty around these partial equilibrium insights.

# 1 Background to the Australian express carrier industry

The express carrier industry is an important player in the transport of goods worldwide. Express carriers provide fast and integrated delivery services on a global basis facilitating international trade and connectivity. The industry's turnover was estimated at US$175 billion in 2008, it directly employs some 1.3 million people, and contributed to the global economy through value added of around US$80 billion.[1]

In Australia, express carriers are a key competitor in the carrier services market together with interstate and intrastate carriers. In 2010-11, the gross product of the carrier services industry in Australia is estimated to be around $1.5 billion.[2] The industry is formed by some 700 companies providing door-to-door delivery services through one or more transport modes. The main market segment relates to services for businesses. In terms of products and services provision, the Australian market is shared among:

- interstate carrier services, approximately 45 per cent the carrier services industry
- intrastate carrier services, approximately 35 per cent, and
- international carrier services, approximately 20 per cent.

The Conference of Asia Pacific Express Carriers (CAPEC) represents the interest of Asia and the Pacific's leading integrated express delivery companies, namely DHL, FedEX, TNT and UPS. In Australia CAPEC's member companies employ around 6200 people.

### *CAPEC represents the majority of air cargo imports*

Goods can be imported into Australia via air cargo, sea cargo or international mail. Goods carried by CAPEC members constitute the majority of consignments (by number and value) into Australia via air cargo. (Chapter 2 discusses in more detail the size of the international mail and the sea cargo.)

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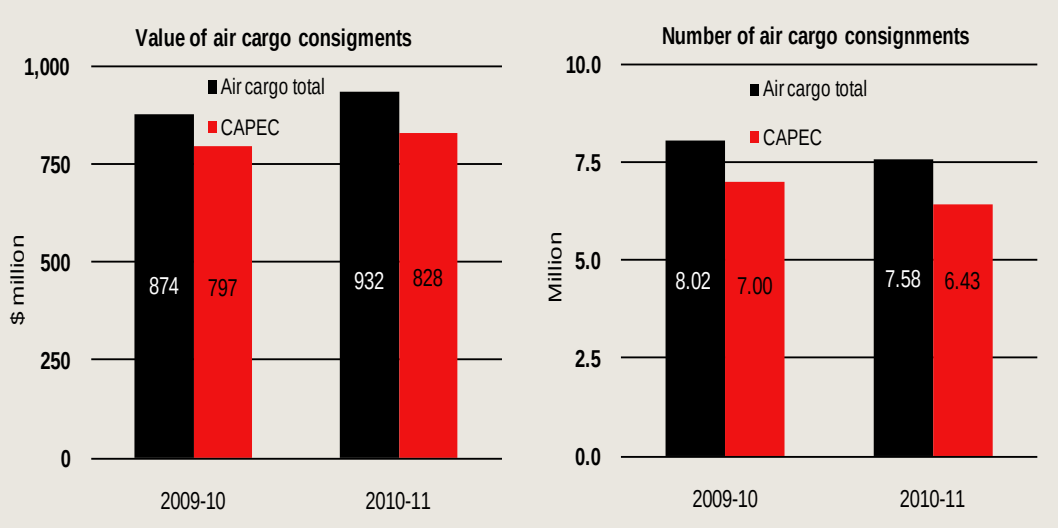
1 Oxford Economics 2009, *The impact of the express delivery industry on the global economy,* Oxford, United Kingdom. World GDP for 2008 was of approximately US$61.4 trillion according to World Bank data.

2 IBIS World. http://www.ibisworld.com.au/industry/default.aspx?indid=503.

In 2009-10 the value of air cargo imports under the GST exemption threshold (customs valuation of $1000) attributable to CAPEC members was approximately $797 million, representing 91.1 per cent of total imports under the low value threshold. For the current financial year (up to March) imports by CAPEC members under the low value threshold have amounted to $828 million, representing 88.8 per cent to total imports under the low value threshold (see chart 1.1, left panel).

1.1 **Air cargo consignments under the $1000 threshold**




[a] Air cargo total data does not include cargo under the low value threshold that may be imported via international mail, sea cargo or air cargo imported under the Special Reporter scheme.

Note: 2010-11 comprises data from July 2010 to March 2011.

*Data sources:* Australian Customs and Border Protection Service and CAPEC.

In terms of the number of consignments, CAPEC handled 7 million consignments in 2009-10, representing 87.3 per cent of all low value air cargo consignments reported to Australian Customs and Border Protection Service (hereafter 'Customs') for that year (some 8 million consignments). Between July 2010 and March 2011, CAPEC handled 84.7 per cent of the consignments. Over the 21 month period spanning July 2009 to March 2011, CAPEC members accounted for 86.1 per cent of total consignment numbers (see chart 1.1, right panel).

It can be expected that data sourced from CAPEC is representative of the wider air cargo market given the market share of CAPEC members.

## *This report and key issues for the Productivity Commission's review*

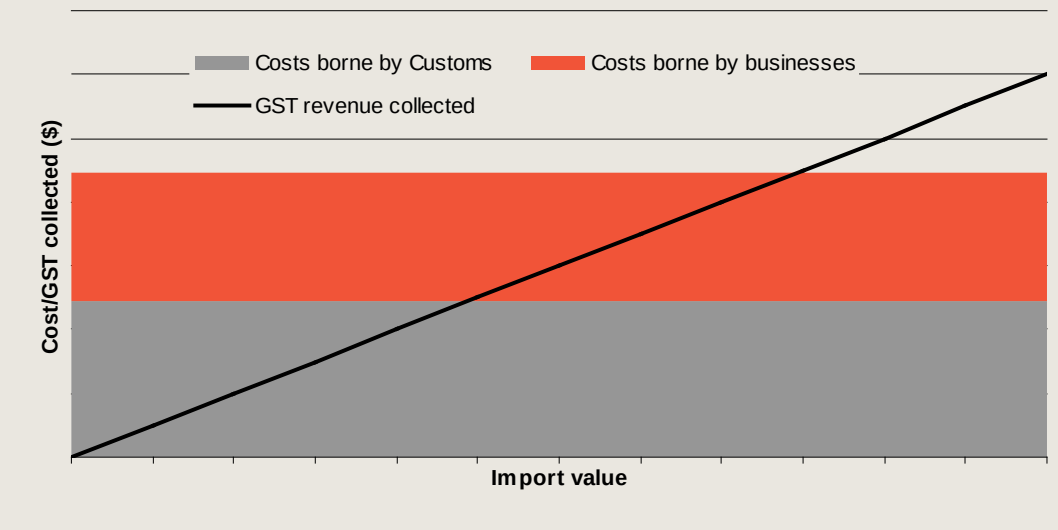
This report focuses solely on the issue of the appropriate value threshold for the exclusion of imports from formal import processing. The analysis is from a welfare perspective, setting out the economywide costs and benefits of alternative low value thresholds.

Australian retailers suggest that there is an uneven playing field for low value items that go directly to households and businesses rather than through Australian retailers. The fact that GST applies to Australian retail but not overseas retail (below the threshold) selling into Australia is likely to move outcomes away from what is economically efficient and hence impose an efficiency cost.

The efficiency costs from differential treatment of GST are offset by administrative costs of collecting GST. Current arrangements for levying GST and import duties require that formal customs declarations are made. These involve considerably more time and cost for Customs and businesses (which are discussed in detail in chapter 3) that will end up being passed on to those buying goods. Such costs are likely to be the same regardless of the value of a consignment. However, the GST revenues collected rises as the value of an item (including freight and insurance costs) rises (see chart 1.2).

Similar trade-offs between the efficiency of tax collection and the differential treatment of products and businesses occur in other instances. For example, GST is not collected from businesses with a GST turnover of less than $75 000 a year.

### 1.2 Costs and GST revenues




Note: Figures are indicative only.

*Source:* The CIE.

It is also worth noting that it is the distortion in competition that generates inefficient outcomes in an economic sense and not the loss in GST revenue. Lost GST revenue is not an economic cost but simply a transfer largely from the government to Australian consumers.

There are also other distortions in international transactions that could be relevant in considering the efficiency implications of adjustments to the low value threshold. These could include:

- import duties — import duties create an uneven playing field for imports as against domestic production. Import duties are currently not levied on low value items but presumably would be were these items to be subject to formal import declarations;[3]
- domestic restrictions such as those applying to the parallel importation of books;[4] and
- ineffective competition in retail markets, potentially reflecting, for example, underlying concerns about land zoning.[5]

Distortions such as import duties, parallel import restrictions and zoning regulations suggest that the theory of the second best often applies.[6] This means that there is no guarantee that removing one distortion will be the most economically efficient strategy when there are other distortions affecting the allocation of goods and services.

The Productivity Commission review should trade-off the efficiency implications of differential tax treatment, efficiency losses and resources costs related to administration and distortions applying in other markets to determine the appropriate threshold for low value imports. The best way to do this is through a computable general equilibrium model, as this allows for all effects to be considered together, although partial equilibrium analysis may also be able to shed light on the appropriate threshold. In this report we set out the key areas of analysis and parameters that can inform this effort.

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3 The Productivity Commission notes welfare gains available from unilateral reductions in tariffs that would help level the domestic–import playing field. Productivity Commission 2010, *Bilateral and Regional Trade Agreements,* Research report, November.

4 Exemptions from GST may improve outcomes for consumers of books. For instance, the Productivity Commission noted that 'Parallel Import Restrictions (PIRs) provide territorial protection for the publication of many books in Australia, preventing booksellers from sourcing cheaper or better value-for-money editions of those titles from world markets', Productivity Commission 2010, *Restrictions on the parallel importation of books,* Research report, p. XIV.

5 The Productivity Commission has noted the potential for land use planning policies to restrict retail competition in previous reviews. Productivity Commission 2008, *The market for retail tenancy leases in Australia,* Inquiry Report No. 43, March; Productivity Commission 2011, *Performance Benchmarking of Australian Business Regulation: Planning, Zoning and Development Assessments,* Draft Report, February.

6 For example, see Mas-Collell, A., M. Whinston, and J. Green 1995, *Microeconomic theory*, Oxford University press: Oxford, p. 458.

# 2 Composition of low value imports

There are three means used for importing low value goods into Australia — air cargo, international mail and sea cargo. Customs has collected good evidence on air cargo and sufficient evidence to know that sea cargo is small. The number and value of low value imports arriving through international mail is less certain.

In this chapter, we set out what is known about the amount and composition of low value imports.

## *Number of low value consignments*

### *Air cargo*

During 2009-10, just over 8 million low value consignments were imported into Australia via air cargo with total value of $874 million based on Self Assessed Clearances (SACs) (see table 2.1).[7] Items in each $100 band constituted about 10 per cent of imports by value. This reflects that there are much greater consignment numbers for lower value good. For instance, goods with a customs value of less than $100 constituted 73 per cent of consignments.

CAPEC members handled most of the consignments under the $1000 threshold entering Australia via air cargo. CAPEC members delivered products valued at $797 million and representing around 91.1 per cent of the total imports below the low value threshold (see table 2.1).

CAPEC businesses constituted the majority of air cargo imports in every value range. They made up:

- 75 per cent of all air cargo items up to $100 unit value;
- 83 per cent of all air cargo items with a unit value between $100 and $200; and
- over 90 per cent of all air cargo items with a unit value between $200 and $1000.

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7 A consignment is defined by Customs as goods those transported in the same ship or aircraft, consigned otherwise than post by one person to another and have a value not exceeding $1000. Where there are several packages sent from a single consignor to a single consignee on one ship or aircraft should be aggregated into one consignment for the purposes of calculating the value.

2.1 **Value of total air cargo consignments and CAPEC share** 2009-10

| | Total air cargo | | | | | CAPEC members | | |
|---|---|---|---|---|---|---|---|---|
| *Value range* | *Consign-ments* | | *Value* | | *Average value per consignment* | *No. of consign-ments* | *Value of consign-ments* | *CAPEC share of total import value* |
| | No. | Share | Value | Share | Value | No. | Value | Share |
| | '000s | % | $ million | % | $ | '000s | $ million | % |
| $0–100 | 5 819 | 72.6 | 103.4 | 11.8 | 18 | 4 749 | 77.5 | 75 |
| $101–200 | 820 | 10.2 | 116.5 | 13.3 | 142 | 684 | 97.1 | 83 |
| $201–300 | 410 | 5.1 | 100.8 | 11.5 | 246 | 366 | 90.3 | 90 |
| $301–400 | 259 | 3.2 | 89.6 | 10.2 | 346 | 241 | 83.5 | 93 |
| $401–500 | 183 | 2.3 | 82.5 | 9.4 | 451 | 174 | 78.3 | 95 |
| $501–600 | 146 | 1.8 | 80.2 | 9.2 | 551 | 140 | 77.2 | 96 |
| $601–700 | 117 | 1.5 | 75.7 | 8.7 | 649 | 113 | 73.3 | 97 |
| $701–800 | 99 | 1.2 | 74.4 | 8.5 | 750 | 96 | 72.1 | 97 |
| $801–900 | 95 | 1.2 | 80.9 | 9.3 | 853 | 93 | 79.0 | 98 |
| $901–1 000 | 74 | 0.9 | 70.3 | 8.0 | 949 | 72 | 68.5 | 97 |
| Total low value | 8 021 | 100.0 | 874.1 | 100.0 | 109 | 6 728 | 796.6 | 91 |

*Source:* Australian Customs and Border Protection Service and CIE calculations.

### *Sea cargo*

Sea cargo accounts for a very small share of low value consignments. In 2009-10, sea cargo accounted for 47 369 consignments and from July 2010 to March 2011, there were 55 356 sea cargo consignments.[8] As such, sea cargo is a very small share (approximately 0.6 per cent) of the size of air cargo consignments. We assume that this share is the same across each value band.

### *International mail*

The number and distribution of low value consignments (and even higher value consignments) arriving through international mail is largely unknown. This is because international mail at the consignment level is not reported to Customs and hence there is little information available on the value of consignments arriving through international mail.

For higher value goods (over $1000), formal import declarations are required for international mail. These are typically done manually and there is no electronic information on the number of consignments at different levels of value. Customs has indicated that about 20 000 parcels in 2009-10 with a customs value above $1000 arrived through international mail and hence had to make formal import

8 Australian Customs and Border Protection Service correspondence with CAPEC, 20 April 2011.

declarations.[9] This is equivalent to 12 per cent of the number of consignments imported by CAPEC members (via air cargo) in the $1000 to $1500 range.[10] Hence for larger value items, importation via international mail is likely much smaller than is the case for air cargo.

Australia Post has its own records of mail items. In total, there were 36 million parcels that entered Australia in 2009-10.[11] Parcels could be items that have no or little value attached such as documents, photos etc that are not retail items. We would expect that most of the parcels will be in the very low value (less than $100) range although there is little evidence that can give a precise indication of the value range for international mail.

Using these two pieces of information — higher value items arriving through international mail make up 12 per cent of those arriving through air cargo and there being 36 million parcels in total — we can postulate consignment numbers for international mail. It should be noted that this is based on very limited evidence and the Productivity Commission should seek to provide better evidence through discussions with Australia Post.

We use a hyperbolic function to extrapolate from the two pieces of information that we have.[12] This gives the result in chart 2.2. International mail would have around 6 times the number and value of consignments in the $0–$100 range and about the same in the $100–$200 range. After this, it would have substantially fewer consignments compared to air cargo.

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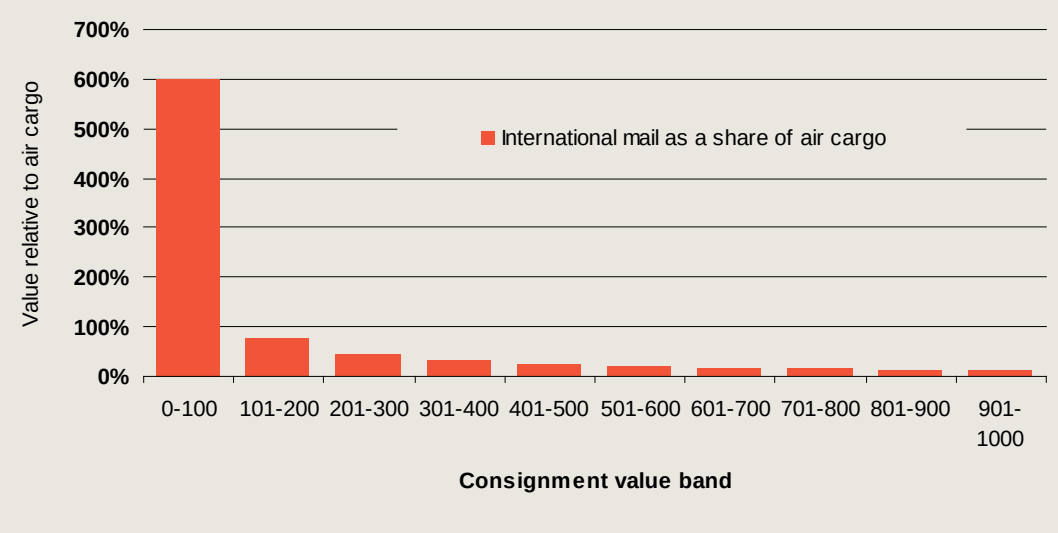
9 Australian Customs and Border Protection Service correspondence with the CIE, 4 May 2011.

10 Australian Customs correspondence to CAPEC, 20 April 2011.

11 Customs data on low value air consignments. http://www.customs.gov.au/webdata/resources/files/AirCargo-Data-LowValueThreshold-website.pdf, accessed on 28th April 2011.

12 That is, per cent of air cargo consignments = a.value threshold level^b.

2.2 **Possible distribution of international mail consignments**




*Data source:* The CIE.

### *Total consignments by number and value*

Putting together the pieces of information above we get total consignment numbers and values as set out in tables 2.3 and 2.4.

- **There are an estimated 44 million low value consignments with a value of up to $1.7 billion in 2009-10. This might overestimate the actual value if there are a large number of zero value parcels arriving through international mail.**
- **Air cargo plays a leading role in terms of transport of low value goods imported to Australia, particularly at the upper end of the threshold.**
- **International mail is the main avenue for low value consignments coming to Australia. However, most of these consignments are expected to have relatively low (or even zero) value.**
- **Sea cargo is a more relevant channel for the transport of bulk commodities than for low value imports.**

2.3 **Consignments by mode** 2009-10

| *Value range* | *Air cargo* | | *Mail and sea relative to air cargo* | | *Mail cargo* | | *Sea cargo* | |
|---|---|---|---|---|---|---|---|---|
| | No. | Value | Mail | Sea | No. | Value | No. | Value |
| | 000 | $m | % | % | '000 | $m | 000 | $m |
| $0–100 | 5 819.1 | 103.4 | 600.6 | 0.6 | 34 951.8 | 620.9 | 34.4 | 0.6 |
| $101–200 | 820.2 | 116.5 | 78.3 | 0.6 | 642.3 | 91.3 | 4.8 | 0.7 |
| $201–300 | 409.6 | 100.8 | 45.7 | 0.6 | 187.3 | 46.1 | 2.4 | 0.6 |
| $301–400 | 258.6 | 89.6 | 32.7 | 0.6 | 84.6 | 29.3 | 1.5 | 0.5 |
| $401–500 | 182.9 | 82.5 | 25.3 | 0.6 | 46.2 | 20.8 | 1.1 | 0.5 |
| $501–600 | 145.6 | 80.2 | 20.8 | 0.6 | 30.2 | 16.6 | 0.9 | 0.5 |
| $601–700 | 116.6 | 75.7 | 17.7 | 0.6 | 20.6 | 13.4 | 0.7 | 0.4 |
| $701–800 | 99.1 | 74.4 | 15.3 | 0.6 | 15.2 | 11.4 | 0.6 | 0.4 |
| $801–900 | 94.9 | 80.9 | 13.5 | 0.6 | 12.8 | 11.0 | 0.6 | 0.5 |
| $901–1 000 | 74.0 | 70.3 | 12.2 | 0.6 | 9.0 | 8.6 | 0.4 | 0.4 |
| Total low value | 8 020.6 | 874.1 | 448.8 | 0.6 | 36 000.0 | 869.3 | 47.4 | 5.2 |

Note: Mail and sea relativities are applied to both consignment numbers and value, implying the same value per consignment within each value category across the three types of import.
*Sources:* Australian Customs and Border Protection Service and CIE calculations.

2.4 **Number and value of low value consignments** 2009-10

| *Value range* | *Total consignments* | | *Share of consignment value* | | |
|---|---|---|---|---|---|
| | No. | Value | Air | Mail | Sea |
| | '000 | $m | % | % | % |
| $0–100 | 40 805.3 | 724.8 | 14.3 | 85.7 | 0.1 |
| $101–200 | 1467.3 | 208.5 | 55.9 | 43.8 | 0.3 |
| $201–300 | 599.3 | 147.5 | 68.3 | 31.2 | 0.4 |
| $301–400 | 344.7 | 119.4 | 75.0 | 24.5 | 0.4 |
| $401–500 | 230.2 | 103.8 | 79.5 | 20.1 | 0.5 |
| $501–600 | 176.7 | 97.3 | 82.4 | 17.1 | 0.5 |
| $601–700 | 137.9 | 89.5 | 84.6 | 14.9 | 0.5 |
| $701–800 | 114.9 | 86.2 | 86.3 | 13.2 | 0.5 |
| $801–900 | 108.3 | 92.4 | 87.6 | 11.9 | 0.5 |
| $901–1 000 | 83.5 | 79.3 | 88.7 | 10.8 | 0.5 |
| Total low value | 44 067.9 | 1 748.6 | 50.0 | 49.7 | 0.3 |

*Sources:* Australian Customs and Border Protection Service and CIE calculations.

## *Imports for businesses and final consumers*

Whether low value imports are destined for businesses or other organisations that can claim GST rebates or final consumers will be an important determinant of the optimum level of the low value threshold.

- If low value imports are going to businesses then GST will be collected on the final product sold if it is sold domestically. If it is exported then the business would claim GST exemptions. Hence there would be no difference to GST collections whether or not GST was collected on these items at time of import.

- If low value imports are destined for organisations such as schools, universities and other non-profit organisations then these organisations can claim GST exemptions if GST was levied on the imports. Hence there would be no difference to GST collections whether or not GST was collected on these items at time of import.
- If low value imports are destined for final consumers then additional GST would be collected (this includes excise attached to alcohol and tobacco purchases).

The CIE has obtained data from CAPEC members for every consignment into Australia from major flight points in the UK, Singapore, Hong Kong, the US and New Zealand for a period of one week. This dataset was cleaned to remove consignments in transit to other locations (such as New Zealand and Fiji) and to remove consignments of zero value. After doing this the sample amounts to just under 70 000 low value consignments — equivalent to around 1 per cent of low value consignments from air cargo for 2009-10. From this, we have allocated each consignment as either to a business or an individual based on the consignee name.

Using this sample, we have estimated the share of low value imports that are destined for individuals and businesses/other organisations for each value threshold. The results are shown in table 2.5.

- **Goods destined to individuals make up between 40 to 50 per cent of consignments in the $500 to $1000 range and 50 to 70 per cent of consignments in the $0 to $500 range.**
- **Goods destined for individuals make up a smaller share of goods at the higher end of the low value range.**

### 2.5 Low value consignments for individuals and businesses

| *Value range* | *Consignment value* | | *Consignment numbers* | |
|---|---|---|---|---|
| | Business/other | Individual | Business/other | Individual |
| | % | % | % | % |
| $0–100 | 33.2 | 66.8 | 49.8 | 50.2 |
| $101–200 | 29.7 | 70.3 | 29.4 | 70.6 |
| $201–300 | 35.7 | 64.3 | 35.4 | 64.6 |
| $301–400 | 41.4 | 58.6 | 41.3 | 58.7 |
| $401–500 | 45.8 | 54.2 | 45.8 | 54.2 |
| $501–600 | 50.0 | 50.0 | 50.1 | 49.9 |
| $601–700 | 53.2 | 46.8 | 53.3 | 46.7 |
| $701–800 | 58.2 | 41.8 | 58.2 | 41.8 |
| $801–900 | 55.5 | 44.5 | 55.5 | 44.5 |
| $901–1 000 | 59.5 | 40.5 | 59.4 | 40.6 |

Source: CIE calculations based on CAPEC data.

## *Imports by product type*

The product type could be important for determining the optimal low value threshold because:

- consumers respond to price changes in different products in different ways; and
- some products are not subject to GST or are already levied with GST because formal declaration is currently required (such as for alcohol and tobacco).

Determining the types of goods within the low value threshold requires substantial work beyond the timeframes allowable for this submission. We have used a random sample of 2000 consignments for individuals and 2000 consignments for businesses to give some indication of the product types.

The Productivity Commission might alternatively see if it can obtain HS Codes for goods in the $1000 to $1500 range and use this as a proxy for the types of goods slightly below the current threshold.

The product separation from our sampling of consignments indicates that almost half of the low value imports correspond to textile and fashion items (26 per cent of total value of imports) and to electronic goods (20 per cent). See table 2.6.

- For individuals, these two categories are 60 per cent of total individual low value imports.
- For businesses clothing and electronic goods are 36 per cent of their total low value imports.

### 2.6 Low value imports by product category

| *Product type* | *Individuals* | *Businesses* | *Total* |
|---|---|---|---|
| | % | % | % |
| Textile and fashion | 41 | 15 | 26 |
| Electronic and related | 19 | 21 | 20 |
| CDs and DVDs | 1 | 1 | 1 |
| Software | 1 | 0 | 0 |
| Sporting goods | 7 | 2 | 4 |
| Cosmetic and cleaning | 1 | 0 | 0 |
| Mechanical parts | 4 | 9 | 7 |
| Books, magazines, newspaper and related goods | 1 | 2 | 2 |
| Medical supplies | 0 | 3 | 2 |
| Educational goods | 0 | 0 | 0 |
| Wine (liquor) | 0 | 0 | 0 |
| Food | 2 | 1 | 1 |
| Other | 23 | 45 | 36 |
| Total imports | 100 | 100 | 100 |

*Note:* This is based on a sample of 2000 consignments for individuals and 2000 consignments for businesses. The consignments sampled were randomly determined.

*Source:* CIE calculations based on CAPEC data.

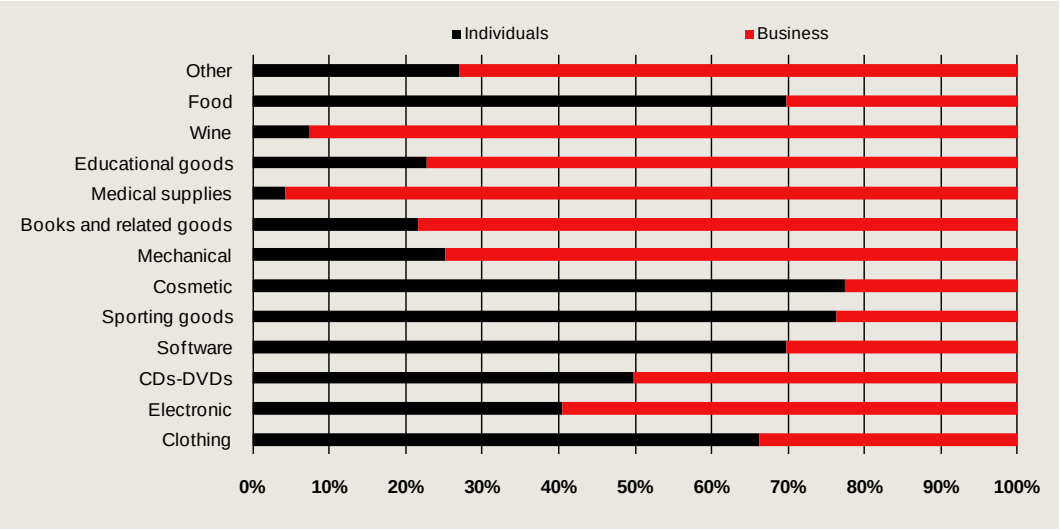
A significant proportion of the sampled consignments are included in the *other* product category (36 per cent of total low value import consignments) because consignments contained multiple products or product definition lay outside the definitions used.

Other goods of importance are sporting articles for individuals and mechanical parts for businesses.

Chart 2.7 presents the proportion of each type of good imported by individuals and by businesses. Based on the consignment values in the data sample:

- individuals are the major importers of clothing, software, sporting goods, cosmetics and food (typically low value consignments);
- businesses are the major importers of electronic goods, mechanical parts, printed (books, magazines, newspapers and other related products) and educational material and medical supplies;
- sixty per cent of electronic goods are purchased by businesses; and
- two thirds of the clothing is imported by individuals and one third by businesses.

### 2.7 Low value imports composition by product and importer




*Data sources:* CIE calculations based on a sample of CAPEC data.

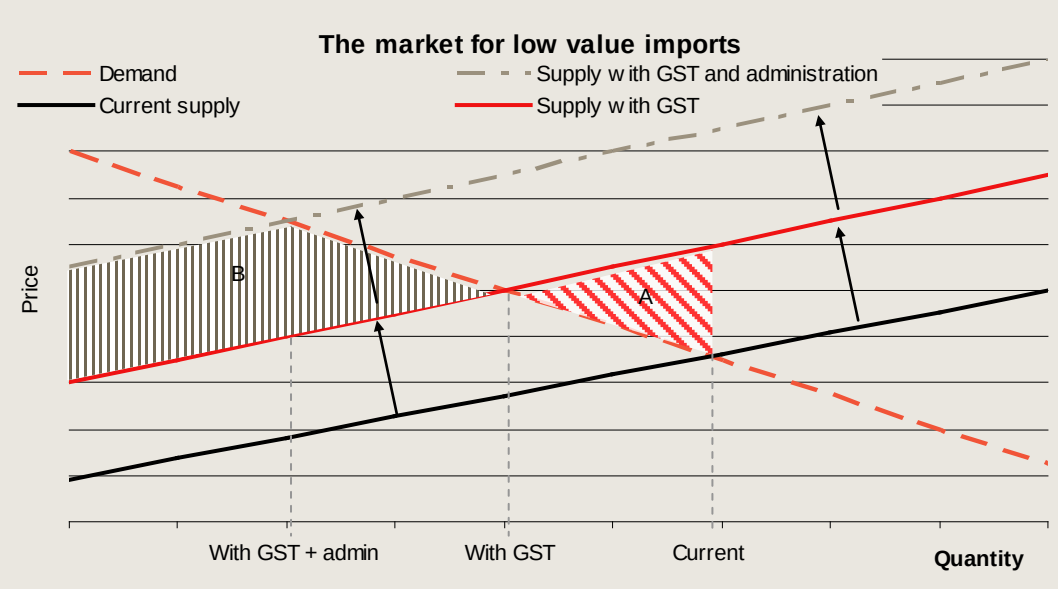
# 3 *Economic efficiency*

An economically efficient low value threshold will trade off:

- losses in economic efficiency from allowing preferential treatment of low value imports;
- gains in economic efficiency from reducing administrative and compliance costs for business and government; and
- changes in efficiency related to other distortions such as import duties, domestic restrictions and domestic competitive conditions.

The trade-offs between the first two effects is shown in chart 3.1. Resource and efficiency costs imposed by extra administration are imposed across all low value imports and hence are akin to dead weight 'rectangles' while efficiency losses from differential application of GST is a dead weight triangle.

### 3.1 Welfare losses and gains from the low value threshold




*Note:* For simplification the efficient quantity is defined as where the supply including GST crosses the current demand curve for low value imports. This demand curve is predicated on goods sold in Australia being subject to GST. A better specified efficient outcome would be where supply excluding GST crosses the demand curve for low value imports when no GST was applied to any products, foreign or domestic. This will give a very similar efficient quantity as that shown above.
*Source:* The CIE.

- **Currently, the amount of low value imports will be higher than is economically efficient because of preferential GST treatment (ignoring other distortions). This leads to economic costs of Area A in chart 3.1.**

- **But if GST is applied then administration costs will also be applied in order to achieve compliance. This will lead to fewer low value imports than the efficient level and impose resource costs from extra administration (Area B in chart 3.1).**

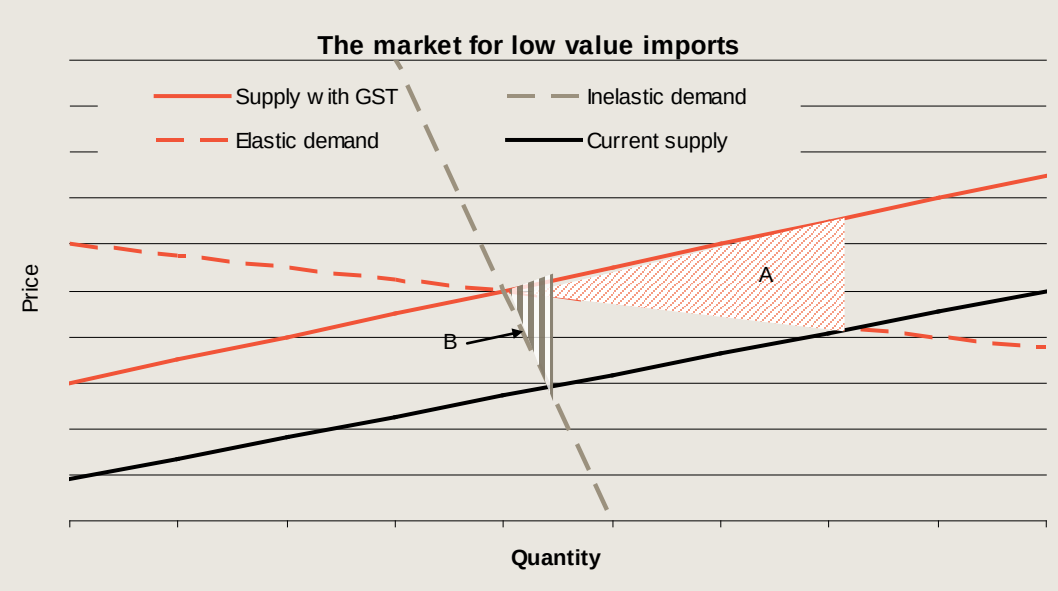
These arguments are discussed in greater detail below.

## *Preferential treatment of low value imports*

Preferential treatment of low value imports occurs because these imports are not levied with GST. The welfare losses that occur from this reflect the change in consumer behaviour. Using a partial equilibrium analysis not accounting for other factors can highlight the key parameters.

The welfare losses will be greatest if consumers respond to the lower price (due to the GST exemption) by buying many more of their goods from overseas. That is, when the elasticity of demand is high. In this case, the welfare losses are the triangle A. When demand is inelastic — that is, consumers would not change their behaviour if low value items were charged the GST — then welfare losses are lower (triangle B).

3.2 **Welfare losses from preferential treatment of low value imports**




*Note:* For simplification the efficient quantity is defined as where the supply including GST crosses the current demand curve for low value imports. This demand curve is predicated on goods sold in Australia being subject to GST. A better specified efficient outcome would be where supply excluding GST crosses the demand curve for low value imports when no GST was applied to any products, foreign or domestic. This will give a very similar efficient quantity as that shown above.
*Source:* The CIE.

The loss in economic efficiency can be estimated based on the dead weight loss triangles in chart 1.1. The loss in economic efficiency (DWL) is (approximately):

$$DWL = \Delta P.\Delta Q / 2$$

Where $\Delta P$ is the change in price as a result of applying different GST treatment to low value and other goods (~10 per cent times the price considering only the GST) and $\Delta Q$ is the associated change in quantity.

This is also the welfare loss to Australia when supply of low value imports is perfectly elastic — that is, a horizontal supply curve. If supply is upward sloping then the welfare loss to Australia will be higher as some of the reduction in the tax will be captured by foreign suppliers. Australia is typically viewed as a small player in international markets and hence supply of foreign goods is highly elastic with respect to the quantity sought by Australia.

Welfare losses can be rewritten as a share of the value of all low value imports (VI = P.Q) as follows.

$$DWL/VI = \frac{10\%.P.\Delta Q}{2.P.Q} = 5\%.\Delta Q/Q$$

Noting that the elasticity of demand is as below and for a perfectly elastic supply of foreign goods the price change is 10 per cent:

$$\varepsilon_d = \frac{\Delta Q/Q}{\Delta P/P} = \frac{\Delta Q/Q}{10\%}$$

Then:

$$DWL/VI = 5\%.10\%.\varepsilon_d = 0.5\%.\varepsilon_d$$

That is, the dead weight loss is a very small share of the value of imports and likely to be substantially less than the rate of GST (unless the elasticity of demand is greater than 20).

The elasticity of demand for low value imports is not known and is likely to differ amongst goods imported. The dead weight losses arising from the differential application of GST as a share of the value of imports are shown for a range of demand elasticities in table 3.3. Under very high possible elasticities (5 to 10), the losses in economic efficiency from are in the order of 2.5 per cent to 5 per cent of the value of goods imported under the low value threshold or up to $100 million under very high behavioural change assumptions.

The actual responsiveness of demand to the levying of GST on low value imports has not been tested. One way to consider consumer responsiveness is through looking at how the amount of low value imports changes when the exchange rate changes. An appreciation of the exchange rate means that products purchased, for example, on online overseas websites will be immediately cheaper in Australian dollars. Imported products sold by Australian retailers (including online Australian retailers) will also

### 3.3 Losses in economic efficiency for varying demand responses

| *Demand elasticity* | *Losses in economic efficiency as a share of the value of low value goods imported* | *In dollars based on estimate of total value of goods imported under the low value threshold* |
|---|---|---|
| | % | $/year |
| 0.0 | 0 | 0 |
| 1.0 | 0.5 | 10 |
| 2.0 | 1.0 | 20 |
| 3.0 | 1.5 | 30 |
| 4.0 | 2.0 | 40 |
| 5.0 | 2.5 | 50 |
| 10.0 | 5.0 | 101 |

*Note:* Value based on low value imports (customs value plus freight costs) of $2.0 billion.
*Source:* The CIE.

be cheaper over time as retailers adjust to lower import costs, although because retailers costs are in Australian dollar terms, these changes will be smaller.[13] In addition, changes tend to take longer as retailers have inventory bought at previous higher exchange rates and retailers can be slower to pass on falling prices than they are at passing on rising prices.[14] Hence for consumers to be price responsive, we would expect that the number of consignments would likely track the Australian exchange rate, although maybe with a lag as consumers become aware of price changes.

Note that there is another way that a higher Australian dollar will also make a difference to the share of total consignments classified as low value. For example, if A$1 buys US$0.90 then a US$1000 consignment is high value. However, at an exchange rate of A$1 buys US$1.05 the same item is now a low value item. Hence it is important to look at both low value consignments and total consignments.

CAPEC members have provided data on the number of consignments (both high value and low value) on a monthly basis from June 2007.[15] The CIE constructed an

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13 In the long run changes may only be about two thirds the level of the change in import prices. See Campa, J. and Goldberg, L. 2002, 'Exchange rate pass through into import prices: an macro or micro phenomenon', *National Bureau of Economic Research working papers,* No. 8934, p. 11.

14 There is a large macroeconomic literature on exchange rate pass through given its importance for monetary policy. The Reserve Bank of Australia has found that while import prices to tend to be fully incorporated into retail prices in the long run, adjustment can be very slow Dwyer, J. and K. Leong 2001, 'Changes in the determinants of inflation in Australia', *Reserve Bank Discussion Papers,* No. 20001-02, May p. 13. More recent studies for other countries have suggested that price reductions from exchange rate appreciations are passed through less fully than price increases. See for example, Delatte, A. and A. Lopez-Vilavicencio 2011, 'Exchange rate pass through: Evidence from major economies', Centre de recherche en développement Economique et Finance Internationale.

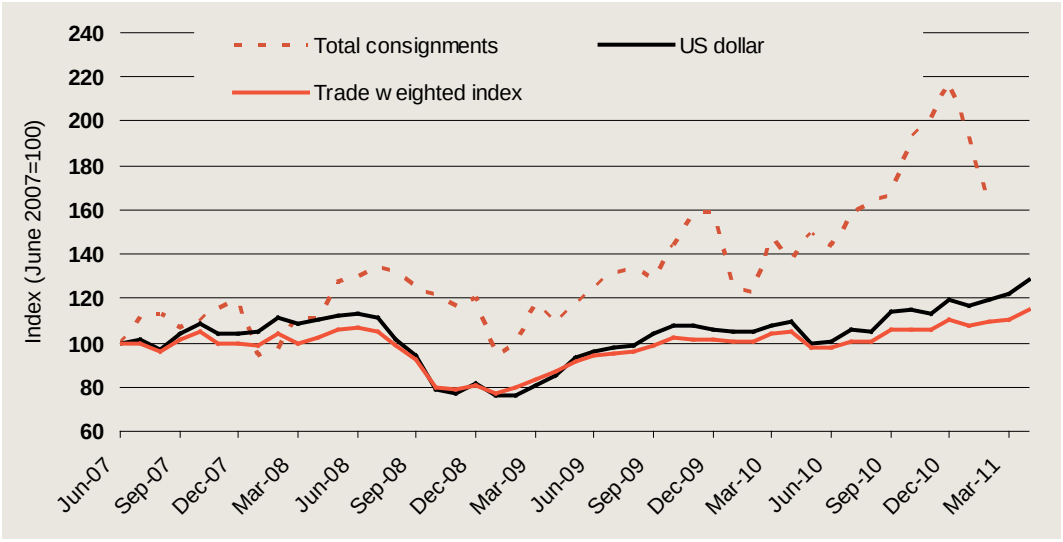
15 One member provided data from July 2007 and one from August 2009.

index of changes in consignments numbers from this and compared this against the movement in the exchange rate (both US dollar and trade weighted index).[16] There appears to be an upward trend in the number of consignments, although there is considerable volatility such as peaks in December (see chart 3.4). During the period when the Australian dollar was at a lower level (June 2008 to June 2009) there were fewer consignments. As the Australian dollar appreciated the number of consignments has risen.

At face value, this suggests that buyers are responsive to prices. From its trough in January 2009, the Australian dollar has appreciated about 70 per cent against the US dollar and 50 per cent on a trade weighted basis. Over this period, the number of consignments has increased by about 80 per cent.

Of course there were many other factors that drove the changes that occurred that are being ignored. Most importantly, consumer confidence was at a low following the global financial crisis. It is also likely that there is an upward trend in consignment numbers. On the basis of this highly simplified analysis, it is likely that the demand elasticity is less than implied by comparing the percentage changes and could be around 1.

### 3.4 Behaviour change and the exchange rate




*Data source:* Reserve Bank of Australia; CAPEC and CIE calculations.

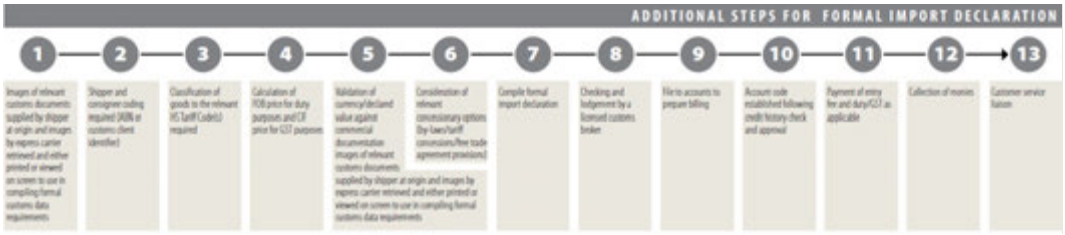
16 The index was a chain weighted index to account for the inclusion of additional CAPEC members.

## *Administration costs*

Reducing or removing the low value threshold will mean that Self Assessed Clearances (SACs) will likely be replaced by formal Customs declarations. There are many extra steps required for a formal customs declaration for carrier businesses and for Customs and Quarantine.

The additional steps required for formal customs declarations are shown in chart 3.5.

3.5 **Additional steps required for formal declarations**




*Note:* See CAPEC submission for detail of full process for formal declarations and SACs.
*Source:* CAPEC.

Additional administration costs impose two types of economic efficiency losses. The first reflects that people's choices will change as additional costs are passed on in prices. This can lead to less consumption of low value imports than the economically efficient level. The second reflects the additional resource costs that are imposed for low value imports that continue under the higher cost regime.

### *Resource costs to government*

The additional costs to government are reflected in charges for formal import declarations. The charges are set to reflect the costs to Customs of providing services and are shown in table 3.6. Online formal declarations cost $40.20 per consignment, while manual declarations are levied with a charge of $48.95 per consignment. In addition, Quarantine levies a charge of $15 per consignment for those going through formal declarations. For air cargo transported by CAPEC members, total charges are typically $55.20 per consignment, as electronic declarations are used.

If these charges are considered to be cost reflective then this suggests substantial additional costs to government for processing low value consignments through formal declaration processes, as would be required in order to collect GST.

### 3.6 Customs processing charges

| *Item* | *Charge* | *Paid By* |
|---|---|---|
| *Import (N10) and warehouse (N20) declaration charges* | | |
| Sea (electronic) | $50.00 per declaration | The owner/ service provider when the declaration is communicated to Customs |
| Air and post (electronic) | $40.20 per declaration | |
| Quarantine Charge | $15.00 per declaration | The owner |
| *Manual documentary import (N10) and warehouse (N20) declaration charges* | | |
| Sea (documentary) | $65.75 per declaration | The owner/ service provider, above |
| Air and post (documentary) | $48.85 per declaration | |
| *Other charges* | | |
| Periodic declaration processing charges | $1 275 per declaration | The owner/ service provider, as above |
| Request for cargo release (RCR) processing charge | $9.40 per RCR | The owner |

*Source:* Australian Customs and Border Protection Service website: http://www.customs.gov.au/webdata/resources/notices/ACN0621.pdf, accessed 1 May 2011.

Estimated government costs for processing goods in particular value ranges are shown in table 3.7 based on the Customs charges being reflective of the costs of processing additional consignments. For goods in the $0–$100 range, costs would be in the order of several billion dollars. In practice, costs may be lower than this if Customs is able to find efficiency savings from processing more consignments (for example, if there are significant fixed costs for Customs that are included in charges, but whether this is the case or not is current unknown). Nevertheless, additional costs are likely to be substantial.

Aggregate costs are much lower for a threshold of $100 and above because there are fewer consignments in these thresholds. For a threshold of $100 for example, additional Customs and Quarantine costs would be expected to amount to around $200 million per year.

### 3.7 Government costs for formal clearance of low value imports 2009-10

| *Value range* | *Number of consignments* | *Customs and Quarantine costs* |
|---|---|---|
| | '000 | $m |
| $0–100 | 40 805.3 | 2 252 |
| $101–200 | 1 467.3 | 81 |
| $201–300 | 599.3 | 33 |
| $301–400 | 344.7 | 19 |
| $401–500 | 230.2 | 13 |
| $501–600 | 176.7 | 10 |
| $601–700 | 137.9 | 8 |
| $701–800 | 114.9 | 6 |
| $801–900 | 108.3 | 6 |
| $901–1 000 | 83.5 | 5 |
| Total low value | 44 067.9 | 2 433 |

Note: Based on current consignments rather than predicted consignments under alternative arrangements.
*Source:* Australian Customs and Border Protection Service and CIE calculations.

These costs will eventually be borne by the buyer of the goods either directly through having to pay charges as the owner of the goods or through higher prices of (intermediary) goods where goods are considered to be owned by the supplier until finally delivered to the end consumer.

### *Resource costs for business*

Express carriers and Australia Post would also face additional administration costs for formal declarations as opposed to the streamlined SACs (as shown in the steps in chart 3.5) and current international mail arrangements. These costs could include:

- additional time for brokers and classifiers. Current numbers of brokers and classifiers employed by Express Carriers suggest about 10 to 15 minutes of their time is required for each formal declaration.[17] Hourly rates for brokers and classifiers are typically $60 to $80 per hour;
- additional time for administrative support staff;
- additional costs for invoicing;
- additional storage space for consignments (as formal declaration items are held for longer than those processed through SACs); and
- on-costs such as building space, computer equipment etc.

These costs are discussed in more detail in the body of CAPEC's submission.

Given the government costs of over $50 per consignment, a conservative estimate of these additional costs to express carriers is $30 per consignment.

Online prices for customs brokers suggest prices range from upwards of $50 for a consignment.[18] Again, this suggests that the $30 charge is at the conservative end of the possible costs to business.

Total estimated business costs for putting goods in particular value ranges through the formal clearance process are shown in table 3.8. Costs for businesses could amount to over $1 billion if the threshold was removed and there was no reduction in imports because of higher prices. This assumes that there would be no economies of scale in processing many more formal declarations or upward pressure on wage rates for Brokers/Classifiers etc given the higher demand for their services.

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17 CIE analysis of employment numbers against formal declarations for 2009-10.

18 See, for example, Aus-Express Customs.

3.8 **Business costs for formal clearance of low value imports** 2009-10

| *Value range* | *Number of consignments* | *Business costs* |
|---|---|---|
| | '000 | $m |
| $0–100 | 40 805.3 | 1 224 |
| $101–200 | 1 467.3 | 44 |
| $201–300 | 599.3 | 18 |
| $301–400 | 344.7 | 10 |
| $401–500 | 230.2 | 7 |
| $501–600 | 176.7 | 5 |
| $601–700 | 137.9 | 4 |
| $701–800 | 114.9 | 3 |
| $801–900 | 108.3 | 3 |
| $901–1 000 | 83.5 | 3 |
| Total low value | 44 067.9 | 1 322 |

Note: Based on current consignments rather than predicted consignments under alternative arrangements.
*Sources:* Australian Customs and Border Protection Service and CIE calculations.

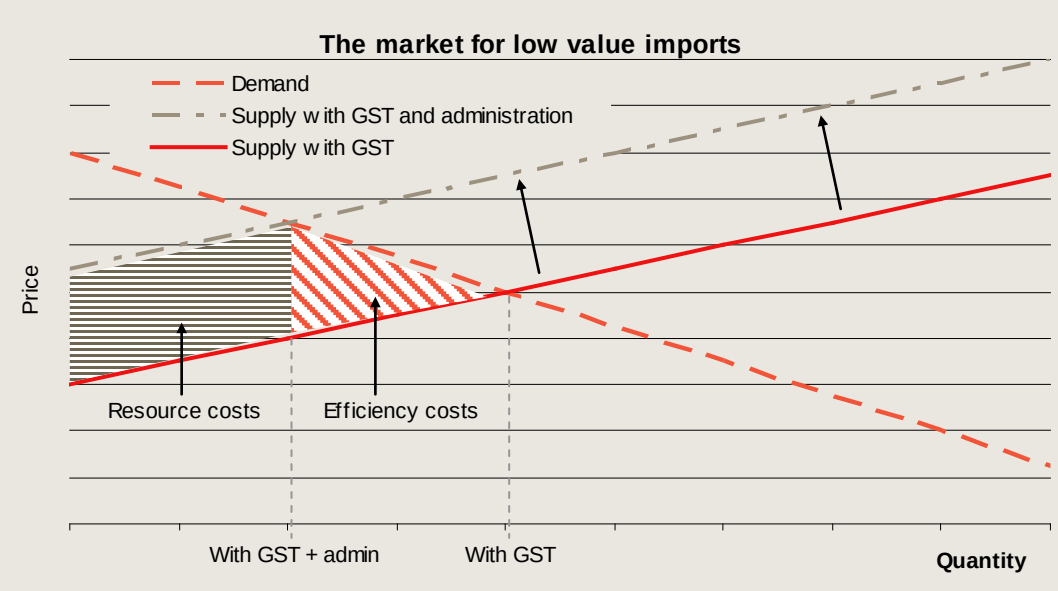
These uncertainties are less important for the small changes in consignment processing for reductions in the threshold to values above $100. In this case resource costs would be up to $100 million per year for processing the formal processing of the current number of low value imports with customs values above $100.

These costs will eventually be borne by the buyer of the goods through higher freight charges.

### *Efficiency costs*

The resource cost estimates presented above are based on the same number of low value imports entering Australia. If people respond to the price of imports then there will be fewer low value imports. This will reduce the resource costs discussed above but lead to efficiency costs. These different costs are broken up in chart 3.9.

### 3.9 Efficiency and resource costs




*Source:* The CIE.

The efficiency costs can be estimated similar to the efficiency costs of differential treatment of products with respect to GST. On the basis of a flat supply curve, the dead weight loss triangle will equal:

$$DWL = \Delta P.\Delta Q / 2$$

That is, half the change in price times the change in quantity, measured from the price/quantity bundle when GST was applied but not administration costs.

## *Other distortions*

There are a number of other economic distortions noted in chapter 1. It is beyond the scope of this submission to consider how these distortions impact on the economically efficient/optimal low value threshold in detail, although the main ones previously noted would suggest that the economic costs of a low value threshold are smaller than would otherwise be the case because:

- restrictions on domestic retail competition, such as arising from planning, would be less costly economically if consumers had better access to overseas retailers;
- restrictions on international trade such as import duties will be less costly economically if these restrictions are able to be avoided; and
- restrictions that increase prices of books sold in Australia will be less costly economically if consumers can avoid these restrictions.

# 4 Foregone GST revenue from the low value threshold

A GST exemption applies to low value imports. Currently, goods imported into Australia that have a customs value of $1000 or less (except for consignments containing tobacco, tobacco products or alcoholic beverages) are classified as low value. These goods are also exempt from customs duties.

There have been a number of estimates of the revenue that the government foregoes by providing this exemption.

- Australian Treasury estimates foregone revenue of $410 million in the 2009-10 financial year and $460 million in 2010-11. Treasury indicates that the certainty around this estimate is low.
- The National Retailers Association estimates foregone GST revenue from the low value threshold to be in the order of $500 million and the forgone duty and customs clearance fees to be around $200 million.

In this chapter we set out how foregone revenue should be measured, the basis of previous estimates of foregone revenue and our own estimate of foregone GST revenue arising from the low value threshold.

## *How should foregone GST revenue be estimated?*

A very simple approach to estimating GST revenue foregone from having a low value threshold would be to take 10 per cent of the value of all goods imported into Australia with a customs value of $1000 or less. There are a number of limitations on this method that will make it inaccurate.

- The GST rate applies to the customs value plus the cost of freight and any duties. Using a customs value would underestimate the amount of GST foregone on a single consignment by an amount equivalent to 10 per cent of the freight and duty charges.
- Companies that are registered for GST are eligible to obtain a GST credit for any GST paid on purchasing products used in the business. This GST credit offsets any GST the company is required to pay for the sale of their own goods or services. This system of credits effectively means that the government only collects GST on goods purchased by the final consumer. Therefore, foregone revenue should be calculated only on goods imported by final

consumers/households. Goods imported by businesses will ultimately attract GST when sold to the final consumer.

- There are a number of categories of goods that are exempt from GST. These include (but are not limited to) medical supplies, disability support equipment and fresh food and beverages. It is likely that the majority of the low value imports do not fall into these categories and, therefore, this would have a very minor effect on the estimate of forgone revenue.
- Many of the goods imported by final consumers and businesses under the low value threshold would be subject to an import duty. This would collect additional government revenue although potentially at a cost through introducing distortions between domestic and overseas production of those goods. This would likely fall as Australia undertakes unilateral, bilateral and multilateral tariff reductions.
- The number of low value imports may fall if GST is imposed on these imports. If the elasticity of demand is high, which corresponds to the situation where differential application of GST is generating the highest welfare losses (see chapter 3), then much less GST revenue would be collected than implied by using current low value imports. If elasticity of demand is low, then using current low value imports is more appropriate. However, in this case the welfare losses from differential GST application would be small.

Any estimate of the revenue foregone would need to factor in these issues to be viewed as credible.

In addition, it is more useful to understand the revenue lost from imposing an alternative threshold rather than from having no threshold at all. There is little point in imposing administrative costs for low value items as GST revenue collection will be small and administrative costs high.

## *Treasury estimate of foregone GST revenue*

In the *Tax Expenditures Statement 2010* the Treasury estimated that revenue foregone due to the GST threshold on imports amounted to $410 million in the 2009-10 financial year and $460 million in 2010-11. This estimate has been widely quoted in publications on this topic, including in the Productivity Commission's Issues Paper. There is no discussion in the Statement that explains the assumptions behind the calculation. Through correspondence with Treasury we have found that the calculations were based on a sample of data provided by Customs and the analysis accounts for those imports by businesses that would be expected to receive a GST credit had they been required to pay the GST.

Since the Treasury analysis, Customs has put together complete data for air cargo (as discussed in chapter 2) providing a better basis for estimation. As noted in chapter 2,

estimates for international mail are still problematic. The updated Customs information for air cargo found that the value of imports from air freight in 2009-10 under the low value threshold had a total value of $874 million, implying GST collections from this source would be much lower than $87.4 million once the factors discussed above are accounted for.

The other difficulty with the Treasury estimate is that there is no transparency about how it has been derived or the key assumptions that underlie it. Without these details it is difficult to identify whether the estimate is credible. Key details that have not been provided by Treasury include:

- the total assumed value of low value imports and the sources of these imports
- the number of consignments by each mode of transport
- the average value of a consignment
- the proportion of consignments assumed to be imported by households
- the degree of behavioural change assumed.

We note that the Treasury only places a low level of confidence on their estimate of the forgone revenue. This reflects the fact that the data used in calculating the forgone revenue was sourced from a sample as opposed to a census of low value consignments. Customs has now put together all values for air freight and number of consignments for sea freight. We expect the Productivity Commission will be able to provide greater certainty around low value imports coming through international mail through its own discussions with Australia Post.

## *National Retailers Association*

In their submission to this Productivity Commission Inquiry the National Retailers Association (NRA) estimated the total value of imports below the threshold to be between $5 and $10 billion and the lost GST revenue from these imports to be in the order of $500 million and the forgone duty and customs clearance fees to be around $200 million. It should be noted that foregone customs duties fees simply reflect lower costs of undertaking customs clearances (presuming fees are cost reflective) and hence there would be both reduced revenues and reduced costs for government.

The NRA estimate is based on a survey of Australian retailers. The extent to which these retailers would have an accurate gauge of the activity of their competitors is difficult to know, particularly given that low value imports go directly to households and businesses. It would be expected that direct data sources would provide much greater certainty than a survey of Australian competitors about online overseas retailers selling into Australia. We note that when NRA made their estimates the recently released Customs data on air freight would not have been available.

There are also questions about the consistency of the numbers reported by the NRA. Below we have taken some time to work through what the NRA's numbers would imply for the amount of consignments, value of consignments, customs processing costs and number of flights into Australia.

- *Number of consignments*
  NRA suggests that foregone Customs charges would be in the order of $200 million. This implies at most 4 million low value consignments arriving given that government charges are $55.20 for online formal customs declarations and more if done manually, and assuming there were no import duties collected. If there were 4 million consignments then to get to a figure of $5 to $10 billion in low value imports would require each consignment to be worth $1250 to $2500 on average. Yet Customs data indicates that on average consignments are valued at around $100. Looking at this in reverse, if there were $5 to $10 billion in low value imports and each consignment was valued at $100 on average, then there would be 50 to 100 million consignments arriving. In this case Customs charges would amount to $2 to $4 billion dollars to clear these consignments. The consistency of the estimate is hence brought into question.
- *Customs cost of processing consignments*
  If the number of low value consignments is around 50 to 100 million as suggested by a figure of $5 to $10 billion in low value imports, and we assume that it takes around half an hour to process each consignment by Customs staff (which is not unreasonable given a charge of over $50), then around 25 to 50 million extra working hours would be needed each year to process the low value consignments. If we assume that one staff member works an average of 2000 hours a year (8 hours a day, 5 days a week for 50 weeks a year), then Customs would need to hire an additional 12 500 to 25 000 staff to process the low value consignments. Clearly this is unrealistic given that the number of staff currently employed in the whole Customs Department is 5805.[19] Hence it is unlikely that formal processing would ever be applied to all low value consignments on the NRA's estimates as the administration task of applying GST to all low value imports would be immense.

The points above provide some context as to what is implied by the figures presented by the NRA in their submission and brings into question the validity of estimates of GST foregone. From this we expect that the certainty around these estimates is insufficient to inform a Productivity Commission Inquiry.

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19 From the Customs Annual Report 2009-10 (http://www.customs.gov.au/webdata/minisites/annualreport0910/index.html).

## *Our estimate of the foregone GST revenue*

Previous estimates of the foregone GST revenue from the low value threshold have suffered from difficulties in obtaining sufficient data and lack of transparency in explaining how numbers have been derived. In this section we use information provided by CAPEC members to see if we can provide a more accurate estimate of the amount of GST revenue foregone. We highlight all assumptions that we make so that the Productivity Commission can review these and make adjustments as necessary. We can make our calculations available to the Productivity Commission should they be required.

### *Data sources and gaps*

Customs has made data publicly available showing the number of air cargo consignments and the value of consignments that fall under the $1000 threshold. The data released by Customs was summarised in chapter 2.

In order to estimate GST revenue foregone a number of additional pieces of data are required.

- The Customs data does not include the value of low value consignments imported via international post or sea freight. The number of low value sea freight consignments is known and is less than 1 per cent of those from air freight. International post could be large although many of the consignments will probably be of very low value (such as gifts) as discussed in chapter 2.
- The Customs data includes imports for businesses, other organisations and for final consumers. GST revenue will be foregone only for goods destined for final consumers. Businesses and other organisations likely make up a significant share of low value imports, particularly at the higher end of the low value range (as discussed in chapter 2).
- The Customs data includes all low value imports. A small part of these may be GST exempt.
- The Customs data provides imports based on customs value. Freight and duties will need to be added to this to get a figure to which the 10 per cent GST can be applied.

Using a week of flights provided by the four CAPEC members, comprising a total of around 70 000 consignments, we have sought to better understand some of these key parameters as set out in chapter 2. We have also made adjustments for freight costs and import duties.

Finally, we also present a figure for foregone revenue based on various possible elasticities of demand for low value imports. This allows us to measure a correct counterfactual of how much additional revenue would be collected were the

threshold to be adjusted and consumers allowed to respond to changing import prices.

There are still some areas where more information would result in more accurate estimates of GST forgone. For a detailed assessment of forgone GST the value (including freight costs, duties) of all consignments going to households through international mail would be needed. We test the sensitivity of our results to different assumptions given this uncertainty.

### *Our approach*

*Number and distribution of consignments*

The number and distribution of consignments was discussed in detail in chapter 2. The basis of our estimate is as set out in table 4.1.

4.1 **Number and value of low value consignments** 2009-10

| *Value range* | *Total consignments* | |
|---|---|---|
| | Number | Value |
| | '000 | $m |
| $0–100 | 40 805.3 | 724.8 |
| $101–200 | 1 467.3 | 208.5 |
| $201–300 | 599.3 | 147.5 |
| $301–400 | 344.7 | 119.4 |
| $401–500 | 230.2 | 103.8 |
| $501–600 | 176.7 | 97.3 |
| $601–700 | 137.9 | 89.5 |
| $701–800 | 114.9 | 86.2 |
| $801–900 | 108.3 | 92.4 |
| $901–1 000 | 83.5 | 79.3 |
| Total low value | 44 067.9 | 1 748.6 |

*Sources:* Australian Customs and Border Protection Service and CIE calculations.

*Consignments to households*

As noted earlier, only those consignments delivered to households would have generated GST revenue if the importation threshold were removed. We use the figures in table 2.5 to approximate shares to businesses and households. We apply these to all types of imports. It is possible that international mail is more oriented towards households than is air cargo. This is discussed as a sensitivity test on the results.

*Products exempt*

Some products are exempt from GST such as some food items, medical supplies etc. Few of these items are imported through air cargo. Based on the discussion in

chapter 2 we estimate that these exempt products could comprise up to 3 per cent although more exempt products are destined for businesses. To err on the conservative side we use a figure of 1 per cent of low value imports to households being exempt from GST.

*Freight and duties*

GST payable on imports is calculated on the Customs value plus freight costs and duties. Based on the products that are being imported, the average duty rate applicable to low value imports is 3 per cent for imports to businesses and 5 per cent for imports to individuals.[20] The difference between duty rates for individuals and businesses is driven by the types of products they import. For example, individuals import a greater share of products that attract duties such as textiles and fashion items. Again to err on the conservative side we adopt a tariff rate of 5 per cent for both individuals and households.

Freight rates vary by source, weight, speed of delivery and customer. Contracts for shipments can provide discounts giving final rates well below those available for shipment of a single item. Hence it is not simple to consider the freight rates applicable to low value imports.

Freight costs for a single item shipped from the United States to Sydney with a weight of 2 kilograms will typically cost around $150 using publicly available rates from CAPEC members. This could be well above 100 per cent of the item's customs value for many items. Shipping rates will likely be well below this where importers have contracts with express couriers.

Higher value items tend to have higher weight on average, although this is by no means universal (see chart 4.2). Hence we apply the freight charge at a constant per cent of the value of items. We apply a freight rate of 30 per cent of the value of the item to reflect that many items will be freighted under contract. This is only important in so far as GST is applicable on the freight rate.

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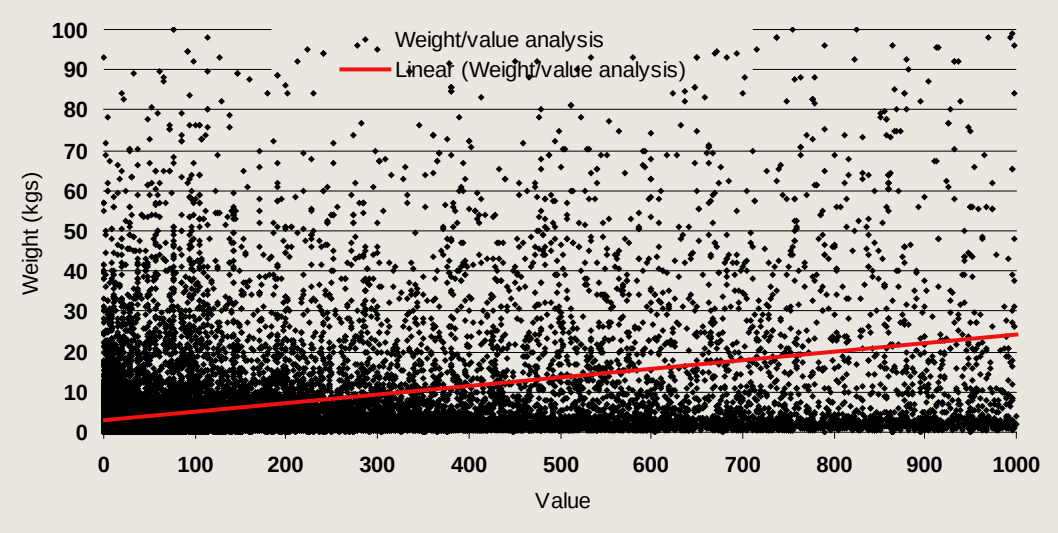
20 This has been estimated based on the shares of products imported from the sample of 2000 consignments and applicable MFN tariff rates.

## 4.2 Weight and value




*Data source:* CAPEC data for one week in April 2011.

Lowering the low value threshold will also likely increase freight charges because express carriers will have to recover their own extra administration costs through higher charges. These additional charges could amount to as much as $30 per consignment based on the discussion in chapter 3. GST would be levied on these additional freight charges.

For each import consignment declaration processed by Customs (and Quarantine) a fee of $55.20 (for online declarations) is charged. No GST is paid on these charges and often they will be paid directly by the consignee.

*GST foregone with no behavioural change*

The GST foregone measured in the absence of any change in behaviour from imposing the GST is:

$$\Delta GST = (M + F + AF + \tau.M).S_H.(1 - S_E).\tau_{GST}$$

Where M is customs value of low value imports, F is freight charges, AF is additional service fee for brokerage charges from having to undertake formal declarations, $\tau$ is the average import duty tariff rate, $S_H$ is the share of imports to households, $S_E$ is the share of products exempt and $\tau_{GST}$ is the GST rate of 10 per cent.

This calculation can be undertaken for goods within each value band to assess the foregone GST if there is no behavioural change from imposing alternative thresholds. The results are shown in table 4.3.

- **For lower thresholds the resource costs imposed are immense (almost $4 billion) while the revenue foregone is expected to be in the order of $300 million of which $200 million relates to GST. This is likely to be a 'high' estimate.**

- **The majority of revenue foregone comes from goods valued under $100.**
- **For higher thresholds, little additional revenue is collected. At a threshold of $400, only $63 million of additional revenue would be collected while imposing resource costs of $73 million.**
- **Resource costs exceed the revenue collected for all thresholds up to (and including) $600.**

4.3 **GST and import duties foregone** 2009-10

| *Threshold* | *Extra GST collected* | *Extra Import duties collected* | *Total extra revenue collected* | *Resource costs imposed* |
|---|---|---|---|---|
| | $m | $m | $m | $m |
| $0 | 228 | 87 | 315 | 3 755 |
| $100 | 82 | 51 | 133 | 278 |
| $200 | 59 | 41 | 100 | 153 |
| $300 | 45 | 33 | 79 | 102 |
| $400 | 35 | 27 | 63 | 73 |
| $500 | 28 | 22 | 50 | 53 |
| $600 | 21 | 17 | 38 | 38 |
| $700 | 15 | 13 | 28 | 26 |
| $800 | 10 | 9 | 19 | 16 |
| $900 | 4 | 4 | 8 | 7 |

Source: CIE calculations.

## *Key sensitivities*

### *International mail*

The analysis above has made assumptions about the distribution of international mail consignments based on limited evidence. While it is probably quite accurate for changes to the threshold close to the current threshold, such as to $900, it could be a long way off for lower thresholds. If international mail was much more likely to go to individuals and tended to have higher values then this would increase the GST foregone. It would also increase the resource costs imposed by changing the threshold.

Allowing international mail to be distributed across the same value distribution as air cargo gives the results shown in table 4.4.

- **Resource costs remain the same for removing the low value threshold but are higher for higher thresholds.**
- **Total revenue foregone increases as the average value of goods arriving from international mail is presumed to be higher and is less concentrated in lower value ranges.**

- **For a threshold of $400, additional revenue collected might amount to $291 million while imposing resource costs of $334 million.**
- **Resource costs exceed the revenue collected for all thresholds up to (and including) $500.**

4.4 **International mail distributed like air cargo** 2009-10

| *Threshold* | *GST foregone* | *Import duties foregone* | *Total revenue foregone* | *Resource costs imposed* |
|---|---|---|---|---|
| | $m | $m | $m | $m |
| $0 | 441 | 240 | 681 | 3 755 |
| $100 | 326 | 212 | 538 | 1 031 |
| $200 | 257 | 180 | 437 | 647 |
| $300 | 205 | 152 | 357 | 455 |
| $400 | 164 | 127 | 291 | 334 |
| $500 | 130 | 105 | 234 | 248 |
| $600 | 99 | 83 | 182 | 180 |
| $700 | 72 | 62 | 134 | 125 |
| $800 | 49 | 42 | 90 | 79 |
| $900 | 21 | 19 | 41 | 35 |

*Source:* CIE calculations.

Our base estimates may also overstate GST collections as we consider parcels arriving through international mail in the $0-$100 range to have the same average value as for air cargo. It is highly likely that parcels arriving through international mail have a lower value because of the many parcels that would have a customs value of zero.

More comprehensive data that can better inform the assumptions will enable better estimates to be made. In particular, more information about international mail is needed.

### *Behavioural change*

There is another key area where the simple approach applied above likely overstates the GST revenue that would be collected if the threshold was lowered/removed. The methodology used above is a static approach — there is no consideration of the effects of taxes and extra costs in reducing the demand for imports. With fewer imports the GST that could be directly collected would be lower than what has been estimated using the static approach, although there may be GST collected from any additional domestic consumption.

The price increases that would occur were low value goods to be subject to formal Customs declarations and GST are shown in table 4.5. For very low value items, price increases will be many multiples of the current cost of the consignment. For example, a consignment with a Customs value of $20 and a freight cost of $6 (30 per cent of the Customs value) has a total current cost of $26. Including Customs and Quarantine

fees of $55.20 per consignment and extra administrative costs for express carriers of $30 per consignment imposes an additional cost of more than 3 time the original value before any GST or customs duties have even been applied.

For higher value goods price increases are smaller as the fixed costs are a smaller share of the current value of goods. Note that there would be price increases for business largely related to extra administration costs even though there would be no more GST collected.

### 4.5 Average price increases for imposing GST and formal customs declarations

| *Value range* | *Average price increases* | |
|---|---|---|
| | Business | Individuals |
| | % | % |
| $0–100 | 373 | 396 |
| $101–200 | 50 | 62 |
| $201–300 | 30 | 42 |
| $301–400 | 23 | 34 |
| $401–500 | 18 | 29 |
| $501–600 | 16 | 27 |
| $601–700 | 14 | 25 |
| $701–800 | 13 | 23 |
| $801–900 | 12 | 22 |
| $901–1 000 | 11 | 21 |

*Source:* CIE calculations.

The size of these price changes suggests that there would be substantial behavioural change for lower thresholds and some behavioural change for higher thresholds. The implications of this for foregone GST are shown in table 4.6 under alternative demand elasticities.

- **Even with minimal behavioural change foregone GST would almost half from removing the threshold due to the substantial increases in prices for low value items**
- **For a $400 threshold, the extra GST collected would be only $12 million if demand is extremely responsive or $32 million is demand is relatively unresponsive.**

4.6 **GST foregone under alternative demand responses** 2009-10

| *Threshold* | *Demand elasticity* | | | |
|---|---|---|---|---|
| | *0.5* | *1.0* | *2.0* | *5.0* |
| | $m | $m | $m | $m |
| $0 | 135 | 89 | 50 | 19 |
| $100 | 70 | 60 | 44 | 19 |
| $200 | 52 | 46 | 35 | 16 |
| $300 | 40 | 36 | 28 | 14 |
| $400 | 32 | 28 | 23 | 12 |
| $500 | 25 | 22 | 18 | 10 |
| $600 | 19 | 17 | 14 | 7 |
| $700 | 14 | 12 | 10 | 6 |
| $800 | 9 | 8 | 7 | 4 |
| $900 | 4 | 4 | 3 | 2 |

*Source:* CIE calculations.

This is only a partial equilibrium analysis of the behavioural changes that are possible. More sophisticated economic modelling tracing through the general equilibrium effects could also be undertaken as set out in chapter 5.

## *Comparing the estimates*

The CIE estimates of revenue foregone suggest that estimates are likely to be lower than those put forward by Treasury and others, and that the revenue foregone is likely to be highly concentrated in the lower end of the low value range.

An alternative view of the size of low value imports could be through the size of non-store retailing and retail-based commission buying and/or selling. This includes domestic and international internet selling, plus other items that are not low value imports. According to the Productivity Commission, non-store retailing and retail commission-based buying and/or selling amounted to $2.7 billion in 2008-09, accounting for 0.8 per cent of total retail trade sales and service income (A$330 billion).[21] Hence this estimate would suggest that our assumptions on the value of parcels might be high and the actual GST foregone would be even lower than estimated above.

The amount of goods imported below $100, while having a bearing on the overall estimate, will not prove important for the setting of a new threshold. The resource costs of applying formal customs process to imports with a value of $0 to $100 are immense and it is clear that doing so would not improve the welfare of Australians.

21 Productivity Commission 2011, *Economic Structure and Performance of the Australian Retail Industry*, Productivity Commission Issues Paper, Productivity Commission, Canberra, March, Table 1, page 4.

Hence the main issue is how large an increase in revenue might be expected from small changes in the threshold. The analysis above suggests that additional GST revenue and import duties from reductions in the threshold to anywhere between $400 and $900 are likely to be small, while the resource costs imposed will still be substantial. If there is behavioural change then the extra revenue collected will be even smaller.

# 5 Economic modelling of changing the threshold

## The characteristics of the low value imports

The goods of interest in this study are imported by users (businesses or households) directly from overseas. At the same time, there may be lot more of similar products imported by conventional importers, wholesalers and retailers. In other words, the users are competing with conventional importers. There may also be similar products produced in Australia and sold by Australian retailers.

Direct importation by users of low value goods leads to an important feature — it requires only communication and transport margins to deliver the goods, rather than the conventional wholesale and retail margins. As a result, boosting importation of such goods may increase pressure on the conventional wholesale and retail businesses.

The efficiency and inefficiency effects of the low value threshold have been set out in chapters 1 and 3. The economic modelling should capture these impacts.

## How to structure the economic modelling

A computable general equilibrium (CGE) model of the Australian economy with detailed treatment of industries/commodities and government revenues and expenditures is appropriate for analysing the impact of changing the threshold of tax exemption. A CGE model is able to estimate the following impacts of changing the GST exemption threshold:

- the change in GST and tariff revenue;
- the efficiency gains or losses due to changes in relative prices of imports and domestic products; and
- the second round impacts caused by the above changes.

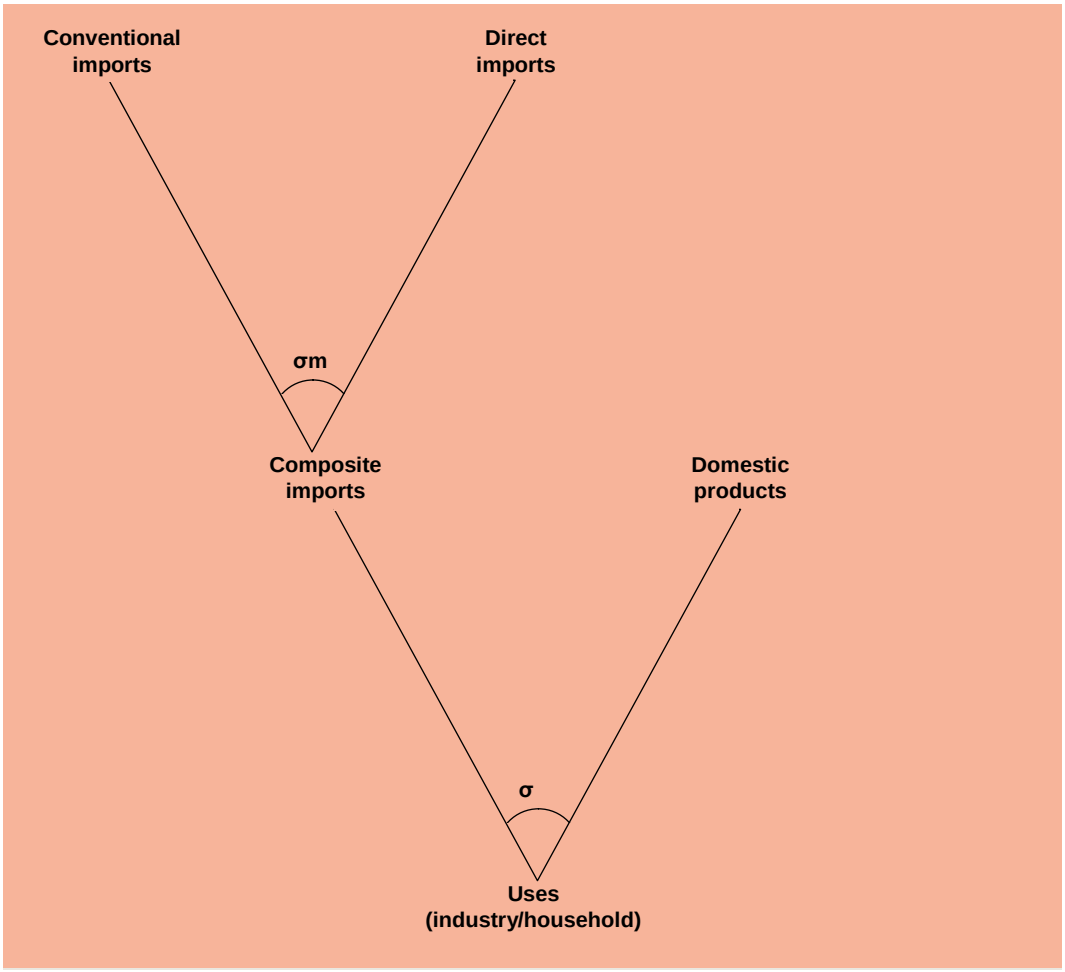
Candidates of such models include FH-Orani, and the MMRF type models including the MMRF-NRA developed by Productivity Commission.[22]

However, some modifications to these models may be required for the specific purposes of this study. Ideally the economic modelling should have the flexibility to model:

- the changes (either increase or decrease) in the threshold of tax exemption; and
- the impact on the conventional import and retailing sector.

It is therefore proposed to disaggregate imports of relevant commodities into conventional and direct imports. The demand system is illustrated by chart 5.1.

### 5.1 Proposed nesting of demand




*Source:* The CIE.

22 Productivity Commission 2007, *Potential Benefits of the National Reform Agenda*, Commission research paper, Productivity Commission, Canberra, accessible at http://www.pc.gov.au/research/commissionresearch/nationalreformagenda.

Users (firms and/or households) first decide the demand for domestic and the aggregated imported goods and services according to their budget and the prices of these goods and services. They then decide the demand for conventional and direct imports according to the relative prices of these imports.

This way of nesting the demand has an important advantage. It enables capture of impacts caused by changing the threshold of the GST exemption with minimum modification to existing models. For example, the bottom nest in chart 5.1 is the current structure of some existing models, and thus the base data and relevant model parameters can be used.

## *Key parameters for economic modelling*

### *The share of direct imports*

The share of direct imports will determine the split of existing imports in the database. Ideally the data of for direct imports should include both high (higher than the current $1000 customs valuation threshold) and low value imports ordered directly by users from overseas to enable modelling of an increase or decrease in the threshold of GST exemption. If only low value imports are included, the model can only evaluate the impact of lowering the threshold.

The amount and composition of commodities are set out in chapter 2.

### *The share of uses of direct imports*

This relates to the split of direct imports between business and consumption uses. As discussed earlier, exemption of GST for goods imported by businesses will not cause further distortions and revenue losses because GST charges on conventional imports are credited to business users.

The share of goods to businesses and individuals is set out in chapter 2.

### *The tariff and GST rates of conventional and direct imports*

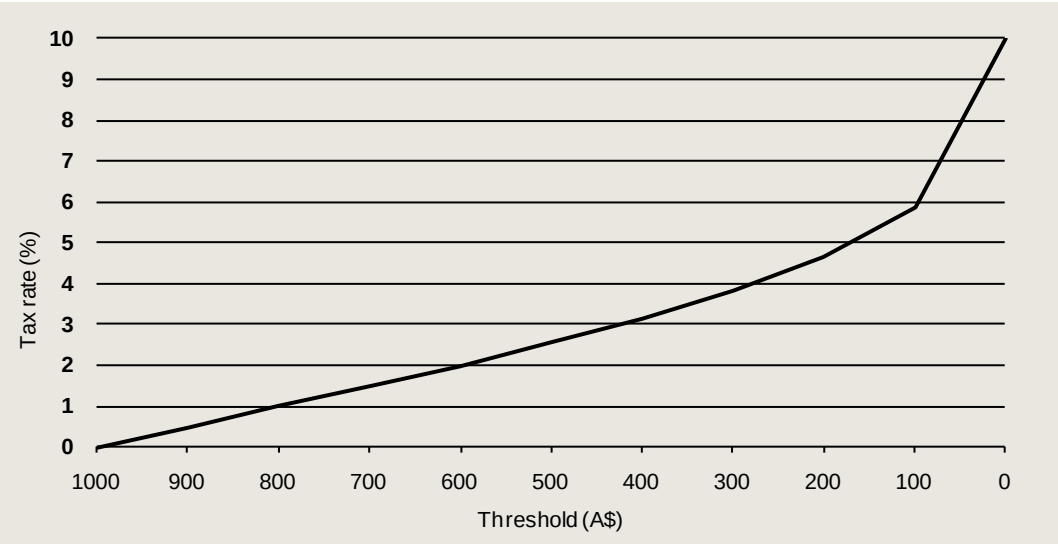
Because the imports are split, it is necessary to recalculate the tariff and GST rates of the conventional and direct imports. Because most of the direct imports would be tax free, the tariff and GST rates for conventional imports would be higher than the original rates for aggregate imports in order to collect the revenue recorded by official statistics.

If the direct imports include both high value and low value imports, the tariff and GST rates for the direct imports categories would be positive numbers. By contrast, if only low value (below the current threshold) imports are included, the tariff and GST rates for these imports would be zero in the base case.

Lowering the threshold implies more imports are subject to tariffs and GST and hence the average tariff and GST rate of relevant imports would be higher. By contrast, increasing the threshold would lower the average tariff and GST rates. This explains why including only low value imports in the direct imports cannot model the impact of increasing the threshold — the tariff and GST rates cannot be further reduced to below zero.

Chart 5.2 illustrates the effective GST rate with different thresholds of exemption according to the composition shown in table 4.1. The estimates assume the direct imports include low value goods only. The base rate with a threshold of $1 000 is hence zero. If the threshold reduces to $900, the effective GST rate would be 0.45 per cent. If the threshold reduces to $100, the effective GST rate would be 5.86 per cent. If there is no exemption, the GST rate would be the statutory rate of 10 per cent.

5.2 **Effective GST rate with different thresholds of exemption**




*Data source:* CIE estimates.

### *Margins associated with the imports*

As discussed previously, direct imports require different margins to conventional imports for the purposes of economic modelling. A significant difference is that direct imports do not require wholesale and retail trade margins, but requires postal and courier services. Table 5.3 illustrates the margins associated with imports for household consumption.

### 5.3 Margins associated with imports for household consumption

| *Margin* | *Conventional imports* | *Direct imports* |
|---|---|---|
| Gas Supply | | |
| Wholesale Trade | Yes | |
| Retail Trade | Yes | |
| Hotels and Cafes | Yes | |
| Road Freight | Yes | Yes |
| Rail Freight | Yes | |
| Ports | Yes | |
| Water Freight | Yes | Yes |
| Air Freight | Yes | Yes |
| Finance | Yes | |
| Communication[a] | | Yes |

[a] Communication is not defined as a margin good/service in MMRF models.

*Source:* CIE illustration.

Communication which includes telecommunication services and postal and courier services is not defined as a margin good/service in the MMRF models. It is necessary to include it as a margin good/service.

It might also be useful to separate the postal and courier services from the communication sector to provide a more detailed and accurate presentation of the economy.

To determine the margin for direct imports, the administration costs discussed in chapter 3 could be used.

#### *The elasticity of substitution between conventional and direct imports*

This is one of the most important parameters. A low elasticity of substitution between conventional and direct imports suggests less impact on conventional imports and retailing if taxation of direct imports changes. An extreme case is zero elasticity. In this case, the conventional imports and direct imports are not substitutable. Hence there would be no substitution effects when prices of direct imports change, although there may still exist income effects.

Because the direct imports account for a small share of total imports, there is little literature on the estimation of the elasticity of substitution between conventional and direct imports. To overcome this problem, sensitivity analysis of different values of the elasticity may be conducted or analysis of changes in direct imports at different exchange rates may be used, as discussed in chapter 3.

# 6 Conclusions

This submission has sought to show the main welfare costs and benefits associated with the low value threshold at which imports do not go through formal declaration processes and do not attract GST and import duties.

In this chapter we bring together the previous sections to assess the case for lowering the low value threshold below $1000. We do this using partial equilibrium modelling noting that the Productivity Commission may choose to conduct full economic modelling that would better capture the other distortions and flow-on impacts across the Australian economy.

## *What are the welfare impacts of reducing the threshold to $900?*

To make things simple consider the net economic impacts of applying the GST and associated resource costs to a set of goods valued slightly below $1000 and not currently paying GST. Presume that all these goods are going to individuals.

The total current price of these goods is $1300 inclusive of freight charges. If GST was included but there were no additional administration charges then the price would be $1430 for each good, 10 per cent higher than the original price.

Now consider the administration costs for government and business of $55.20 and $30 respectively. This brings the pre-GST price to $1385.20 and the post GST price to $1518 or $88 above the price of $1430, noting that GST is not levied on the $55.20 Customs charge. This is 17 per cent higher than the original price.

The efficiency costs and benefits and resource costs will depend on the degree of behavioural change. Let's put this at a demand elasticity of 2 to be on the high side. Then if there were 100 units currently imported:

- there would be only 80 units imported with the GST; and
- there would be only 66 units imported with the extra GST and administration costs.

The efficiency benefits are the change in price from applying the GST multiplied by the change in the number of units divided by 2. That is, $130*20 units/2 = $1300.

The efficiency costs are the change in price from administration costs multiplied by the change in units (both measured from the with GST outcome) divided by 2. That is, $88*14 units/2 = $616.

The resource costs are the administration costs for goods still imported. That is, $85.20*66 units = $5623.

The total net benefit is efficiency benefits less efficiency costs less resource costs. That is, $1300 - $616 - $5623 = -$4939.

Hence even with all products destined to individuals there are efficiency costs from lowering the threshold.

If we account for the fact that around 60 per cent of imports in the $900 to $1000 range are for businesses and these incur only efficiency costs and resource costs — there are no efficiency benefits — then the net costs become even larger.

## *Are there conditions under which this result would differ?*

It is worth asking whether there are conditions under which lowering the threshold might provide net benefits. It turns out that there are no conditions under which this would be the case in a partial equilibrium sense. In particular:

- there may be small net benefits to lowering the threshold if all products were destined to individuals. This would be the case if individuals were very price responsive and the introduction of the GST and processing fee reduced low value imports to almost zero. This is unlikely as imports of goods above $1000, which incur administration charges and GST, are observed; and even then
- the net costs from imposing more onerous requirements on businesses will far outweigh any net benefits from collecting GST from goods destined for individuals.

Even under substantially lower assumptions about costs to freight carriers and Customs this result would still be the case.

## *Summary*

Partial equilibrium analysis suggests that there are welfare costs from reducing the GST low value threshold from its current level. This mainly reflects the high share of goods destined for businesses, which claim GST credits and the high costs for formal processing of import declarations for express carriers and Customs. This is the case under a large range of assumptions about the responsiveness of households and businesses to changing prices.