Some costs of foreign debt

There are some downsides to foreign debt:

- **Creation of economic hardship.** As with all debt, the main problem is repaying interest and the principal. Excessive levels of government or sovereign debt create great hardship, forcing governments to lift taxes and cut spending, contracting economic activity. As seen in some European countries like Greece, this causes economic activity to shrink and unemployment to rise.
- **The burden of debt repayment.** The burden of debt repayment is especially heavy if the debt is expressed in another currency and the value of the Australian dollar falls against that currency. It can mean a reduction in our credit rating and, ultimately, higher interest rates.
- **Adds to the CAD.** The NFD is the major reason for Australia's large deficit in net primary incomes and our big CAD. This ultimately weakens the currency and diminishes its purchasing power.

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Weblinks The weblinks in these activities are available in this topic's student resources tab.

- Foreign debt

CHECK YOUR UNDERSTANDING

1. What is the NFD? How is this different from the NFE?
2. Identify and explain three causes of Australia's NFD.
3. Identify and discuss two important costs and two benefits of a rise in Australia's NFD.

APPLIED ECONOMIC EXERCISES

Apply your understanding of this subtopic by accessing and completing the Applied economic exercise(s).

- School-assessed coursework > Applied economic exercises > **Question 4**

3.5 The terms of trade

The **terms of trade (TOT)** measures the ratio for the average price the world is prepared to pay Australia for our exports against the average price we pay the world for our imports. Put another way, it is the amount of imported goods that can be purchased with a unit of exported goods.

- The TOT is said to rise or become *more favourable* for a country when the export prices we receive rise faster, or fall less, than import prices. As a result, a nation can purchase more imports with a unit of its exports.
- The TOT is regarded as *less favourable* for a country when export prices rise more slowly, or fall more quickly, than import prices. As a result, a nation can purchase fewer imports with a given unit of its exports.

Measurement of the terms of trade

The TOT is measured by means of an index that uses a base year (where the index equals 100 points) to compare following years.

$$\text{The terms of trade index (TOT)} = \frac{\text{Export price index}}{\text{Import price index}} \times 100$$

Here the export price index is constructed by measuring changes in the *average prices* of a basket of Australian exported goods, with items weighted according to their relative importance in trade. Similarly, the import price index measures changes in the average prices of our imported goods, with items weighted according to their relative importance.

The TOT is primarily regarded as an *aggregate demand factor* affecting spending levels. This is because the *prices* we receive or pay in international transactions affect the *value* of our exports and the value of our imports. When, for example, the world chooses to pay us lower prices for our exports (as happened with our commodities during 2013–16) because of weaker demand, this normally causes a drop in the value of exports sold. In turn, this tends to slow AD and economic activity. In reverse, if the world pays generally higher prices for our exports because there is a shortage or demand is strong, this normally boosts the value of exports and strengthens our level of AD and economic activity.

Trends in Australia's terms of trade index

As can be seen in figure 3.14, Australia initially enjoyed stronger TOT between 2009–10 and 2011–12, but there was a spectacular deterioration in the subsequent years to 2015–16 as export prices fell relative to import prices.

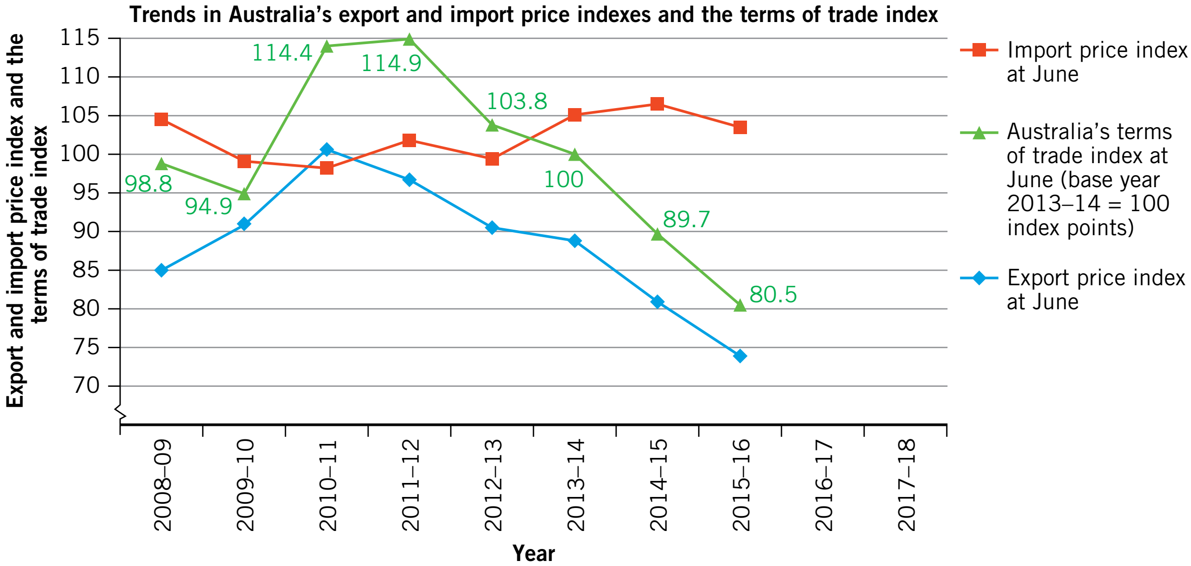

FIGURE 3.14 How changes in export and import prices affect Australia's terms of trade index

Sources: Data for the terms of trade index derived from ABS 5206.0 (Table 3); data for the export and import price indexes derived from ABS 6457.0 (Tables 1, 3, 12, 7, 9).

Factors that may influence the terms of trade

Australia's TOT display the *prices* received for the basket of our exports and those paid for a basket of imports in world markets. In turn, these reflect the various *conditions of demand* for our exports and imports, and the global *conditions of supply* of exports and imports. Assuming that global competition is reasonable and countries are price takers, the price of each good (P_e) is largely determined by its level of demand (D) and supply (S) at market equilibrium (E). This situation is shown hypothetically in figure 3.15.

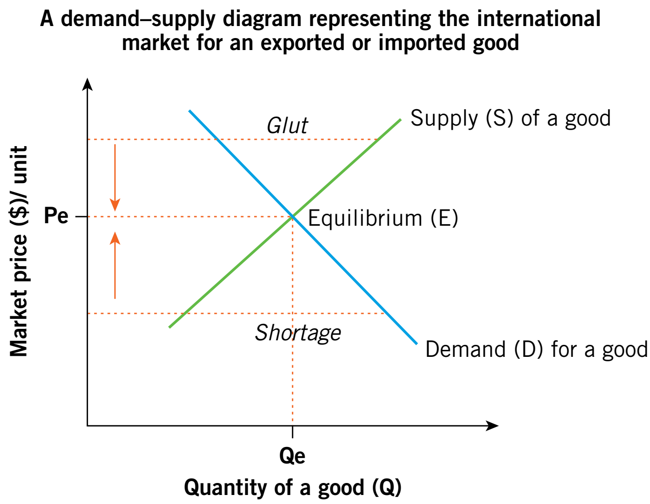

FIGURE 3.15 How demand and supply of each good traded might determine its market price and thus influence Australia's terms of trade.

Changes in global conditions of demand

The level of *world demand* for Australia's exports has a tremendous influence on the prices we are paid and hence our TOT. This is shown in figure 3.16.

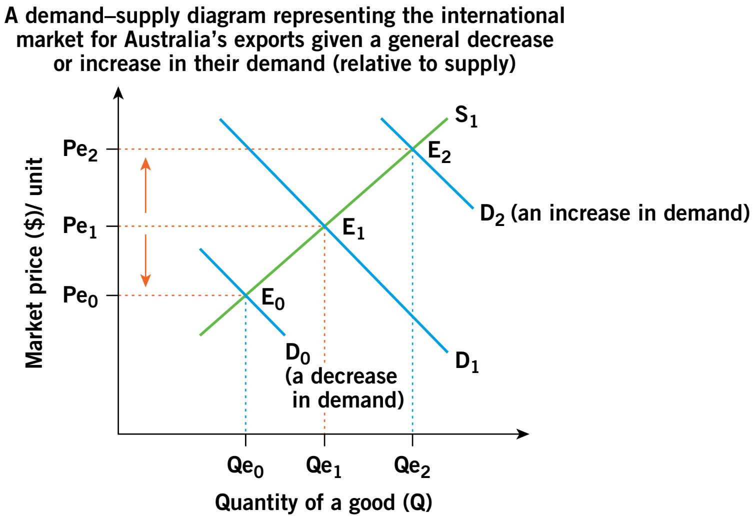

FIGURE 3.16 How a general increase or decrease in the demand for our exported goods might help to cause their price to rise or fall, thus affecting Australia's terms of trade.

Hence, when there is an overall *decrease in the global demand* for Australian exports of commodities (like wheat, beef, wool, coal and iron ore) and manufactured items (relative to their global supply) at a given price (D_1 to D_0), the prices we receive for exports are lower (P_1 to P_0), perhaps depressing the TOT. Global demand for our exports may *decrease* as a result of several factors:

- weaker economic growth in our major trading partners like China (as occurred 2013–16), Japan or the United States
- depressed consumer and business confidence abroad reducing the demand for exports of our goods
- reduced growth rates in global disposable income or population.

In reverse, when there is an *increase in the global demand* for our exports (D_1 to D_2) at a given price (relative to their global supply), this tends to cause a rise in export *prices* (P_1 to P_2), perhaps increasing our terms of trade. Global demand for our exports may *increase* as a result of several factors:

- stronger economic activity among our major trading partners
- greater consumer and business optimism overseas
- faster growth rates in global disposable income or population.

So far we have looked at how a general increase or decrease in world *demand* for Australian exports affects our export prices and hence the TOT. Let us turn now to consider how the global conditions of *supply* can affect our terms of trade.

Changes in global conditions of supply

Changes in the *global supply* of commodities that Australia exports also have a significant influence on the prices we are paid and hence our TOT. This is illustrated in figure 3.17

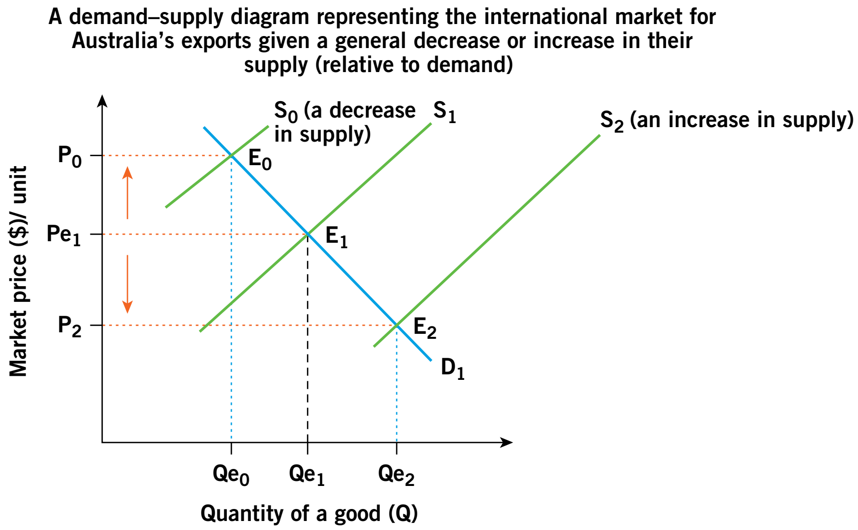

FIGURE 3.17 How a general increase or decrease in the supply of traded goods might help to cause a rise or fall in export prices, thus affecting Australia's terms of trade.

Hence, when there is an *increase in the global supply* (S_1 to S_2) of the commodities Australia exports (like wheat, beef, wool, coal and iron ore) and manufactured items (relative to their global demand) at a given price, the general prices we receive for exports are lower (P_1 to P_2). This tends to make our TOT less favourable. Global supply of the things we export may *increase* due to the following:

- new discoveries of minerals or the opening of new mines
- the effect of new technology on productivity and hence production
- domestic and international growing conditions for crops.

By contrast, when there is a *decrease in the global supply* of the commodities and goods that Australia exports at a given price (S_1 to S_0), the prices received tend to rise (P_1 to P_0), and with them, possibly our terms of trade. Supply might *fall* due to the following:

- resource depletion and exhaustion
- declining productivity
- severe climatic conditions here and overseas.

Effects of movements in the terms of trade

Australia's TOT has significant effects, not just on the CAD and exchange rate, but also on AD and the level of domestic economic activity.

Effects of the terms of trade on Australia's CAD

When the terms of trade rise or fall (due to changes in our export prices relative to import prices), this will affect the values of both exports and imports and hence the size of Australia's CAD.

- A *fall* in the TOT tends to cause the CAD to rise. This is because when we receive lower prices, for example, it often means that there is a relatively weaker demand internationally for our exports. In turn, the value of credits for our exports usually decreases, while dearer global prices paid by us for imports tend to increase the value of import debits.
- A *rise* in the TOT usually results in a decrease in the CAD due to higher prices causing a rise in the value of credits for exports relative to debits for imports.

Effects of the terms of trade on Australia's exchange rate

Changes in the TOT have a powerful effect on the exchange rate for the Australian dollar. Our dollar's exchange rate or value is what it is worth when swapped for other currencies to help facilitate international transactions between countries. The exchange rate is determined in the foreign exchange market by buyers (D) and sellers (S) of the currency. A rise in the D for our currency relative to its S will push the dollar higher, while a fall in D relative to S will weaken the exchange rate.

- A *fall* in our TOT tends to weaken Australia's exchange rate. This is because lower export prices often indicate that there is relatively less international demand for our exports. This tends to reduce the value of exports relative to imports, in turn causing a decrease in the demand for the Australian dollar relative to its supply in the foreign exchange market. This weakens the exchange rate.
- A *rise* in our TOT often pushes up the value of the Australian dollar. This is because receiving better export prices relative to those paid for imports tends to increase the value of net exports. In turn, this means there is a rise in the demand for the dollar relative to its supply, causing the dollar to strengthen.

Effects of the terms of trade on AD and domestic economic activity

The TOT is an aggregate demand-side factor that can affect the level of spending and economic activity.

- A *decline* in the TOT tends to weaken the value of our export sales relative to import spending, and hence in itself tends to slow AD and the level of economic activity.
- A *rise* in the TOT, which means receiving better prices for our exports relative to those paid for imports, tends to boost the value of net exports, AD and domestic economic activity.

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Weblinks The weblinks in these activities are available in this topic's student resources tab.

- Comparative advantage and terms of trade

CHECK YOUR UNDERSTANDING

1. Explain what is meant by the TOT, noting how it is measured.
2. What is meant by the phrase *less favourable TOT for Australia*?
3. Identify and explain how both demand and supply factors can affect Australia's TOT.
4. Explain how you would expect a fall in Australia's TOT to affect each of the following variables:
   a the CAD **b** the exchange rate.