

What are the Terms of Trade?

The terms of trade (ToT) measure the price of a country's exports relative to the price of its imports.

Terms of Trade = (Index of Average Export Prices ÷ Index of Average Import Prices) × 100

For example the UK's Terms of Trade index averaged around **92**, reflecting a structural reliance on imported manufactured goods and energy relative to its export prices.

In comparison to Germany's Terms of Trade index averaged around **98**, reflecting structural strength from exporting high value manufactured capital goods, offset by vulnerability to imported energy price shocks.

Improvement in the Terms of Trade

An improvement in the terms of trade occurs when:

- Export prices ↑ relative to import prices
- Import prices ↓ relative to export prices

Export prices ↑ relative to import prices → ToT ↑ → each unit of exports can purchase more imports

For example, if the export price index rises from 100 to 110 while the import price index remains at 100:

$$\text{ToT} = (110 \div 100) \times 100 = 110$$

The terms of trade have therefore improved.

Deterioration in the Terms of Trade

A deterioration in the terms of trade occurs when:

- Export prices ↓ relative to import prices
- Import prices ↑ relative to export prices

Import prices ↑ relative to export prices → ToT ↓ → more exports required to purchase the same quantity of imports

A deterioration is not necessarily bad for the economy. Cheaper exports may increase export demand and revenue, depending on PED.

Causes of Changes in the Terms of Trade

Relative Inflation Rates

Differences in inflation between countries affect their relative export and import prices.

UK inflation $\uparrow$ relative to trading partners $\rightarrow$ UK export prices $\uparrow$ relative to import prices $\rightarrow$ ToT $\uparrow$

For example In 2022/23, UK inflation peaked above 11% (exceeding many key partners), which drove up export unit values and temporarily pushed the UK terms of trade index from 96 up past 102.

However, higher export prices reduce the price competitiveness of UK exports, potentially reducing export demand.

Changes in Productivity

Higher productivity reduce firm's unit costs, allowing them to lower prices.

Productivity $\uparrow \rightarrow$ unit costs $\downarrow \rightarrow$ export prices $\downarrow \rightarrow$ ToT $\downarrow$

For example South Korea's productivity grew over 4% annually in the 2000s, lowering export prices and reducing its terms of trade by 20% .

Therefore, a deterioration in the terms of trade can actually reflect an improvement in the economy's international competitiveness.

Changes in Commodity Prices

Changes in global commodity prices can significantly affect countries that import or export primary commodities.

Commodity prices $\downarrow \rightarrow$ commodity exporters' export prices $\downarrow \rightarrow$ ToT $\downarrow$

At the same time:

Commodity prices $\downarrow \rightarrow$ commodity importers' import prices $\downarrow \rightarrow$ ToT $\uparrow$

For example, In 2014–2016 the oil price crash from over \$100 to under \$30 a barrel, Saudi Arabia saw its terms of trade fall by 35%, while net energy importer the UK experienced a 12% boost due to cheaper oil and gas import prices.

Changes in Exchange Rates

Exchange rate movements change the relative prices of exports and imports.

Currency depreciation $\rightarrow$ import prices $\uparrow \rightarrow$ ToT $\downarrow$ (SPICEE)

For example:

£ depreciates post brexit 2016 (sterling depreciated by roughly 15%) $\rightarrow$

importing goods become more expensive in £ (UK is a net importer of raw materials) → UK import price index ↑ → UK ToT dropped nearly 5% within a year↓

Effects of Changes in the Terms of Trade

Improvement in ToT

If caused by **higher export prices**:

Export prices ↑ → ToT ↑

However, higher prices reduce international competitiveness. If export demand is **price elastic**, export revenue may instead fall → net exports ↓ → AD ↓.

If caused by **lower import prices**:

Import prices ↓ → ToT ↑

For context the UK's main exports (financial services , consulting etc) can be described as more price inelastic as foreign buyers demand UK services due to high non-price competitiveness such as high quality rather than their cheap price.

Deterioration in ToT

If caused by **higher import prices**:

Import prices ↑ → ToT ↓

However, if caused by **lower export prices**:

Export prices ↓ → ToT ↓

A change in ToT is beneficial depends heavily on the **PED of exports and imports** and what caused the change.