



# Britain's minerals trade

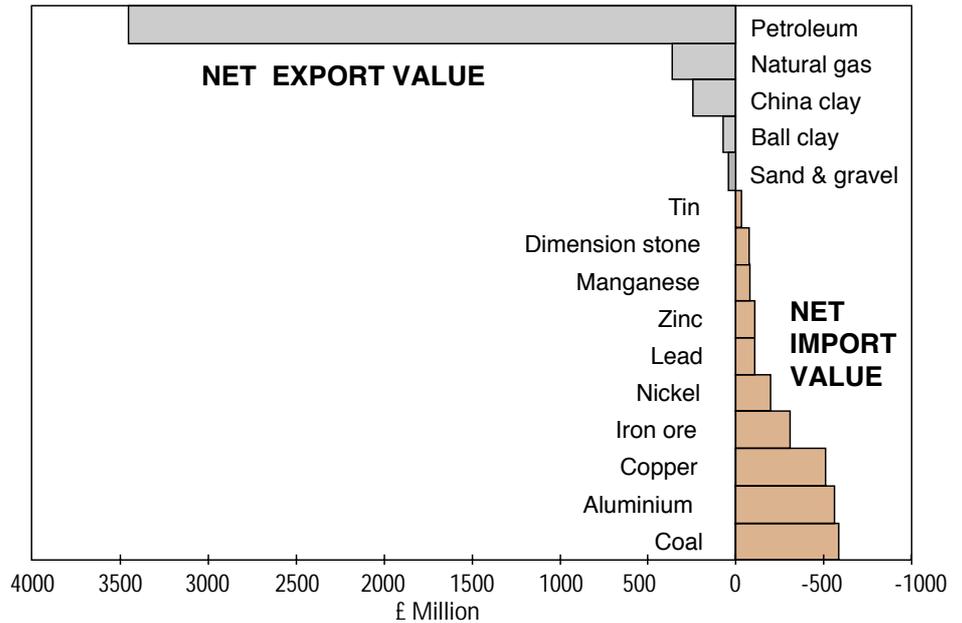
## Meeting the needs of British industry

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### Keyword

With the closure of South Crofty tin mine in Cornwall, Britain is now without a metal-mining industry for the first time in 2000 years. In fact, we have been dependent on imports of metals, with the exception of iron ore, and many other essential minerals for most of the twentieth century. The reason for this is not exhaustion of our native resources but the fact that the demands of world industry can now best be satisfied by the output from the very large mining operations that are found elsewhere in the world, whose large size enables them to be worked profitably.

Britain's mineral-based trade is among the largest in the world. Although the total value of minerals and metals traded is much less than that of consumer goods, manufacturing still depends crucially on an assured supply of raw materials. During the 1970s and 1980s the world political situation, particularly in respect of the former communist bloc and southern Africa, led to fears about security of supply of commodities such as chromium, cobalt and vanadium. Several countries, including Britain, maintained strategic stockpiles of these and other commodities. These stockpiles



UK trade balance in selected minerals (all forms), 1996.

have now either been disposed of or are being downsized. It remains true, however, that the supply of many minerals is concentrated in a small number of countries. This, combined with the modern industrial policy of 'just-in-time' supply of materials, which saves the cost of physical stocks, means that industry is conspicuously vulnerable to any disruption of primary production or trade.

Some imports come as crude (unprocessed) mineral, such as iron ore, titanium minerals and crude sulphur. Others come as semi-processed mineral, such as alumina (aluminium oxide) and zinc concentrate or as refined metals (e.g. most copper imports). There is a well-established trend for the countries where the minerals are mined to develop their own processing facilities and thus to benefit by adding value to minerals rather than to export them in their crude state. Imports of phosphate rock, for example, have recently declined sharply for this reason, and Britain now imports manufactured fertiliser in place of the raw material. Environmental constraints have also contributed to the closure of processing plant, especially metal smelters, and commercial pressures have caused the substitution of large-scale facilities for a greater number of smaller plants.

Examples of the restricted number of sources of mineral and mineral-based imports are provided by iron ore (40% from Australia), ferro-manganese (86% from South Africa and Norway) and unwrought aluminium (46% from Russia, or about one quarter of total consumption). Britain's four aluminium smelters rely on imported alumina, two thirds of which come from Ireland (based on raw-material imports from Guinea) and one third from Jamaica. Tungsten materials are imported from several countries, but the primary world supply is dominated by China and Russia (85%). Coal imports supplied about one quarter of consumption in 1996 and were chiefly from the USA (37%), Australia, Colombia and South Africa. In terms of value, coal was the largest net mineral import in 1996.

The trade is not entirely one-way; the UK is one of the top ten exporters of oil and is the second largest kaolin (china clay) exporter, after the USA. Among refined metals produced from imported materials, Britain is a leading exporter of lead, silver, chromium and platinum-group metals, in addition to a vast range of manufactured articles based on minerals from all sources. The BGS annual publication *World Mineral Statistics* gives details of the production, imports and exports of almost all traded mineral commodities.