ARTICLE

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# The changing nature of the UK's trade deficits, 1985–2008

#### SUMMARY

This article considers changes in the nature of the balance of trade between 1985 and 2008. The first section examines the theories behind trade and the position of the UK relative to its trading partners. Periods of deficit and surplus between these dates are then analysed individually, drawing comparisons. Lastly, the composition of the balance of trade in each period and the fundamental reasons driving either the surplus or deficit are discussed. The analysis concludes that there are some fundamental similarities between the causes of each trade deficit. although there have also been large structural changes in the composition of UK exports and imports due to developments in the global economy.

### Why do we trade?

he principles underpinning trade arise from the differences in the requirements or wants of individuals, and the resources available to them. These principles can be applied to countries as they differ from one another in terms of quality, quantity and price of resources, as well as the techniques which firms use to produce goods and services.

Economic theories behind international trade originate from David Ricardo's (1817) theory of comparative advantage. His work suggested that there would always be a gain to world output from trading, regardless of whether a country has an absolute productive advantage in any of its trading products. If each country specialises in the production of the goods and services in line with their comparative advantage, total world output can be increased, theoretically benefiting all. The more pronounced the variation in trading countries structures are, the greater the potential economic gain from specialisation and trade.

The Hecksher–Ohlin model (see Heckscher 1919 and Ohlin 1933) builds on the theory of comparative advantage by predicting patterns of production based on the factor endowments (that is natural resources, labour and capital) of a trading region. It suggests that a country will export those products which intensively use factors of production in which it has a relative abundance, and import those products which intensively use factors of production that are relatively scarce.

New Trade Theory challenges some of the assumptions underpinning these traditional models, in particular by looking at trade from the perspective of imperfect competition and increasing returns to scale. Krugman (1979) has been attributed with the early development of this literature, which seeks to explain why there is so much trade between similar countries, with similar factor endowments, which cannot be explained by previous models. Krugman suggested that although the broad pattern of what countries trade is determined by things like resources and climate, there is also specialisation due to economies of scale, network externalities, the possibility of product specialisation and strategic behaviour.

# The UK total trade balance since 1985

The balance of trade has traditionally been defined as the difference between the imports and exports of goods across an economic boundary in a given period. However, as services have become increasingly prominent in international trade these too are considered in what is commonly called the balance of total trade. This is particularly significant in the UK, given the importance of the service sector in the UK economy and trade, especially since joining the European Union in 1973. The balance measures the difference between the value of total exports and the value of total imports for a country. It is a significant component of the current account, which makes up part

of the balance of payments. For further information on the construction of the balance of payments see Chamberlin (2009). A trade deficit implies that the value of a country's imports is greater than the value of its exports, and a trade surplus vice versa.

Over the past three decades, there have been some distinct changes in the UK balance of total trade (see Figure 1). These have been separated into four periods:

- between Q2 1985 and Q4 1988 the balance deteriorated rapidly, moving from a surplus of £4.1 billion (2.2 per cent of gross domestic product (GDP)) to a deficit of £4.6 billion (also 2.2 per cent of GDP)
- during the late 1980s and the first half of the 1990s, the balance subsequently improved and returned to surplus. In Q1 1995 this surplus stood at £3.3 billion (1.4 per cent of GDP)
- in the late 1990s and for most of the 'noughties', the UK total trade balance has persistently worsened. By the final quarter of 2007 the deficit had reached £12.9 billion (3.9 per cent of GDP)
- however, since then the total trade balance has improved. The most recent data show that in Q3 2009 the deficit had fallen to £7.1 billion (2.2 per cent of GDP)

Table 1 shows the evolution of the UK total trade balance over these four periods in terms of the growth in exports and imports of goods and services. Between Q2 1985 and Q4 1988 the balance moved into deficit as the growth in imports outstripped growth in exports for both goods and services. During the period Q1

1989 to Q1 1995 the total trade balance returned to surplus, as the growth in UK exports increased, and the growth in goods imported fell sharply. From Q2 1995 to Q4 2007 imports grew at a faster rate than exports overall, despite services exports continuing to grow faster than services imports. This was because of a slowdown in the growth of goods exported and a strong pick up in the growth of goods imported. Finally, both exports and imports of goods and services have contracted throughout 2008 but imports have fallen at a faster rate than exports for both goods and services.

The main focus of this paper is to try and offer some economic explanations for the movements in the UK total trade balance during these four periods. Headline indicators relating to the export and import of goods and services are available in constant price terms, which enables analysis of trade volumes for the key aggregates. Unfortunately, published data at a more detailed product level is only available in current prices, which makes it difficult to identify changes in volumes as prices are not necessarily constant. However, it does enable a general idea of the factors determining the UK's trade position to be formed at a lower level.

# International comparisons in the total trade balance

Over the same period, the US (in percentage of GDP terms) has been running similar trade positions to that of the UK. In contrast, Germany and Japan have both been running sizeable trade surpluses (see Figure 2).

The present US trade deficit, similar to the UK, results from a significant deficit in trade in goods, which is partially offset by a surplus of trade in services. In contrast the positions for Japan and Germany are reversed, generally showing an overall surplus, stemming from a large surplus in goods trade and a relatively smaller deficit in services trade.

These trends can be partially attributed to differences in the structure of these economies. The UK and the US have large service sectors and consumption (domestic spending) has been the main source of growth, consequently resulting in a large number of imported goods. Conversely, both Germany and Japan have much

#### Table 1

Average quarterly real growth rates of the exports and imports of goods and services<sup>1</sup>

|                 | Goods and Services |         | Services |         | Goods   |         |
|-----------------|--------------------|---------|----------|---------|---------|---------|
|                 | Exports            | Imports | Exports  | Imports | Exports | Imports |
| 1985Q2 – 1988Q4 | 0.5                | 2.4     | 0.3      | 2.1     | 0.6     | 2.5     |
| 1989Q1 – 1995Q1 | 1.3                | 0.5     | 1.2      | 0.7     | 1.3     | 0.5     |
| 1995Q2 – 2007Q4 | 1.2                | 1.6     | 1.9      | 1.8     | 0.9     | 1.5     |
| 2008Q1 – 2008Q4 | -2.2               | -2.8    | -2.1     | -2.8    | -2.3    | -2.8    |

Note:

Source: ONS Quarterly National Accounts

1 Data is based on the Chained Volume Measures and seasonally adjusted.

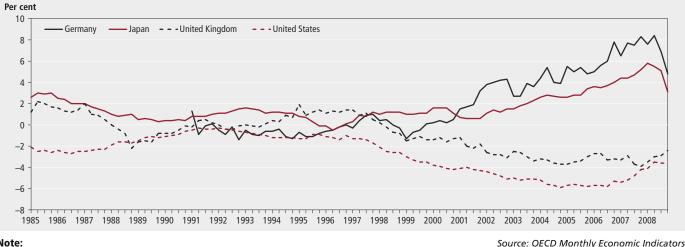
# Figure 1 Total trade balance as a percentage of GDP<sup>1</sup>



#### Note:

1 Data is based on the Chained Volume Measures and seasonally adjusted.

# Figure 2 Balance of total trade as a percentage of GDP – international comparisons<sup>1</sup>



#### Note:

1 Data is based on the Chained Volume Measures and is seasonally adjusted.

# Figure 3 Growth in household final consumption expenditure and imports<sup>1</sup>





#### Note:

1 Data is based on the Chained Volume Measures and is seasonally adjusted.

larger manufacturing bases, and growth to a greater extent has been export led due to the weakness of domestic spending. In both Germany and Japan, high saving ratios appear to be the result of ageing populations.

# The move to deficit, Q2 1985 to Q4 1988

In Q2 1985 the UK's trade balance recorded the largest surplus, as a percentage of GDP, since the end of 1982. Over the next twoand-a-half years this surplus, representing 2.2 per cent of GDP, swung to a deficit of 2.2 per cent of GDP. This was primarily driven by the trade in goods component. As Table 1 shows, goods imported grew over fourtimes faster than exports in this period. Although the balance of trade in services also deteriorated, this component only accounted for approximately 20 per cent of the total reversal.

As UK household consumption expenditure has been an important driver of economic growth in recent decades, there have been strong links between the UK's balance of trade and the economic cycle. Growing trade deficits between 1985 and 1988 coincide with a period of strong growth in household final consumption expenditure. As Figure 3 clearly shows, UK household consumption growth and imports growth have been strongly correlated.

There were a number of factors that may account for the strength of consumption growth in the mid to late 1980s. Stronger economic growth in 1987 and 1988 meant that unemployment, which peaked at around 3 million in 1986, began to fall rapidly. The deregulation of financial markets (in the big bang of 1986) also led to a large expansion in the availability of household consumer and mortgage credit

Source: ONS Quarterly National Accounts

- the latter prompting strong growth in domestic house prices that buoyed the net-worth of home-owners. Reductions in income tax in the budgets of 1987 and 1988 also boosted personal disposable incomes.

Interest rates were also kept low during this period. Between early 1987 and March 1988, the UK Treasury followed a semi-official policy of shadowing the German Deutsche Mark (DM) with the eventual intention of joining the European Exchange Rate Mechanism (ERM). Nigel Lawson, the then Chancellor of the Exchequer, resisted raising interest rates in case it led to sterling appreciation against the DM, thus breaking the unofficial exchange rate target. In addition, in October 1987 global stock markets crashed, falling by 25 per cent in one week. Although there was no obvious economic explanation, Governments worried about

any potential macro consequences, kept interest rates low to avoid any possible downturn. The resulting low interest rates lent support to already strongly growing household borrowing and spending.

However, the deterioration in the UK's total trade balance during this time may also have been structural, as well as cyclical. The early 1980s saw a strong retrenchment in the size of the UK's manufacturing sector, meaning that as household consumption expanded, demand was increasingly met by imports. The substitution of domestic goods with imports may also have been driven by price, and by quality (such as the prestige associated with certain foreign products like German cars and Japanese electricals).

Trade flows can also be heavily influenced by the exchange rate. As a currency appreciates, imports become relatively cheaper and exports become relatively more expensive (holding other things equal). Likewise, exchange rate depreciation would have the opposite effects, making imports more expensive and exports relatively cheaper. Therefore, if the volume of exports and imports are price sensitive, then the competitiveness effects resulting from exchange rate movements can have an important effect on the overall total trade balance.

The decline in the UK manufacturing sector during the early 1980s had been partly blamed on the strength of sterling, which through the development of North Sea oil had been afforded petrocurrency status, but to the competitive detriment of other traded goods. These were primarily manufactures.

Between 1985 and 1987 sterling appreciated strongly against the US dollar. In March 1985 the exchange rate was close to unity, but by the end of 1987 sterling was trading at around \$1.80 - representing an 80 per cent appreciation in three years. The sharp fall in the US dollar was attributed to the Plaza Accord in 1985, where France, West Germany, Japan, UK and US agreed to intervene in currency markets to devalue the US dollar. This was considered a necessary step to correct the overvaluation, which had contributed to the US trade deficit growing to 3.5 per cent of GDP, and help the US economy emerge from recession by improving the competitiveness of US exports. If anything, the Plaza Accord was too-successful in devaluing the dollar, leading to the Louvre Accord in February 1987. This attempted to halt the decline, but with limited impact, as the dollar continued to depreciate throughout the rest of 1987. The large fall in the US dollar may explain some of the growth in UK imports between 1985 and 1988, particularly in services, where UK exports grew at an average quarterly rate of 0.3 per cent while imports grew by 2.1 per cent.

Throughout this period of deficit the UK had remained a net exporter of oil, although North Sea oil production had passed its 1986 peak. Oil prices that had peaked at over \$40 per barrel following the Iranian Revolution in 1979, fell to below \$8 per barrel in 1986, making extraction from and investment in the North Sea fields less profitable.

In conclusion, between 1985 and 1988 the UK's total trade balance experienced a sharp reversal from surplus to deficit. The main cause appears to be a strong passthrough from rapidly growing household consumption to imports. At this time total trade was predominately in goods. UK manufacturing output had undergone a significant contraction in the early 1980s, so growing domestic demand was increasingly satisfied by imports. Exchange rate policy at the time supported these trends. International attempts to devalue the US dollar were aimed at improving the competitiveness of US exports and closing the US trade deficit. Although semiofficial action was taken to avoid sterling appreciating against the German DM, this resulted in lower interest rates which further fuelled the growth in household spending.

# The return to surplus, Q1 1989 to Q1 1995

As a percentage of GDP, the total trade balance improved from a deficit of 2.2 per cent to a surplus of 1.4 per cent by the first quarter of 1995. Table 1 shows that overall improvement in the total trade balance originated from an improvement in the growth rate of exports and a substantial easing in the growth rate for imports of both goods and services. From the macroeconomic standpoint, the return to surplus possibly reflects the reverse of the factors that caused the previous swing into deficit.

During the early 1990s the UK entered recession. Strong growth at the end of the 1980s had generated double-digit inflation in consumer prices. The subsequent tightening in monetary policy led to a significant fall in house prices, and as repossessions and mortgage arrears spiked consumer confidence plummeted. Even when inflation had started to fall and unemployment had doubled towards 3 million, the UK's membership of the ERM meant that interest rates were maintained at higher rates than they may have been, especially as the UK was in recession and a cut in interest rates was required to stimulate the economy.

Worried about the inflationary consequences of reunification, the German Bundesbank increased interest rates in the early 1990s, meaning that UK rates had to follow suit if the sterling parity against the DM was to be maintained within the ERM. Therefore, as long as the UK monetary authorities were committed to staying in the ERM they faced the inconsistent action of tightening policy at a time when the economy was contracting and unemployment rising quickly. The effect on household consumer spending, feeding through to imports was predictable (see Figure 3). Only when the UK finally suspended its ERM membership, following intense selling of the pound in currency markets in September 1992, were interest rates free to come down.

The recession in the early 1990s was not a global phenomenon. Most of the UK's main trading partners were experiencing moderately strong growth, especially Germany, meaning that UK exports and the economy as a whole were supported by foreign demand. As a result, the rate of growth of UK imports fell but exports growth remained robust. These movements were also reinforced by changes in the value of sterling.

Following the exit from the ERM in September 1992 (Black Wednesday) and the immediate reduction in UK interest rates, the sterling effective exchange rate fell by over 10 per cent between the summer and winter of 1992. It was not until December 1997 that the sterling effective exchange rate recovered to its pre-Black Wednesday level. The sustained low value of sterling provided a strong fillip to the UK total trade balance. Growth in the exports of goods picked up, particularly in capital goods, motor vehicles and other consumer goods. Surpluses in business and financial services also increased markedly.

The return to surplus between 1989 and 1995 therefore reflected a contraction in domestic demand, while foreign demand remained fairly robust. The fall in imports growth and the rise in exports growth was also supported by a substantial and persistent depreciation in sterling. Positive effects from net-trade acted to reduce the severity of the recession, especially compared to the present and early 1980s recessions when there were synchronised downturns in most of the major economies.

# The return to deficit, Q1 1995 to Q4 2007

After recording a surplus equal to 1.9 per cent of GDP in the first quarter of 1995, the UK total trade balance persistently worsened until the final quarter of 2007, when the deficit stood at £12.9 billion, or 3.9 per cent of GDP. The large and prolonged turnaround in the trade balance was driven by a sharp rise in the growth of imports of goods and a fall in the growth of exports of goods. In contrast, exports of services continued to grow faster than imports. Overall, exports of goods and services grew by an average 1.2 per cent each quarter during this period, but imports by a higher rate of 1.6 per cent.

The period between the current and early 1990s recessions marked the longest peacetime expansion on record. The UK economy experienced 64 successive quarters of positive growth while maintaining low inflation – the whole episode has come to be known as the 'Great Moderation'. Given the cyclical nature of the UK's total trade balance, it is perhaps not surprising that such a sustained period of economic growth has resulted in a persistent deterioration of the total trade balance.

However, this period included a number of profound changes in the global economy which may also have been instrumental in accounting for changes in the UK's trade balance, as well as the structure of the UK economy itself. China's open door policy saw it effectively join the global economy, leading to its eventual ascension to the World Trade Organisation in 2001. The fall of the Berlin Wall in 1989 eventually led to the accession of the former Communist countries in Eastern Europe to the European Free Trade Area. Economic liberalisation during the 1990s and 2000s in India saw the economy turn more outwards, looking for export orientated growth rather than import substitution.

Richard Freeman, the Harvard Economist, referred to these three changes, which occurred within a decade, as the 'Great Doubling', calculating that the global labour force increased from 1.46 billion to 2.93 billion. As a result the global capital-labour ratios halved, putting strong downward pressure on wages, especially those in low-skilled occupations. As the Heckscher-Ohlin model predicts, this has led to a dramatic change in the relative prices of traded goods which entail a high degree of relatively unskilled labour, and where these goods are produced.

This has been reflected in the composition of UK goods trade. The UK has seen its share in the exports of lower technology goods fall, but has actually increased its share in global exports of smaller high technology manufactures such as medical and pharmaceuticals, communication equipment, office machinery and computers (see Chamberlin 2009 and MacCoille 2008). Strong growth in imports has also coincided with a shift from the major industrialised countries to emerging markets. During this period, the share of total imports originating from the US, the South East Asian economies, France and Germany declined. In contrast, the share of total imports accounted for by China and the economies that gained accession to the European Union in 2004 rose.

UK export growth, which had been robust until 2003, accelerated between 2004 and 2006. There was also a shift in the countries to which the UK exports its goods and services. The shares accounted for by China, the countries that gained accession to the EU in 2004 and the US increased, while the shares accounted for by more traditional trading partners such as France, Germany and the countries of South East Asia fell.

The improvement in services exports growth has been driven by faster than average growth in financial and other business exports. Financial services accounted for approximately a third of all exports in Q4 2007 compared to just 16 per cent in Q2 1995. Financial services have also shown strong growth in imports, although not to the same degree as exports, explaining the increasing surplus position. Liberalisation of global financial markets has resulted in increased integration of financial services globally. However, much financial market activity has become concentrated in highly developed economies and financial hubs, such as London.

The recent growth in services exports is consistent with the increasing composition of services output in total UK output, a trend that has been ongoing for the past four decades or so. This could be interpreted as further evidence of the continued change in industrial structure of the UK economy. As this change has occurred during a time of fast growth in global trade, it appears that the UK's economic structure has moved in line with its comparative advantage, which has also been reflected in its trade position.

The changing composition of UK trade has coincided with a widening deficit, but also with improving terms of trade. The terms of trade is simply the ratio of export prices to import prices. An influx of cheap imports have depressed the latter, but export prices, which are concentrated in high-technology manufactures and services have been more resilient despite stronger global competition. The improvement in the terms of trade, as discussed in Chamberlin (2008), represents a positive wealth effect, as sterling can command a greater quantity of goods and services in global markets. This may be one of the factors accounting for the rise in consumption growth that started around 1996.

# The trade balance in the recession

Following the final quarter of 2007 the trade deficit has narrowed. Both imports and exports of goods have fallen as a result of the global recession, reflecting a contraction in both domestic and foreign demand respectively. However, imports of goods have fallen at a faster pace than exports (see Table 1), and therefore the balance of trade in goods has improved over the period. In fact, net-trade has generally made a positive contribution to UK GDP throughout the recession.

Prior to the global recession and financial crisis the UK ran a persistent trade deficit. Correction would require either a fall in domestic consumption relative to the rest of the world, sterling exchange rate depreciation, or a combination of the two. In fact both of these have occurred. The UK has experienced a more persistent downturn than the majority of OECD economies, and the effective sterling exchange rate fell by around 20 per cent in the second half of 2008. The overall significance of sterling depreciation is hard to gauge. Business surveys report little effect on exports, primarily because any competitiveness effects have been outweighed by a strong contraction in foreign demand. However, it should be noted that the fall in export demand may have been even greater if it were not for the exchange rate.

# Issues surrounding the most recent trade deficit

Despite structural differences, there are similarities between the current and previous UK trade deficits. Negative balances have coincided with periods of strong household final consumption expenditure and low private savings compared to income. Such conditions raise issues surrounding the sustainability of these deficits and the financing of excessive consumption.

When a nation runs a current account deficit it is essentially consuming beyond its means, a position it has to fund by either increasing its foreign liabilities or by reducing its foreign assets. These counterparts to the current account are recorded in the financial account of the balance of payments, and because they represent the offsetting financial transactions that fund the current account position, it explains why the overall balance of payments should balance to zero (see Chamberlin 2009).

The stock of foreign assets and liabilities is reflected in the International Investment Position (IIP). Financing a persistent current account (total trade balance) deficit would be expected to see foreign liabilities rise relative to assets, and a long deterioration in the IIP.

**Figure 4** plots the UK IIP as a percentage of GDP. For the most part it can be seen that the IIP has moved in line with the total trade balance, with the persistent deficit leading the UK to greater foreign indebtedness. It can also be seen that there was a sharp improvement in the IIP at the end of 2008, which reflects the revaluation of foreign assets following

the depreciation of sterling. However this does not change the underlying position. For example, if sterling were to appreciate once again the IIP would decline and once again reflect the build up of previous trade deficits.

A key issue, is how countries like the UK and the US have been able to run persistent deficits for so long, why there was little pressure on their currencies to depreciate during this time, and finally why it was both easy and cheap for these countries to fund their persistent and large deficits? Having been identified as a primary cause of the ensuing financial crisis and global recession, there has been much discussion on how large global imbalances may be avoided in the future.

Over the last decade, high saving rates in Emerging Asia (China) and strong oil prices benefiting oil exporters, have seen these nations run large and persistent trade surpluses and accumulate significant foreign reserves. These have been reinvested in the financial markets of the developed nations, primarily the US, often at very low interest rates. This recycling of surpluses has enabled deficit countries to both cheaply and easily fund their positions over a long period of time. An extension of this has been to reduce global interest rates, encouraging greater and riskier lending in search of higher yields, including the US subprime mortgage market and private equity.

Why might Emerging Asia and oil exporters be prepared to invest their surpluses at such low yields? The major reason is that most have poorly developed financial markets themselves, so literally have little other options. Furthermore, the spate of financial crises in the 1990s, especially in Asia, has encouraged the accumulation of foreign reserves and safe assets such as US Treasury Bills. Although the volumes involved are small compared to the US, the UK - home to the City of London, has also seen large inflows from emerging Asia and OPEC. This too would have strengthened sterling, preventing a correction in the UK trade deficit.

### Conclusion

Despite structural changes in the UK economy, and possible effects resulting from movements in sterling, the total trade balance over the last two-and-a-half decades has generally exhibited a strong cyclical pattern. Movements between surplus and deficit have tended to follow the strength of domestic demand.

The UK is an open economy, and there is anecdotal evidence that the structure of the UK economy has moved in line with its comparative advantage. The UK's main export industries are now higher technology manufactures such as pharmaceuticals, communications equipment, office machinery and computers, and business and financial services.

The Great Doubling of the global labour force in the 1990s and 2000s as China, India and Eastern Europe entered global trade have dramatically lowered the prices of many imported goods. The passthrough to lower import prices (and thus interest rates via lower inflation) supported strong consumption growth in the mid to late 1990s, enabling the UK economy to enjoy a record period of economic growth.

However global imbalances have arisen as surplus countries, such as OPEC members and Emerging Asia, invest their surpluses in the financial systems of

# Figure 4 Net International Investment Position as a percentage of GDP<sup>1</sup>



#### Note:

1 Not seasonally adjusted, current prices.

Source: ONS Quarterly National Accounts

deficit countries. This has prevented the adjustment that otherwise might have happened in the exchange rate or domestic demand to correct these imbalances, allowing them to perpetuate and build for over a decade.

One of the consequences of cheap money was a search for yield, prompting greater and riskier lending such as in the US subprime mortgage markets. Global imbalances therefore played a key role in the build up to the financial crisis and global recession, from which the world is just beginning to emerge.

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