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A short history of sterling's exchange rate



The first step involved in the UK joining the euro is fixed permanently in value to the euro. Although such a fix would undeniably be a major event, it would not be unprecedented – indeed, for most of the last three hundred years, sterling's value has been either fixed, or at least closely linked to, the value of something else, be it gold or another currency. Indeed, *not* having some form of linkage – as has been the case since sterling left the European Exchange rate Mechanism in 1992 – is the exception rather than the rule.

In this chapter we look at the various exchange rate fixes that have been employed in the past, and ask:

- how they worked when they were in operation;
- why some lasted for many years whereas others were abandoned after a relatively short time; and
- what these experiences can teach us about the issues surrounding the UK 'joining the euro'

Isaac Newton & the Gold Standard

1717-1931

The first period in which sterling was fixed began in 1717. At that time, the money in circulation in the UK consisted mainly of gold and silver coins. However, over time, the quality of the coinage underwent significant change.

There were two main problems:

First, up until the seventeenth century, coins were struck by hand – with the result that they were not uniform in either size or weight. This made them susceptible to ‘clipping’, that is to say, having their edges trimmed. The clippings that were collected in this way were then melted down to provide an illicit, but lucrative, income for those involved. While the clipped coins retained their face value, their *intrinsic value* – that is to say their value in terms of the gold or silver content – was clearly reduced.

Second, the intrinsic value of the coinage was further undermined by the state itself, which increased the alloy content and correspondingly reduced the gold and silver content. This practice was most widespread under the spendthrift Henry VIII.

Various monarchs – Henry’s daughter Elizabeth I being one of them – made attempts at ‘recoinage’ to re-establish the value of sterling. However, these efforts met with only limited success since the coins continued to be struck by hand, and were thus still susceptible to clipping. Furthermore, there were periodic, and acute, shortages of coins; and public acceptability of those in circulation was often limited.

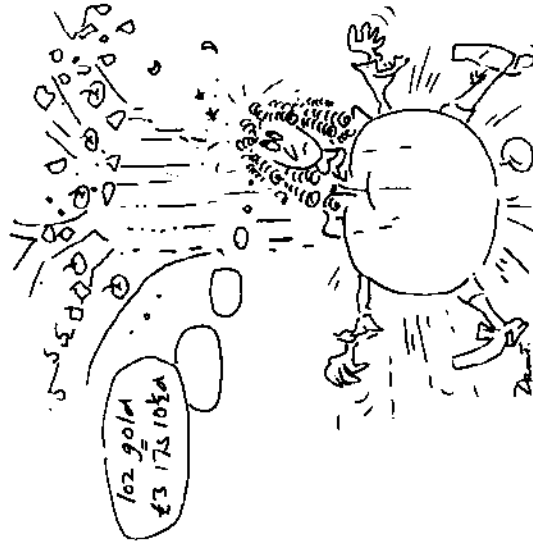
Thomas Gresham, a financier during the period of Queen Elizabeth’s recoinage, established a new approach to the problem when he formulated ‘Gresham’s Law’, which states that ‘bad money drives out good’. This law can be demonstrated as follows: Suppose you have a choice between using two coins to make a payment, both with a face value of one pound sterling. One has a high gold content and shows no signs of clipping, while the other contains more alloy and has clipped edges. Which do you use for making the payment and which do you keep? Gresham stated – not surprisingly – that the ‘bad money’ would be used for making payments whereas the good quality money would be kept out of circulation.

An improvement in the situation began on Christmas Eve 1663 when Charles II issued a warrant for the creation of new gold coin – the guinea – to be struck from gold imported from West Africa. The new coin was a great success. Mechanical production ensured its uniformity; and the inscription *DECUS ET TUTAMEN* around its edge proved a major deterrent to clipping. This same Latin inscription – meaning ‘ornament and safeguard’ – currently appears on UK one pound coins.

A more comprehensive recoinage took place between 1695 and 1696. Mechanically-produced silver coins were newly minted and issued, with clipped coins being taken in exchange. Sir Isaac Newton, who became Warden of the Mint just as the recoinage programme began, subsequently became Master of the Mint and took on the task of determining the precise value of the pound sterling in relation to gold. This process involved determining the quantity of gold in one pound

20/10/16

sterling (or, more precisely, in the one guinea coin, as this was the principal gold coin in circulation). After lengthy deliberation, and particular attention paid to the gold content of similar continental European coins, Newton finally established the relationship as one pound sterling being equal to 113.0016 grains of gold – that is to say, just under one quarter of an ounce. Alternatively, one standard ounce troy of gold was deemed equal to £3 17s 10½d. (Before decimalization in 1971 there were twenty shillings (s) per pound and 12 pence [denoted by the letter ‘d’ from denarius, an ancient Roman coin] per shilling.)



Isaac Newton discovers the gold standard

There is a parallel here with the current issue of the conversion factors between national currencies and the euro. It is often claimed that the six significant figure conversion factors will be difficult to understand and therefore be an obstacle to public acceptance of the euro. But if the Georgians could manage with complex conversion amounts, surely the scale of the current problem should not be overstated?

With only a few wartime interruptions, this parity between the value of the pound sterling and gold was retained for more than two hundred years. Britain adopted a formal gold standard in 1816, largely as a result of the sudden abundance of the metal. More gold was mined in the 19th century than in the preceding 5,000 years. Thus, use of gold coins (rather than silver and copper) became the norm. Thus, the gold standard was more accurately a ‘gold coin’ standard, since although notes which were redeemable into gold were in circulation, gold represented, and was the principal form of cash. European countries followed the UK

onto the standard in the 1870s. The US, meanwhile, maintained a bimetallic (gold/silver) standard until 1900, as did India. China maintained a silver standard. Nevertheless, by the end of the 19th century, most of the world's industrialized nations shared the gold standard.

The fixed parities between each country's currency and gold meant that the exchange rates between the world's major currencies were also fixed.

For example:

In England, one gold sovereign (£1), which had replaced the guinea as the main gold coin in 1821, was defined as equal to 113.0016 grains of gold (Sir Isaac Newton's conversion rate).

$$£1 = 113.0016 \text{ grains}$$

In the US, one dollar (\$1) was equal to 23.22 grains of gold.

$$\$1 = 23.22 \text{ grains}$$

Thus

$$£1 = 113.0016 \div 23.22 = \$4.8666$$

* Similar calculations for all the other currencies on the gold standard meant that there was a set of fixed exchange rates between all the main trading countries in the world. This stability of exchange rates is widely credited with helping to generate the boom in international trade in the late nineteenth and early twentieth century.

With the outbreak of the First World War, Britain unofficially left the gold standard in 1914 (and officially in 1919). In 1925, largely at the insistence of the then chancellor of the exchequer, Winston Churchill, the UK adopted a gold bullion standard in 1925. The bullion standard reflected the demise of gold coin in circulation (although notes could be redeemed for 400-ounce bullion bars). The real problem, though, was the adoption of the pre-war traditional price of gold (and, by extrapolation, the same fixed exchange rate with other currencies, notably the dollar).

During the War, prices in the UK had risen more sharply than in the US. By adopting the bullion standard at the same fixed exchange rate with the US dollar, this meant that goods produced in the UK were correspondingly more expensive than those in the US, thus putting UK exporters at a serious disadvantage. One way of correcting the problem would have been for prices and wages in the UK to fall, making the UK

Fixing sterling's exchange rate

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1717-1931

Type of system:	Gold standard
Fixed to:	Gold
Period of 'fix':	214 years
Main reasons for demise:	Fixes were suspended during and immediately after wars. General breakdown of gold standard in the 1930s

1931-1946: Sterling not subject any fix or linkage

1946-1949

Type of system:	Bretton Woods system
Fixed to:	US dollar at US\$4.03/£
Period of 'fix':	3 years
Main reasons for demise:	Post-war dollar shortage; desire to improve UK competitiveness

1949-1967

Type of system:	Bretton Woods system
Fixed to:	US dollar at US\$2.80/£
Period of 'fix':	18 years
Main reasons for demise:	Sterling crisis caused by large trade deficit

1967-1972

Type of system:	Bretton Woods system
Fixed to:	US dollar at US\$2.40/£
Period of 'fix':	5 years
Main reasons for demise:	General breakdown of world fixed exchange rate system. US suspension of convertibility of dollars into gold.

once again competitive with the US. However, slashing wages is not a political option – attempts to do just that led to the General Strike of 1926 and attendant widespread social unrest. With UK exports remaining uncompetitive, and demand for imports strong, the UK started to run a large balance of payments deficit.

In theory, adoption of the gold standard provides an 'automatic' form of adjustment in such circumstances. In the UK, the balance of payments deficit is 'paid for' by running down gold reserves. With lower gold reserves, the supply of money – which is backed by gold – is reduced. This will force either prices to fall or demand in the economy to contract. In the countries receiving the UK's gold, the opposite happens: an increase in their gold reserves allows an increase in the money supply, leading to stronger demand and higher prices.

Bretton Woods

1946-1971

Partly as a result of the experience of these competitive devaluations in the 1930s, a fixed exchange rate system (based on gold) was reintroduced after the Second World War. This was the 'Bretton Woods' system, named after the New Hampshire town where the meetings to establish it took place. Under this system, implemented in 1946, each country pledged to maintain a fixed exchange rate between its currency and either the dollar or gold. Since one ounce of gold had a fixed value of \$35, whether the currency was fixed to either gold or the dollar was largely immaterial. Under the system, the Deutschmark was set equal to 1/140 of an ounce of gold, meaning it was worth \$0.25 (\$35/140).

This system of fixed exchange rates was supported by a new organization, the International Monetary Fund (IMF), the function of which remains largely the same to this day. In particular, the IMF provides foreign exchange to countries if their exchange rate parity comes under pressure. A country's ability to borrow from the IMF is determined by its 'quota' – essentially the amount of money it subscribes in order to become a member of the IMF. The condition of obtaining an IMF loan is that the country implements IMF-approved policies – usually involving restrictive monetary and fiscal measures – to support its currency.

The main burden of adjustment is still placed on the country with the balance of payments deficit – as it was under the gold standard. This has often been criticized as a weakness of the system, with some claiming that just as much adjustment should take place on the part of the 'creditor country'. This view is typified in the current pressures for Japan – with a consistently strong current account surplus – to adopt policies to encourage demand in its economy, thereby sucking in imports.

Under the Bretton Woods system, restrictions were placed on the extent of the convertibility between currencies and gold. In the US, for example, only central banks were allowed to convert dollars into gold. Exchange rates could be adjusted in the case of a fundamental trade deficit, but such adjustments or devaluations were intended to be – and in practice were – relatively infrequent.

In the UK, the introduction of the Bretton Woods system meant that maintaining the fixed exchange rate was the central aim of UK economic policy. The policy got off to a bad start, however, with a post-war balance of payments deficit forcing sterling to be devalued by 30% just three years after the system was established.

From 1949, however, the value of sterling was fixed at \$2.80/£ for eighteen years. Despite a long period of restrictive domestic policies, there was no substantial reduction in the trade deficit, with the result that sterling was once again devalued in 1967 – from \$2.80/£ to \$2.40/£. The prime minister of the day, Harold Wilson, addressed the nation on a Sunday afternoon, his speech containing the supposedly reassuring phrase that the value of “the pound in your pocket” had not been devalued. In the words of Philip Ziegler, ‘Wilson became stamped as the man who pretended that devaluation would not affect the buying power of the pound; worse still the one who tried to pass off devaluation as a triumph instead of the economic defeat that it was.’

However, the UK was not the only country experiencing problems with its trade deficit. A mounting deficit, coupled with sharply rising inflation, was also behind President Richard Nixon’s announcement (on 15 August 1971) that the dollar was to be devalued against gold and that convertibility between the dollar and gold, even for central banks, was to be terminated. This marked the end of the Bretton Woods system. In December 1971, under the ‘Smithsonian Agreement’ – the successor to Bretton Woods – the dollar was devalued to 1/38 of an ounce of gold and other currencies were revalued against the dollar. However, attempts to set new fixed rates proved difficult, and the world officially turned to floating exchange rates in 1973.