EMU and trade

EMU study

HM TREASURY

Executive Summary

Background

1 This study focuses on the key issue of the extent to which UK trade with the euro area economies might be increased through participation in EMU. It then relates this to the potential impact this could have on UK output and income over the longer term. The study's conclusions are based on a combination of economic theory, detailed empirical evidence and an examination of UK-specific factors, for example the geographical distribution of trade. In relation to the overall assessment of the five economic tests for UK membership of EMU, this EMU study is most relevant to the fifth test: *"Will joining EMU promote higher growth, stability and a lasting increase in jobs?"*

EMU and trade

2 Section 2 shows that there are good theoretical arguments for expecting the adoption of a common currency to lead to increased trade among the members of a single currency. The key mechanisms are: the reduction in exchange rate uncertainty; lower currency transaction costs; and wider benefits, in particular through greater price transparency, greater specialisation and enhanced competition. Currency union is likely to offer stronger benefits than a simple fixed exchange rate regime. In the European context, it can be seen as a direct complement to the Single Market Programme.

3 Currency transaction costs act as a barrier to trade. Exchange rate volatility likewise discourages trade by making the profitability of overseas transactions uncertain. A lack of price transparency meanwhile stifles competition and prevents consumers and firms from seeking out the best deals. It is likely that smaller firms are most affected by these problems. But many economists doubt that they represent very serious problems for the economy as a whole. It is straightforward for larger UK firms to hedge against short-term exchange rate uncertainty through forward currency markets. Total currency transaction costs in the UK are likely to be less than $^1/_2$ per cent of GDP.

UK and euro area trade compared

4 The scale of benefits from the adoption of the euro is likely to be higher the greater the degree of UK trade integration with the euro area (although, according to some models, a high starting level of UK-euro area trade may serve to limit the *percentage* expansion in trade). Section 3 shows that the euro area is the UK's dominant trading partner, accounting for about half of UK trade in goods and services. With the prospect of EU enlargement, and with it the future growth and expansion of the euro area, this share may well increase. For the current account, including income transactions and transfers, the share is lower because UK investment income transactions are more focused on non-EU countries. On either measure, the UK's next most important partner regions – the US and Asia – each account for less than one fifth of UK trade.

5 It is sometimes argued, nevertheless, that UK trading patterns are very different to those of the existing euro area economies, making the UK a less natural candidate for EMU. UK trade (exports plus imports) in goods and services with the EU is equivalent to just under 30 per cent of UK GDP. This is slightly lower than for the other larger EU economies, Germany, France and Italy. The share of UK goods trade conducted with the EU has broadly converged with that of Germany and Italy, but to a lesser extent with France and Spain. However, the EU share of trade in services is notably lower in the UK compared with the other large EU countries. The share of UK goods trade with the US economy meanwhile has consistently exceeded that of other large EU countries, a pattern that is likely to persist. However, this is not the case for other non-EU countries, with which the share of UK trade has fallen markedly over time.

The importance of the US dollar

6 Section 3 also notes that this straightforward comparison of the euro area and US shares of UK trade exaggerates the importance to UK trade of the euro relative to the US dollar. Many commentators highlight the existence of a much larger 'US dollar bloc' of trading countries. Links between third country currencies and the US dollar (e.g. in Latin America and the Middle East), the US dollar denomination of trade in certain commodities, and the use of the US dollar more generally as a currency of invoicing, all serve to raise the US dollar's importance well beyond the US share in UK trade.

7 This matters because adoption of the euro could lead to an increase in exchange rate volatility vis-à-vis the US dollar, diluting the benefits of the complete nominal exchange rate stability with the euro area. This issue is discussed in detail in the EMU study *The exchange rate and macroeconomic adjustment*. On the evidence presented in that study, Section 3 concludes that there would be an overall improvement in exchange rate stability if the UK adopted the euro. Very strong assumptions concerning the US dollar's relative importance are needed to overturn this conclusion.

The link between exchange rate volatility and trade

8 Section 4 concludes that the empirical evidence linking exchange rate volatility with lower trade is very mixed. Many studies fail to identify a meaningful negative relationship between exchange rate volatility and trade, and some even find a weak positive link. However, this might be because many studies have focused on shorter-term measures of volatility, which may be less of a problem due to the availability of hedging instruments. More generally, the studies are limited in that observed exchange rate volatility is an imperfect measure of currency risk; participation in a fixed exchange rate regime, for example, does not necessarily eradicate the risk of sporadic (and major) realignments, as the evolution of the Exchange Rate Mechanism (ERM) demonstrated.

9 Even with those studies that do establish a clearer link, the increase in trade arising from the complete elimination of exchange rate volatility in a given area is not likely to exceed 10 per cent. In the UK case, this has to be weighed against the probability of greater external currency volatility against the US dollar within EMU. On this limited evidence, the potential gains from the elimination of intra-euro area exchange rate volatility within EMU are not likely to be substantial.

Empirical evidence on currency unions

10 Section 5 concludes that the wider benefits could be more substantial, based on empirical work that has been developed only recently and post-dates the October 1997 assessment of the five economic tests. In an influential study, Rose (2000) challenged the view that currency unions have only modest impacts on trade. Controlling for key determinants of trade within the well-established gravity model framework, Rose found that countries in currency unions trade three times more with each other than countries with separate currencies. Furthermore, this increase in trade with other currency union members is not at the expense of trade with non-members. Although this sort of result has been replicated many times, the economic mechanisms underpinning it are not well understood. More importantly, the results mainly reflect the fact that many currency unions are between smaller, poorer countries. Rose and others doubt that they are fully applicable to assessing the trade impact on existing EMU members, or on the UK if it were to join.

11 A number of subsequent studies have attempted to quantify likely increases in the EMU context. Analysis using a larger dataset and exploiting time series variation in currency arrangements still points to a doubling of trade. Studies controlling for observed systematic differences between currency union member and non-member countries put the gains at up to 60 per cent. EMU-tailored calculations based on a relative trade barriers model suggest that EMU could raise trade by between 40 and 60 per cent. The emerging research consensus therefore still signals substantial gains to trade through membership of a currency union, although much lower than initially estimated by Rose. Moreover, the studies confirm that the increase in trade within a currency union is not at the expense of trade with non-members, with some studies reporting that a currency union raises trade between members and non-members. In other words, not only is a currency union not trade diverting, it is actually trade creating with non-currency union members.

12 As a complement to cross-country studies, time-series analysis of particular episodes involving a change in currency regime can be instructive. Case study analysis in Section 5 of the dissolution of the Irish punt's 150 year association with sterling in 1979 does not reveal any conclusive evidence that Anglo-Irish trade was significantly affected. But once again there are limits to the extent to which such findings may be extrapolated to the question of possible UK adoption of the euro.

The short-run impact of EMU on intra-euro area trade

13 Section 6 argues that this representative range is broadly supported by analysis of the impact of EMU on trade within the existing euro area since 1999. Trade intensity within the euro area has increased since the euro's launch. Extra-euro area trade for EMU members has risen more sharply over the same period, though this is perhaps explained through buoyant US growth, oil price rises, ongoing EU integration with Central and Eastern Europe and other fast growing economies and, possibly, the depreciation of the euro against the US dollar since 1999. Detailed studies comparing euro area bilateral trade with trade between otherwise comparable industrialised economies outside EMU support the idea that the euro is already having an appreciable impact. They estimate that EMU has increased trade within the euro area by between 3 and 25 per cent since 1999.

Trade, productivity and long-run growth

14 The implication of increased trade is that both exports to and imports from the euro area would rise within EMU. However, this study concludes that increased trade integration with the euro area would be beneficial for long-term UK growth. Section 2 sets out the theoretical links between international openness and long-run economic growth derived from theories of international trade. Classical theories focus on one-off improvements in productivity and potential output through increased openness. Newer theories of trade and growth meanwhile highlight the possibility of more durable improvements in growth potential through technological spillovers. The bulk of empirical evidence confirms this. Based on the cross-country empirical evidence reviewed in this study, it seems reasonable to assume that each 1 percentage point increase in the trade to GDP ratio increases real GDP per head by at least $^1/_3$ per cent in the long run.

Conclusion: the potential impact of EMU on UK trade

15 Section 7 draws the various strands together to produce illustrative but plausible estimates of the potential long-run increase in UK output and income through increased trade as a result of UK membership of EMU. It is difficult to arrive at a single representative estimate of the long-run gains to UK trade through possible adoption of the single currency. The various studies adopt different methodologies and they highlight and address different perceived problems – none, of course, are above specific criticism. Nevertheless, on the basis of a careful review of the evidence, this study concludes that a reasonable range for the potential increase in UK trade with the euro area resulting from UK membership of EMU is between 5 and 50 per cent, without any trade diversion from the non-euro area. The lower end of this range equates with the lower estimates of the increase in intra-euro area trade that has already occurred between member countries. The upper estimate pays much greater attention to the wider benefits signalled by the evidence in Section 5, and appears closer to the more likely outcome in the long term.

16 With an increase in trade with the euro area at the top of the 5 to 50 per cent range, this suggests that EMU membership could potentially increase the long-term level of output per head in the UK by between $4^1/_2$ and $9^1/_4$ per cent, depending on the assumption made about the long-run impact of an increase in the trade to GDP ratio on the level of GDP per head. Spread over a long-term period of – for example – 30 years, this implies an increase in the rate of growth of output per head of between 0.15 and 0.30 percentage points a year. Equally though, the lower end estimates for the increase in trade with the euro area imply little effect on the rate of growth of GDP per head over a 30 year period – at between 0.02 and 0.03 percentage points a year.

17 There are substantial uncertainties and risks surrounding these estimates. It is vital that these are kept in mind when potential trade impacts are considered in any overall assessment of the likely costs and benefits of UK participation in EMU. Moreover, smooth appropriation of such benefits would be critically dependent on sustained convergence of the UK economy with the euro area, as well as the absence of any short to medium-term misalignments in the sterling-euro entry exchange rate.

18 This study is most relevant to the assessment of the growth, stability and jobs test – the fifth of the Government's five economic tests for EMU entry. It is also relevant in assessing the convergence test – the first test; and the investment test – the third test.