

Committee of Governors of the  
Central Banks of the Member States  
of the European Economic Community

Economic Unit

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CREDIBILITY IN THE ERM

INTRODUCTION

Credibility in ERM parities is very difficult to assess - and especially difficult to quantify - since it pertains to exchange rate expectations which are unobservable, presumably variant across market participants and possibly liable to sudden changes. Notwithstanding such measurement problems, there seems to be little doubt that credibility in the ERM parity grid has strengthened. The purpose of this section is to examine some empirical evidence which can supply an indication, albeit approximate, on the evolution of credibility over time; to suggest some factors which may have influenced it and to sketch out briefly the policy implications of an increase in credibility.

I SOME EMPIRICAL EVIDENCE

Differentials between long-term interest rates can supply a first, rough measure of credibility in exchange rate parities (see Charts 1 and 2). This measure must be taken with caution for a number of reasons: bonds whose yields are compared might have different maturity, fiscal treatment and other characteristics; the expected real interest rate might differ across countries as a result of different prospects on growth and productivity; the term structure of interest rates may vary for factors unrelated to expected developments in exchange rates. Although these caveats have to be borne in mind, the progressive reduction in the long-term interest rate differentials vis-à-vis the Deutsche Mark and the other ERM currencies can be interpreted as suggesting that:

- for the currencies which have adhered to the narrow band of the ERM since the start of the EMS, credibility has been progressively increasing since 1983, although with a temporary

inversion (of a differing magnitude across currencies) during 1987;

- for Italy, credibility increased up to 1986, remained roughly constant up to the entry of the Italian lira in the narrow band to then increase again during 1990;
- the entry in the ERM enhanced the credibility in the strength of the pound sterling and of the Spanish peseta.

Comparing the twelve-month interest rate on ERM currencies with the so-called "credibility band"<sup>1</sup> constitutes another source of information. The credibility band is constructed by adding to (subtracting from) the Deutsche Mark twelve-month interest rate the maximum depreciation (appreciation) within the band of a second currency in the light of its actual position vis-à-vis the Deutsche Mark (the role of third ERM currencies in constraining the possibly movements between the Deutsche Mark and the currency in question is assumed away). If the twelve-month interest rate on the currency in question lies above the credibility band defined above, this implies that markets require a risk premium for the possibility that the currency might depreciate vis-à-vis the Deutsche Mark more than what is allowed by the ERM band. In this instance, the interest rate on the second currency incorporates a risk premium which certainly takes into account the possibility of a realignment. The converse, however, does not hold and the fact that the interest rate lies within the credibility band does not necessarily rule out the possibility that (some) market participants expect a realignment. Moreover, downward pressures on a currency need not necessarily be reflected in higher domestic interest rates, as they may be absorbed through official interventions too.

Charts 3 and 4 show the twelve-month interest rate - and the credibility band vis-à-vis the Deutsche Mark - for each ERM currency. The overall picture indicates that, as from 1990 onwards, all currencies have continuously been within the credibility band, suggesting that in the last two years, and for the first time since the inception of the EMS, markets have not expected a realignment in the near future.

The two types of evidence presented above hint at an increase in credibility. They differ, however, in one important respect: the different

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1 The credibility band concept was developed in "European Monetary Reform: Progress and Prospects", by A. Giovannini, Brookings Papers on Economic Activity, 2, 1990.

time horizon underlying the two measures. Whereas differentials between long-term interest rates refer to exchange rate expectations over a fairly long period, the credibility band approach supplies a proxy for the expectations about a realignment to take place in the near future. Even though a reliable, well-established model of exchange rate determination is not (yet) available, plain common sense suggests that the way exchange rate expectations are formed varies according to the relevant time horizon. This simple consideration has to be kept in mind when assessing the factors influencing credibility. In particular, it warns against trying to establish too close a link between short-term exchange rate expectations (and short-term credibility in the parity grid) and the "fundamentals".

## II. Factors behind enhanced credibility

Several factors may have contributed to the enhanced credibility in the ERM in the medium-term. Firstly, price convergence has effectively improved in the ERM over the 80's. Secondly, the absence of realignments since January 1987 may have had an important influence on the expectations of market participants: the longer the period without realignment, the stronger the virtuous mechanism of self-fulfilling expectations that no realignment will occur. Thirdly, there has been a growing recognition among policy makers that a realignment of central parities entails substantial drawbacks and this has been perceived by the markets. In particular, the potential competitiveness gains from devaluation are likely to be small and short-lived because of the impact on the domestic inflation process. Moreover, a realignment of central parities would damage the credibility of the "hard currency policy". Finally, the removal of capital controls in all ERM countries and the move of several countries towards tighter exchange rate links in the ERM (see, in particular, the decision of the UK to join the ERM in 1990 after a similar step by Spain in 1989 together with the entry of the Italian lira into the narrow band) may have further increased the credibility of the authorities' commitment to exchange rate stability.

A further reduction in inflation differentials - although partly due to the emergence of inflationary pressures in Germany - as well as the adoption of stricter exchange rate objectives in several ERM countries may have contributed to the increase in the short-run credibility of the ERM in the last two years. Three other factors, however, may also have played a role. The first is the relative weakening of the Deutsche Mark associated

with the possible effects of the unification of Germany on domestic price stability in that country. Even though this may not have undermined market participants' conviction that in the long term the anti-inflationary stance of Germany is still the most credible, in the shorter term it may have reduced the perceived likelihood of a realignment, as suggested by the significant narrowing of short-term interest rate differentials in the recent period. The second factor is the narrowing of the main external imbalances within the ERM. Regarding the proximate determinants of this narrowing, preliminary estimates<sup>2</sup> suggest that movements in relative demand (associated both with the surge of economic activity in Germany resulting from unification and with the slowdown in growth in many other EMS countries) have played a very important role, while no strong link to changes in competitiveness can be observed over this relatively short period. The third factor is related to the momentum of EMU both because progress towards EMU may be expected to foster economic convergence and because any realignment while countries are negotiating would be untimely. This may have further reinforced the credibility of the existing parity grid at least in the shorter run.

### III. Some possible implications of enhanced credibility of the parity grid

Enhanced credibility of the existing ERM central parities has the effect of reducing the exchange rate risk premium in those countries whose currency is no longer perceived as relatively weak. Accordingly, these countries will experience capital inflows which lead their currency to appreciate within the fluctuation band. If the fall in the exchange rate risk premium is small enough not to induce pressures for the currency to move outside the band, domestic monetary conditions will not be affected. An actual appreciation of the currency would compensate for the fall in the risk premium, thereby enabling the domestic interest rate to remain unchanged. If, however, the required appreciation of the currency exceeds the room provided by the band, monetary authorities will have to lower the domestic interest rate in order to maintain the currency within the band.

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2 See the note prepared by the Economic Unit entitled "Competitiveness, relative cyclical performance and recent developments in the trade positions of EEC countries".

In this case, by reducing risk premia, an increase in the credibility in the parity grid reduces the room for differentiating national monetary policies.

A lower domestic interest rate in the countries whose currency is no longer perceived as relatively weak in financial markets does not necessarily imply that monetary conditions in these countries have been loosened. To the extent that price and wage setters have revised their inflation expectations downwards, lower inflation expectations would have compensated for the lower nominal interest rate, leaving the real interest rate, and thus domestic demand, unchanged. There is, however, also the possibility that the time horizon of financial market participants is shorter than that of the wage and price setters, and that the inflation expectations have not declined along with the nominal interest rate. In this instance, the drop in the nominal interest rate would cause the real interest rate to fall, stimulating domestic demand and thus fuelling the inflationary pressures. Under these circumstances, higher credibility in the ERM commitment would run counter to the objective of convergence towards price stability in the area.

An increase in the credibility in the ERM commitment on the part of financial markets at a time when inflation convergence does not improve is likely to have two further effects. Firstly, by fuelling inflationary tendencies in the higher inflation countries, it may contribute to deteriorate further their competitiveness and current account positions. While it may be true that, with full capital mobility, the expectation of unchanged nominal central parities in the short-term and the existence of sufficiently attractive interest rate differentials may allow current account deficits to be financed by private capital flows for a period, financial markets may eventually come to expect a devaluation of the currency. Secondly, a fall in interest rates in countries which are faced with a large public debt and deficit may help counter the spiral of debt accumulation and thus contribute to the efforts towards fiscal consolidation.

CHART 1: INTEREST RATES DIFFERENTIALS VIS-A-VIS GERMANY: GOVERNMENT BONDS  
ORIGINAL NARROW BAND ERM COUNTRIES

PERCENTAGE POINTS

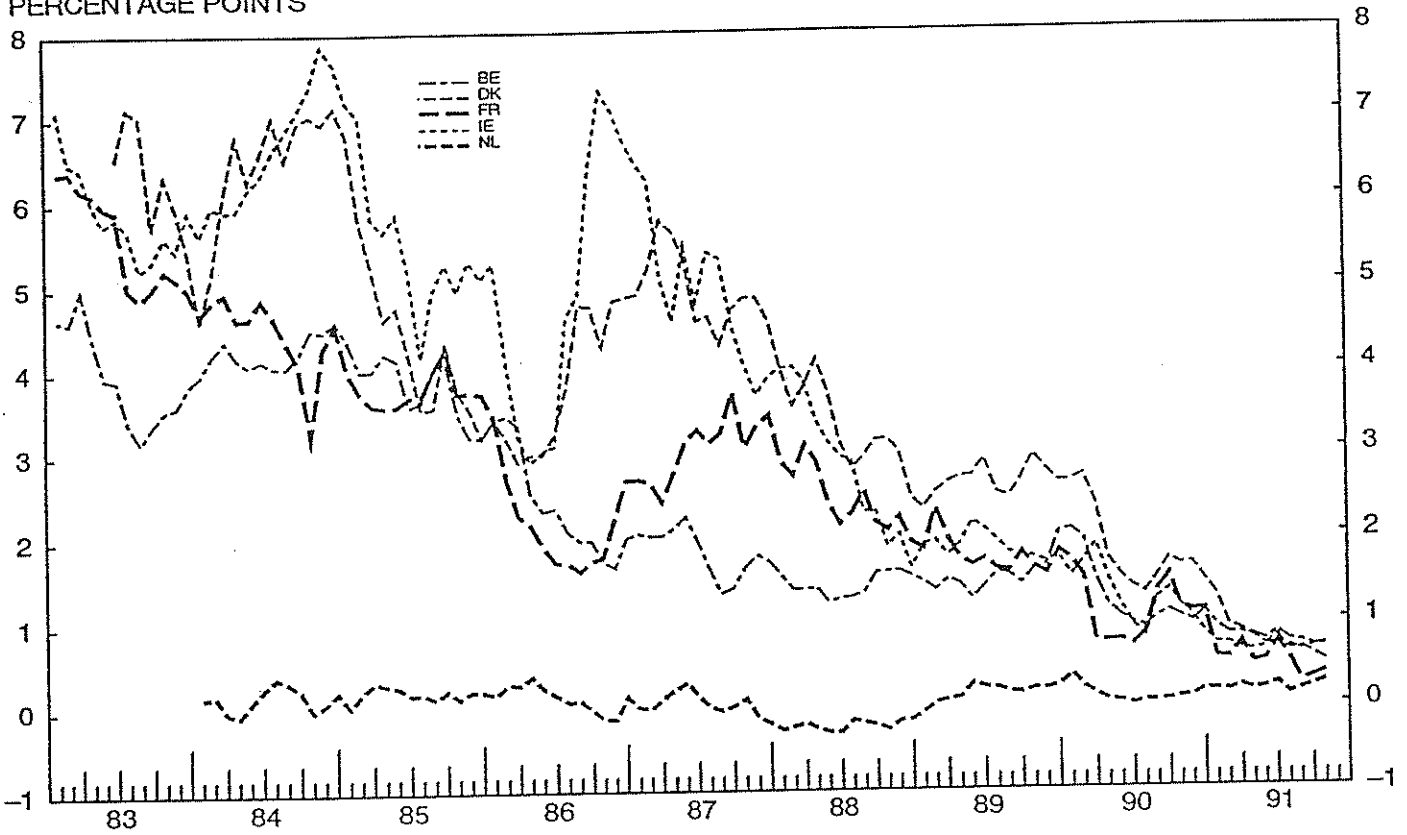
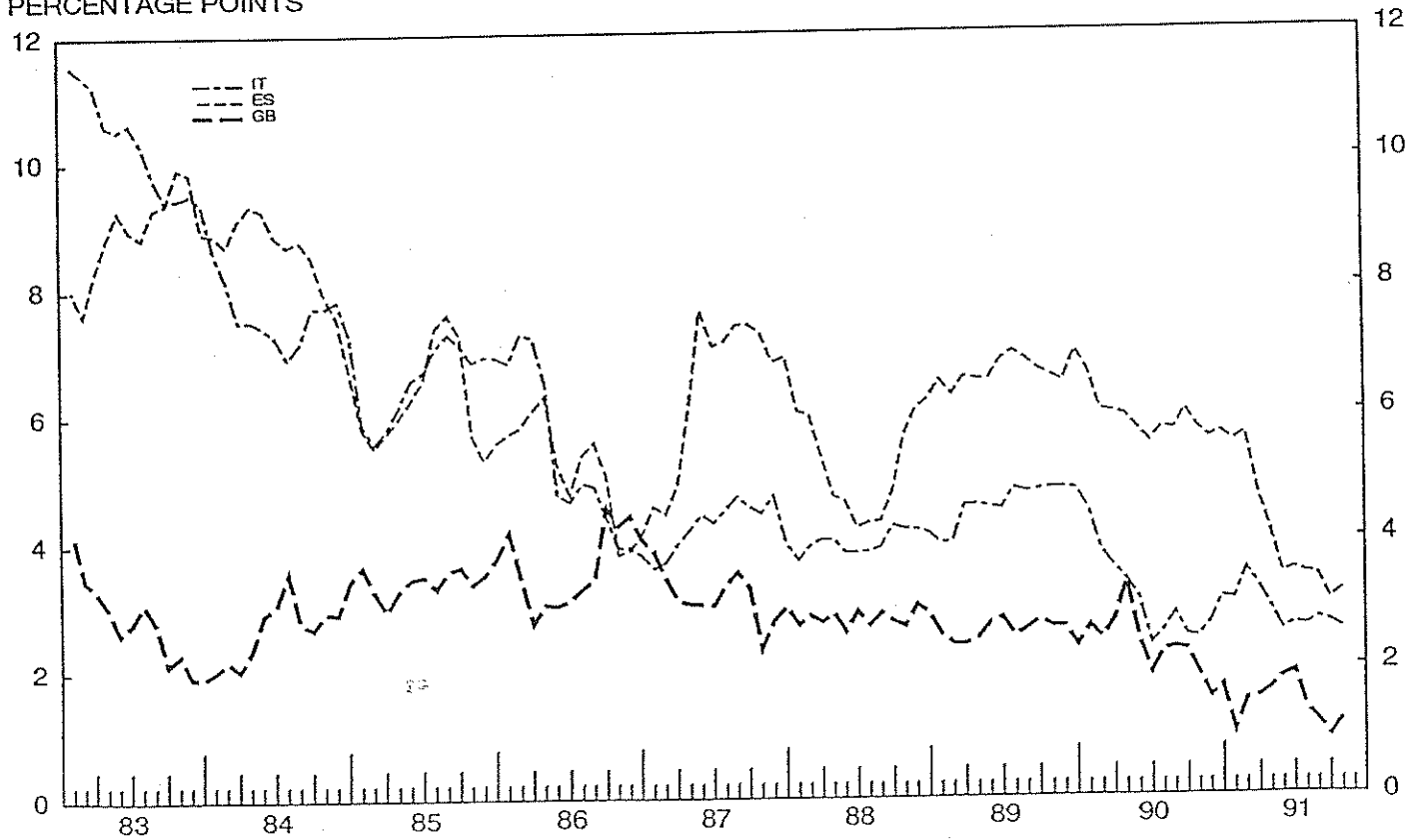
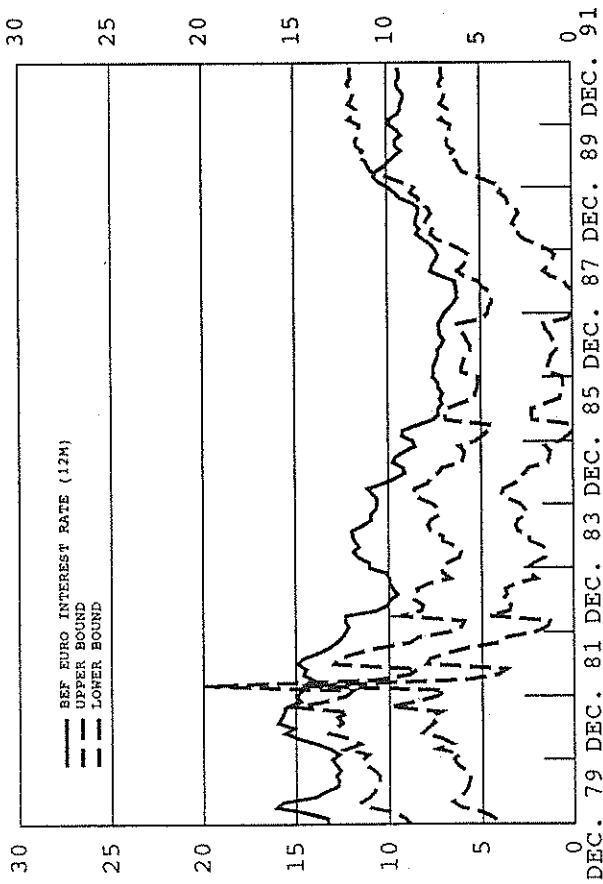


CHART 2: INTEREST RATES DIFFERENTIALS VIS-A-VIS GERMANY: GOVERNMENT BONDS  
OTHER ERM COUNTRIES

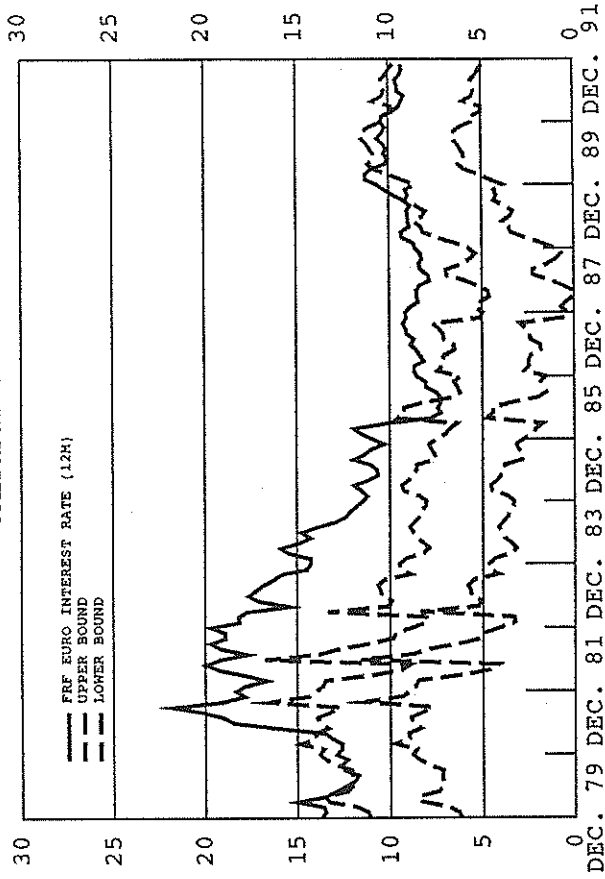
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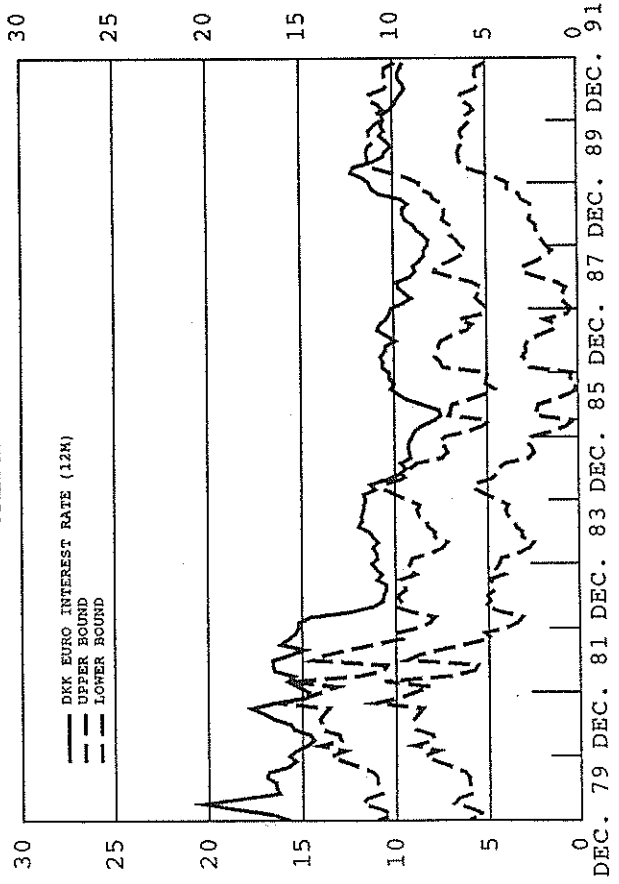
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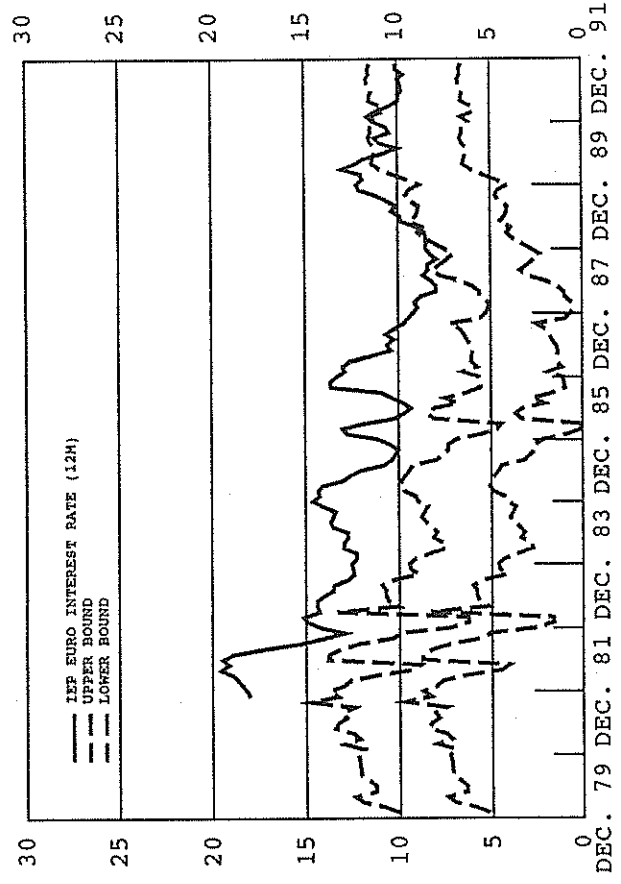
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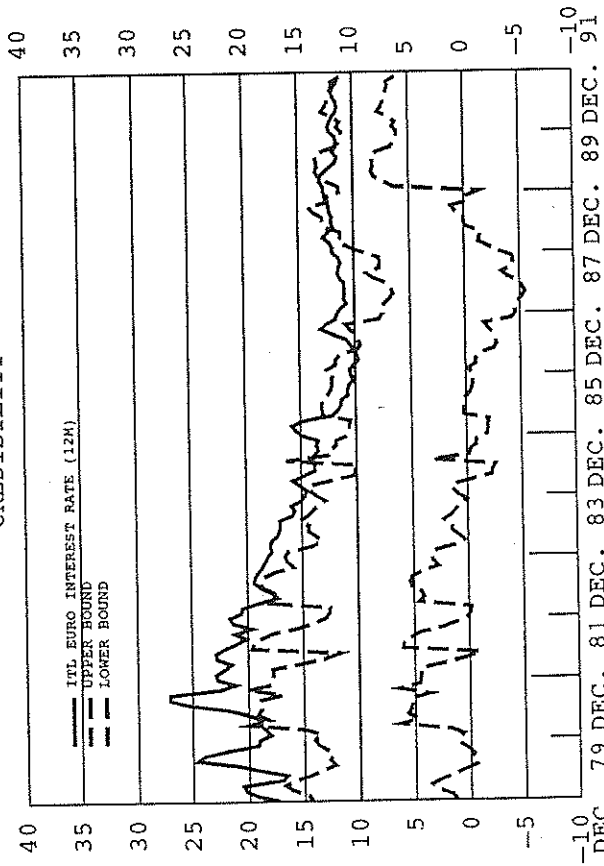
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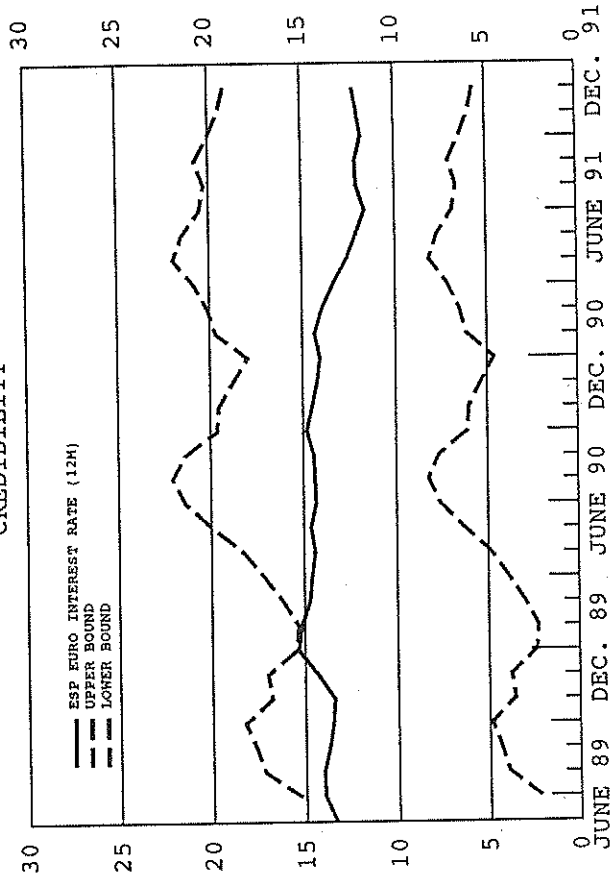
IRISH POUND INTEREST RATE AND "CREDIBILITY"



ITALIAN LIRA INTEREST RATE AND "CREDIBILITY"



SPANISH PESETA INTEREST RATE AND "CREDIBILITY"



NETHERLAND GUILDER INTEREST RATE AND "CREDIBILITY"



BRITISH POUND INTEREST RATE AND "CREDIBILITY"

