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

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Group of experts under the
chairmanship of M. Heyvaert

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EUROPEAN CENTRAL BANK ARCHIVES

FORMULA FOR COMBINING THE TWO INTERVENTION SYSTEMS BASED ON THE PARITY GRID AND ON THE ECU

At its meeting on 18th September 1978 the Council of the European Communities (Economic and Financial Affairs) expressed its interest in the formula of an exchange rate system based on a parity grid and on an indicator of divergence centred on the European Currency Unit (ECU); it asked the Monetary Committee and the Committee of Governors to continue their studies and to present their reports in time for the next Council meeting in October.

With a view to fulfilling this mandate, the Committee of Governors instructed the Group to define the scope and potential content of such a combined formula. A note from the National Bank of Belgium (see annex) was taken into consideration by the Group.

The present report summarises the underlying principles of such a formula and briefly describes the alternative ways in which the ECU-based indicator of divergence might operate, concentrating in particular on the implications of the situations it might identify.

I. THE UNDERLYING PRINCIPLES OF THE COMBINED FORMULA

The idea of combining the two intervention systems, one based on a parity grid and the other on a currency basket (ECU), was put forward in Report No. 39 of the Heyvaert Group (Section I,A,3) and in the Monetary Committee's Report to the Council (Section II,A,3) with a view to avoiding the potential drawbacks inherent in either of these formulae taken in isolation.

* Text revised according to the corrigenda of 6th October 1978, which were circulated at the meeting of the Committee of Governors on 9th October 1978

The initial central values of the ECU in each of the participating currencies would be used as the basis for a grid of reciprocal central rates, in the same way as the EMUA values are at present used in the "snake". Bilateral intervention limits would be derived from these central rates, and only these limits would be announced to the market. This would preserve what some see as the principal advantages of the parity grid system, namely the automatic determination of the intervention currency and general functional simplicity.

At the same time, what others see as one of the main attractions of an ECU-based intervention system would also be retained, namely the possibility of pinpointing the divergent currency, movement against the ECU being regarded by these experts as an objective indicator to show whether a currency is tending to diverge from all or most of the other EEC currencies.

II. OPERATION OF THE ECU-BASED INDICATOR OF DIVERGENCE

For each currency in the system the operation of the ECU indicator of divergence would rest on the attainment of a minimum spread, known as the threshold of divergence, between the ECU's current rate and its central rate (initial value) in the currency in question. The thresholds would be established for each currency in such a way as to eliminate the influence of the unequal currency weights in the ECU basket and would take account of the wider margins that certain countries might adopt (see Section III,4 of the annex). The current position of the ECU in terms of each currency would be calculated on the basis of the exchange rates that the central banks connected to the telephone concertation network communicate to one another four times a day or, if the need arises, more often.

These arrangements are based on the strong presumption that all the Community currencies will participate in the European exchange rate system on a lasting basis.

Realistic divergence thresholds can be established in terms of the ECU whichever ECU concept is adopted (standard basket, adjustable basket or revisable basket). However, in a number of specific situations certain adjustments would have to be made if the indicator of divergence were to retain sufficient value. In the event of a currency withdrawing from the

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system for an indefinite period, these adjustments could be made in more than one way:

- The absentee currency could be excluded from the basket or its weight within it could be frozen. This method would have the effect of totally neutralising the influence of any movement in the absentee currency. However, in this case, the indicator of divergence would no longer correspond to the ECU (EUA).

  The majority of the experts consider that these procedures would reduce the usefulness of the indicator as an objective measure of divergence, particularly if several currencies were to withdraw from the system. Furthermore, the fact that there would be no changes in central rates - in contrast to the method described below - would distort the relationship between the ECU's market values and its central rates.

- The participating currencies' ECU divergence thresholds would be shifted in such a way as to eliminate the influence of movements in the absentee currencies on the operation of the indicator; this influence could be totally neutralised if the divergence thresholds were continually shifted in this way; in practice, however, it would be preferable to make only periodical adjustments. Between adjustments, the absentee currencies would continue to have an influence on the operation of the ECU indicator for the participating countries. The independent floating would thus be treated in the same way as a series of changes (fictitious for the absentee currency and real for the participating ones) in central rates vis-à-vis the ECU, without affecting the reciprocal central rates in the grid. The divergence thresholds would continue to be defined in terms of the same percentage spread in relation to the new central rates vis-à-vis the ECU.

  Some experts stress that the necessity of making frequent ECU central rate adjustments which would be real for the participating currencies and fictitious for the absentee currencies could have implications of a political nature and constitute a source of market uncertainty.

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The same procedures as those outlined above could be envisaged for currencies that did not participate in the system from the outset, provided that, in the event of the second alternative being adopted, a fictitious central rate vis-à-vis the ECU could be established for those currencies at the time the system was introduced.

The members of one delegation suggested that, since the operation of the indicator of divergence requires ECU thresholds established in relation to each currency's weight in the basket, it might be simpler if, for this purpose only, the basket used for each currency excluded its own weight. This proposal could be studied in greater detail if the general compromise based on an indicator of divergence is adopted.

III. IMPLICATIONS OF THE ECU-BASED INDICATOR OF DIVERGENCE

The authors of the proposal set out in the annex base their conclusions principally on the following considerations. Experience has shown that, under a parity grid system, the central banks, generally for monetary or economic policy reasons, tend to intervene on a significant scale only when the bilateral limits have been reached, that is, when such intervention has become compulsory. Use of the ECU as an indicator of divergence should help counteract this rigidity and passivity by encouraging greater initiative and flexibility in central-bank action and by making concertation more effective. In fact, the stabilisation of exchange rates would commence as soon as a currency crossed its divergence threshold, that is generally before it had reached a bilateral limit.

The potential implications of pinpointing a divergent currency, in terms of their scope, how automatic interventions should be and the significance attached to divergence, are the subject of varying opinions.

(a) Views held

1. In the opinion of several experts, the crossing of a currency's divergence threshold should, as suggested in the proposal set out in the annex, in principle have immediate implications for the intervention policy of the central bank concerned and trigger consultations on the adjustment process if the divergence persists. The central bank in question should at once:

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- either begin to intervene in Community currencies or in dollars to check its divergent trend (should the ECU divergence threshold and a bilateral limit be reached simultaneously, intervention should not involve only the currency furthest removed in the opposite direction);
- or initiate immediate consultations with its partners, if it did not take action in the manner indicated above, and consider with them the measures that could be taken.

In order to facilitate this diversification of interventions, the central banks participating in the exchange rate system would have to agree to their currency being used for intra-marginal interventions as soon as it came close (e.g. closer than 0.25 per cent.) to a bilateral intervention limit or had itself crossed its ECU divergence threshold in the opposite direction. If necessary, the extent of such agreement could be limited, for example to a ceiling equivalent to one-quarter of the central banks' debtor quotas under the short-term monetary support arrangements. Once this ceiling had been reached, interventions in the currency in question would have to cease, unless a decision to the contrary were taken in the course of concertation.

2. While in favour of certain rights with respect to intra-marginal interventions (in dollars if there is no alternative), some experts would like the indication of divergence to have additional implications. In particular, they stress that the concept of divergence can be just as valid when a currency reaches a bilateral limit as when it lies within the margins. They consider, moreover, that with a view to achieving greater symmetry of adjustment, the liabilities and claims arising from interventions carried out by a divergent creditor should be governed by a different set of rules from the normal ones.

This approach has already been discussed in Report No. 39 of the Heyvaert Group (Section III,3,D); its main features would be the creation of "restricted" assets for divergent creditors and "restricted" liabilities for the corresponding debtors, and the possibility of subjecting divergent creditors to interest rate penalties and a compulsory consultation procedure of broader scope than the normal concertation. These broader consultations would be expected to lead to concrete action.

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These experts feel, moreover, that if special provisions of this nature existed the ceilings mentioned above could be relatively high, whereas they would otherwise have to be low.

Most of the experts, on the other hand, consider that all liabilities and all claims should be governed by uniform financing and settlement rules.

3. Other experts are of the opinion that the ECU-based indicator of divergence should have only limited importance. In their view, an indicator based exclusively on an exchange rate movement can only reflect the need for a closer examination of the factors causing the movement and should not automatically trigger intervention. For example, the reasons for sharp movements in a currency's exchange rate might have to be sought outside the country concerned. It should also be borne in mind that automatic intervention on an intra-marginal basis might give rise to conflicts of interest between the various central banks. There are, furthermore, serious grounds for questioning whether, in the face of a basic trend, intra-marginal intervention is still relevant and even whether, in this situation, there might not be a risk of enouraging speculation by such intervention. In the view of these experts, account should be taken of the following points:

- the indications supplied by the ECU are highly relative; a currency could, for example, be pinpointed as divergent, and the country concerned consequently penalised, because other member countries had not complied with jointly agreed economic policy guidelines;
- intra-marginal interventions would tend to reduce the margins of fluctuation concerned and would be inappropriate, and even ill-advised, at times of heavy pressure;
- automatic intra-marginal interventions in EEC currencies might provoke undesirable changes in reserves which could be avoided by timely monetary policy measures.

These experts think that the function of the ECU indicator should be to trigger consultations, meaning that as soon as a currency reached its ECU divergence threshold the central bank concerned would initiate consultations

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to consider criteria other than the ECU with a view to determining the most appropriate steps to be taken.

(b) Summary

There are no technical obstacles to the establishment of thresholds of divergence based on the ECU.

Views differ, however, as to the further implications of detecting a divergence on this basis.

- Some experts consider that the combined formula, as described in the attached note, on the whole represents an acceptable compromise for merging the advantages of the parity grid and those of a system based exclusively on the ECU. They feel that any other solution would rob the ECU as indicator of divergence of all practical significance and the new exchange rate system would be little different from the present "snake".

- A few experts are of the opinion that, with a view to achieving greater symmetry of adjustment, special provisions should also be adopted for the financing and settlement of liabilities and claims resulting from intervention carried out in the currency of a divergent creditor or that of a debtor whose currency had not crossed its divergence threshold.

- Finally, other experts consider that the ECU indicator is not in itself a sufficient or reliable enough instrument to trigger automatic operational procedures; any action or concrete measure would need to be decided upon after consultation.

The final choice therefore remains open.

A further choice would have to be made with respect to the functioning of the indicator of divergence in the event of a currency withdrawing from the system or not participating in it at the outset: either an ECU basket could be maintained or a basket could be adopted from which the currency in question was effectively excluded or within which its weight was frozen.

Finally, the Group unanimously acknowledges the need for concertation to be more frequent than hitherto and, in particular, more directly geared towards the pursuit of a co-ordinated exchange rate policy, which implies

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that it should be conducted at a sufficiently high level to enable immediate decisions to be taken. Similarly, it has been suggested that broader consultations should be held when a currency remained constantly beyond its divergence threshold for a given period of time.

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NATIONAL BANK OF BELGIUM

Annex

Group of Experts
under the chairmanship of
M. Heyvaert

(Translation)

20th September 1978

BASIC PRINCIPLES OF THE FORMULA FOR RECONCILING THE TWO INTERVENTION SYSTEMS BASED ON THE ECU AND ON THE PARITY GRID

The object of the present note is to define the scope and provisions of a new exchange rate system based on a parity grid and an indicator of divergence centred on the ECU. This formula, which is briefly described on page 6 of Report No. 39 of the Heyvaert Group and in the Report of the Monetary Committee (paragraphs 12 and 13), seems to have held the attention of the Council at its meeting on 18th September.

The aim is to establish a system contributing to the stabilisation of exchange rates which, while basically functioning on the lines of an ECU system, would incorporate the stringency and automatic implications of the parity-grid formula with regard to the permissible maximum fluctuations between currencies. The advantages of the basket in terms of identifying the most appropriate procedures for stabilising exchange rates would thus be combined with those of the parity grid in relation to the functional needs of the exchange markets.

This combination would be achieved in the following manner:

- as far as the markets are concerned, only bilateral intervention limits would be announced, at which unlimited intervention in the currency at the opposite limit would be compulsory;
- the stabilisation of rates would, however, be preceded within the margins, and accompanied on attainment of the bilateral limits, by the triggering of obligations, presumptions or consultations concerning intervention or adjustment procedures as soon as a certain spread, measured this time in terms of ECUs, had been exceeded.

In short, the ECU would act as a barometer, its indications being used as guidelines for action to stabilise exchange rates within the maximum margins expressed in terms of bilateral intervention limits.

The ECU would be based on the basket of Community currencies, and would be representative of each element. However, instead of being used to express intervention points announced to the market, it would serve as an instrument for internal use by the central banks. Instead of marking the permissible limits of fluctuation, it would measure the threshold beyond which exchange rate stabilisation must begin on the basis of new principles.

The general rules set out below describe in greater detail the provisions that are foreseen.

I. UNDERLYING PRINCIPLES OF THE NEW SYSTEM

1. Central rates would be expressed in ECUs (currency basket). The grid of reciprocal parities between currencies could be derived from these rates.

2. (a) Compulsory intervention would be triggered at the bilateral limit rates derived from the parity grid. Only these rates would be announced to the market.

   (b) The ECU would be used, in the way described in Section II below, to generate supplementary intervention, to diversify intervention procedures when the bilateral limits were reached, or as an alarm signal triggering consultations among monetary authorities.

3. The use of the ECU mentioned under 2(b) would be triggered by the attainment of a minimum spread - referred to as the "threshold of divergence" - between the central rate expressed in ECUs and the rate of the day expressed in the same terms. This divergence threshold would be calculated for each currency in such a way as to eliminate the influence of disparities of weight on the probability of reaching the threshold. It would be established in such a manner that a currency could attain its divergence threshold before reaching its bilateral limit, but would not necessarily have to do so.*

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* The maximum divergence within the parity grid is attained when a currency reaches its bilateral intervention rate vis-à-vis all the other currencies. At this point the spread between that currency's rate in ECUs and its ECU central rate reaches its theoretical maximum, bearing in mind the obligations deriving from the parity grid. This maximum spread is different for each currency, depending on its weight. The "divergence threshold" in terms of the ECU could be set, for each currency, at 75 per cent. of this maximum spread.

II. IMPLICATIONS FOR INTERVENTION RULES AND OTHER POLICIES

1. When a currency exceeded its divergence threshold, the central bank concerned would, in principle, be obliged to diversify its intervention practices:

(a) if the bilateral limit had not been reached, it would have to commence intervention, either in Community currencies (see (d) below) or in dollars, to check the divergent trend;

(b) if the bilateral limit had been reached, it would have to intervene not only in the currency furthest removed from it but also, to alleviate the situation of that currency, in dollars or in other Community currencies close to their bilateral limit in the opposite direction (see (d) below);

(c) if it did not take action in the manner indicated under (a) or (b) above, it would have to give reasons for failing to do so in the context of concertation arrangements;

(d) in order to facilitate the diversification of interventions, a central bank would be required to consent to stabilising interventions in its currency up to an agreed ceiling, when its currency was relatively close to a bilateral intervention limit (e.g. less than 0.25 per cent. away from it) or had crossed its ECU divergence threshold in the opposite direction.

2. When a currency remained persistently beyond its divergence threshold for a specific length of time, the monetary authorities of the country concerned would be required, in the course of consultations, to give their assessment of the situation and an account of any measures that they intended to adopt.

III. PARTICULAR SITUATIONS

Realistic thresholds of divergence can be established in terms of the ECU whichever ECU concept is adopted (standard basket, adjustable basket or revisable basket). However, in the circumstances outlined under

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paragraphs 1, 2 and 3 below, the use of a standard basket would require a general readjustment of the central rates on which the ECU divergence thresholds are based.

1. Change in central rates

The divergence thresholds would simply have to be recalculated on the basis of the new central rates. The spread (in percentage terms) between the divergence thresholds and each currency's central rate would be unchanged.

2. Temporary withdrawal from the system

It would not be necessary to alter or adjust the ECU in order to pinpoint divergences between participating currencies if the divergence thresholds (expressed in ECUs) were shifted in such a way as to neutralise the influence of autonomous movements in the currency or currencies floating independently.

One way of achieving this would be by treating the floating in the same way as a series of (for the floating currency, fictitious) central rate changes.

3. Non-participation in the system

The problems that would arise if some currencies were not to participate in the system would be similar to those raised by temporary withdrawal. The same procedures as those outlined under paragraph 2 might be adopted, provided the non-participating countries agreed to the establishment of ECU central rates for their currencies from the outset.

4. Temporary adoption of wider margins

The adoption of wider bilateral margins by some participants would prevent divergence thresholds being fixed in terms of the ECU. These thresholds would then be set at a spread from the central rate compatible with the individual margins adopted for each currency.

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... INDICATOR OF DIVERGENCE

IN THE INTERVENTION SYSTEM

X = the threshold or the limit are reached

CC = Community currency

	ECU divergence threshold	Extreme bilateral limits	Currencies furthest removed			Choice of intervention currency or currencies
			Extreme bilateral limits (a)	ECU divergence threshold (b)	Within the border zone of 0.25% from the bilateral limits (c)	
1)		X	X			CC at the limit
2)	X	X	X			CC at the limit and $ (or concertation)
3)	X	X	X		X	CC at the limit and either "border" CC or $ or both
4)	X				X	$ + "border" CC or $ or "border" CC
5)	X					$ (or concertation)
6)*	X			X		divergent CC and/or $

* This situation can only arise if the two currencies in opposite positions each have a heavy weight in the basket (e.g. 35%) and the other currencies are at the centre of the band.

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