

ANNEX

Operational considerations for monetary policy  
in stages two and three

I. INTRODUCTION

1. As has been pointed out in the Report, an important technical issue in implementing a monetary union is how to organise monetary policy during the transition from a system of fixed, but adjustable exchange rates to a monetary union in which national currencies linked by fixed parities circulate freely.

Part II of the Report emphasises that once exchange rates are irrevocably locked at the transition to stage three, a common monetary policy is required and will have to be formulated collectively in the framework of the ESCB. In contrast, during stage two, when there is still some exchange rate flexibility, national authorities will retain the "last word" concerning exchange rates and monetary policies. However, the same considerations that lead to the conclusion that the irrevocable locking of exchange rates requires a common monetary policy also imply that ~~the content that exchange rates~~ national monetary policies, ~~and in particular, become more consistent~~ ~~increasing exchange rate stability therefore requires a framework for~~ ~~co-ordination and co-ordination of monetary policies~~. The more explicit the degree of exchange rate fixity, and the higher the degree of capital mobility, the closer must be the co-ordination and the extent to which the overall policy stance of the system has to be decided in common.

2. The Committee has examined several technical schemes aimed at strengthening co-operation among central banks and developing a common

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increasingly stable call for progressively tighter constraints on

decision-making process ~~with regard to certain monetary operations~~ before the responsibility for monetary policy is transferred to the ESCB. The approaches and operational frameworks considered by the Committee are not necessarily mutually exclusive and in some instances it might be useful to combine elements of the different schemes. However, the following discussion treats them as distinct in order to highlight their specific characteristics.

All schemes envisage in some form the establishment of a new institution, but they differ considerably in the degree of authority that they attribute to that new institution.

Under a first approach the authority over exchange rate and monetary policy would rest fully with national authorities, but the operational implementation of the domestic policies would be centralised in a subsidiary jointly owned by all central banks. A second possible approach would be to pool a certain amount of official reserves in a new institution which could facilitate a concerted management of exchange rates through joint interventions in the exchange market and serve as a training ground for achieving a better co-ordination of monetary analysis and decision. This new institution could conceivably be given the power to perform certain operations on its own initiative. A third approach would be to set up an operational framework for an integrated monetary policy in which a new central institution could be given the full authority over a common monetary policy once a decision has been made to lock exchange rates.

The Committee feels that ~~these three possible approaches~~ deserve to be explored more fully. Before describing them in greater detail it might, however, be useful to outline some general considerations about monetary policy in the intermediate stage on the way to monetary union.

II. GENERAL CONSIDERATIONS ABOUT MONETARY POLICY IN THE INTERMEDIATE STAGES

3. Before the authority over a common monetary policy will be attributed in the final stage to the ESCB, three elements determining a joint approach to monetary policy should have emerged: (i) a consensus on the ultimate objective(s); (ii) a common ~~operational~~ framework for intermediate objectives and for the design of monetary policy; and (iii) a sufficient degree of experience with common operations. The evolution of

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specific formulation of the

these three elements form part of the learning process involved in stage two.

4. Ultimate objective: A general formulation concerning stability of purchasing power of the currency is more easily interpreted in a national economy where all prices can be expected to move rather closely together throughout the entire area. For a national economy price stability is therefore usually interpreted as approximate stability of such broadly-based indices as the consumer price index. However, in an area as large and as diverse as the Community it can be expected that prices of less intensively traded goods and of services that enter the consumption-based indices may diverge substantially <sup>even</sup> over the medium term. In spite of this drawback ~~the~~ consumption-based indices it has been argued that ~~they~~ would nevertheless be the appropriate indicator since they are widely accepted and are perceived to reflect the cost of inflation to the economy. As an alternative it has been suggested that the Community-wide objective of price stability ~~should~~ be interpreted as approximate stability of the producer price index of manufactured goods. These prices should tend to equalise across the internal market that will exist after 1992.

5. A common ~~framework~~ framework for intermediate objectives and the design of monetary policy: The Report indicates a consensus about ultimate objectives, but a similar consensus about intermediate objectives and the design of monetary policy will have to emerge during stage two as a result, in particular, of the joint, and hence consistent, analysis of monetary developments proposed for this stage. Markets would regard a declaration at the beginning of stage three that exchange rates are henceforth irrevocably locked as fully credible <sup>to</sup> the extent to which there would be evidence of an analytical and operational consensus; in the absence of such evidence there would be danger that ~~market participants would not~~ the exchange rate commitment for particular currencies?

The ultimate objective would have to be translated into operational guidelines. The locking of parities leaves undetermined the level at which interest rates in participating countries must be aligned, and the ultimate objective in terms of price stability is linked to day-to-day monetary actions in too tenuous a way to provide sufficient

specific formulation of the

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did not pass the test of markets.



guidance. A common judgment would be required to prevent conflicting national opinions and policies from emerging. Practical procedures would need to develop for containing divergence from the agreed monetary stance. In short, participating central banks cannot confine themselves to declaring that they will pursue a common objective in a co-ordinated way; they must be seen to be doing so at every moment. This may require both the formulation of consistent intermediate objectives to underpin a collective monetary target and explicit agreement on the nature of reactions to national departures from intermediate objectives.

6. Experience with common operations: An analytical framework ~~to~~ ~~mediate~~ ~~objectives~~ ~~designed~~ ~~to~~ ~~determine~~ ~~in~~ ~~a~~ ~~predictable~~ ~~manner~~ ~~the~~ ~~under~~ ~~of~~ ~~a~~ ~~common~~ ~~monetary~~ ~~policy~~ would be an essential requirement at the time when exchange rates were locked. However, prior to the development and implementation of such a framework it might be useful to gather experience with joint monetary operations on a more limited scale. The objective of common operations would be to help to improve monetary policy co-ordination through a learning process without effectively abandoning the central banks' authority over national monetary policy. Growing experience with common operations could, for example, be attained by centralising the implementation of all central banks' domestic monetary policies or by pooling a certain amount of reserves for the purpose of limited exchange market interventions. These two possible approaches as well as a more far-reaching scheme setting up an operational framework for an integrated monetary policy are described in detail in the following sections.

III. CENTRALISED EXECUTION OF ~~MONETARY~~ MONETARY OPERATIONS

7. To implement the centralised execution of ~~the~~ monetary operations all central banks would establish a common operations floor incorporating all of their respective foreign exchange and domestic money market activities, together with a centralised system of custody accounts, within a jointly owned subsidiary. Initially, each central bank would staff its own operations on the common floor, rather like a branch, but over time these separate national staffs would be merged into a single unit. The use of common facilities would mean, on the one hand, that the operations of each individual central bank would be completely transparent to its

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partners, and on the other hand, that the central banks could present a common front to the markets by agreeing not to reveal the source of the instructions for any of the common institution's operations. However, individual central banks would at all times retain ultimate responsibility for the deployment of their national foreign exchange reserves, and for the supply of domestic bank reserves.

8. This approach would have four main advantages. Firstly, it would enable the central banks to give a powerful demonstration, both to the markets and the wider public, of the progress that had already been made in the concertation of national ~~monetary~~ policies and of the seriousness with which the ultimate goal of monetary union was being pursued. Secondly, it would provide an efficient training ground for, and a strong practical stimulus to, the implementation of a common monetary policy. It might also lead to further advances in the process of policy concertation itself. Thirdly, it would facilitate efforts to converge the institutional frameworks for the transmission of monetary policy in each country - this would not only ease the transition to a unified monetary control procedure in stage three, but would also help to give the common institution an early focus on domestic monetary policy and hence the requirements of domestic price stability. Finally, the institutional structure created would be a necessary component of the ESCB envisaged for stage three, thus making the evolution from stage two to stage three relatively straightforward.

Aspects of this approach could be combined with all of the ~~institutional~~ frameworks discussed in this annex. To the extent that the approach does not require Treaty revision because no formal transfer of monetary sovereignty is involved, initial steps could even be taken in stage one.

→ other

IV. POOLING OF OFFICIAL RESERVES

9. An alternative (or complementary) approach to strengthening monetary policy co-ordination through a growing experience with common monetary operations could be based on the pooling of a ~~limited~~ amount of official reserves in a newly created institution. The basic consideration behind this proposal is that ~~it would be possible to pool the main reserves of the national currencies and that~~ ~~interventions~~ play an important role in determining

→ certain

~~will~~

the monetary policy of most countries. It can therefore be expected that foreign exchange interventions against third currencies, especially in the US dollar, will also play an important role in the formulation of the common monetary policy in the intermediate and the final stages.

10. The new institution created under this approach would have several objectives: it would serve as a training ground for achieving a better co-ordination of monetary analysis and decisions; it would facilitate ~~from Community point of view~~ the concerted management of exchange rates and could intervene visibly on the foreign exchange market (in participating and/or third currencies) at the request of the central banks; and it could demonstrate the political will of the European countries and thus reinforce the credibility of the process towards economic and monetary union.

The resources of the new institution would be provided by the pooling of a certain amount of reserves. In order to manage these reserves, to intervene in the market and to analyse monetary trends with a view to enhancing policy co-ordination, the new institution would need to have a permanent structure and staff. All central banks of the Community countries would be eligible to join the new institution. However, as the management of fixed, but adjustable exchange rates implies specific constraints on monetary policy and exchange market interventions, both of which call for a common approach on the part of the central banks concerned, membership in the new institution would be subject to full participation in the exchange rate mechanism of the EMS.

11. In a first phase the interventions by the new institution would be agreed in common by the participating central banks and complement their own interventions ~~without increasing the overall volume of interventions~~. For this reason the exchange market operations of the new institution would have no additional effect ~~either directly or indirectly~~ on the national monetary policies pursued by individual member countries. However, the efficiency of interventions undertaken in common would be expected to increase. In a second phase, ~~which should be agreed unanimously~~, the participating central banks could ~~decide~~ to hand over to the new institution the power to conduct certain operations on its own initiative,

*1, rather than increase,*

*————— X*

*————— X*

*Agree unanimously*



in compliance with the guidelines set by the Governors on the institutions' Board of Directors.

V. AN OPERATIONAL FRAMEWORK FOR AN INTEGRATED MONETARY POLICY

12. ~~While there is conceptually a clear break between stages two and three in the sense that the final authority over exchange rate and monetary policy could no longer rest with national central banks once stage three has been created.~~ The setting-up of an operational framework proposed under this approach would ~~probably~~ take place in the course of stage two ~~and~~ ~~the high degree of exchange rate fixity which is expected to persist towards the end of stage two~~ would in practice create economic constraints very similar to the ones operating in stage three. Consequently, in contrast to the two approaches mentioned above, the proposal to establish an operational framework for an integrated monetary policy would involve the establishment of an institutional structure which would be able to function also after the decision has been made to lock exchange rates irrevocably.

13. Under this approach a system consisting of three tiers would be set up: a central monetary institution (the ESCB), national central banks and commercial banks. The central monetary institution would deal only with national central banks and it would act as the central bank for the national central banks. The latter would continue their present relationships with domestic commercial banks but they might settle part of their transactions with other national central banks through their accounts with the central monetary institution.

With this organisational structure the scheme would have three fundamental components:

- an autonomous balance sheet for the central monetary institution so that it can take operational decisions rather than serving simply as a forum for concertation;
- a mechanism ensuring control of the liabilities of the central monetary institution, in analogy with the control exercised by national central banks on their ~~monetary~~ liabilities that constitute the monetary base;

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- a set of provisions to support demand by national central banks for the liabilities of the central monetary institution by making ~~their liabilities~~ a necessary ingredient in the national money supply process.

the

14. The first component, the autonomous balance sheet of the central monetary institution, could be implemented by giving it a capital formed by contributions of international reserves from national central banks. In return, national central banks would receive shares of the central monetary institution and would therefore share in its profits and losses.

15. The second component, control over the liabilities of the central monetary institution, could be achieved by giving the central monetary institution the power to determine the conditions under which it supplies credit to the national central banks. The central monetary institution could be given wide discretion in these decisions in analogy to the discretion national central banks exercise in their transactions with commercial banks.

The liabilities of the central monetary institution could be expressed in official ecu; this would then require that the current mechanism for creating official ecu, the revolving swaps, be abolished because the amount of ecus created this way depends on such exogenous factors as the gold price and the US dollar exchange rate. These swaps could be replaced by ~~the~~ contribution of international reserves. The credit mechanisms that constitute the other channel of ecu creation would also need to be brought under control. This could be done by giving the central monetary institution the power to grant member central banks discretionary credit in ecu, in the same way as a national central bank finances commercial banks through open market or rediscount operations. In turn, the existing credit mechanisms could be significantly reduced, by limiting their duration, ~~limiting~~ their applicability to marginal intervention, eliminating automatic renewals and making them more expensive.

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confir<sup>ning</sup>ing

16. The third component would be a mechanism to ~~finance~~ a demand for ~~required resources that constitute the main~~ liabilities of the ESCB. Initially this mechanism would rest on the provision requiring the

support  
the ecu



participating central banks to hold deposits of official ecu with the central monetary institution in the form of reserves. ~~However, in the~~ ~~initial stage~~ as the system evolved a transaction demand for official ecus would be the natural consequence of a growing settlement of creditor and debtor positions among national central banks ~~in~~ their accounts with the ESCB.

Over time, however,  
through

Within this broad framework there are several possibilities of operating the system, depending on whether the reserve requirements would be applied to liabilities or assets of the national central banks.

from page 11-12  
(Colt para 24)

(a) A reserve requirement on liabilities of participating central banks

17. The ESCB would have the power to ask member central banks to hold compulsory reserves in ecu, amounting to the equivalent of a certain percentage of their total liabilities, or of the increase thereof. The reserve requirement in official ecu would link the supply of ~~base~~ money by member central banks and therefore also the aggregate money supply in the Community to the amount of official ecus created by the ESCB.

central bank

The manner in which the central monetary institution could manage this system would be very similar to that of a national central bank. For example the governing body of the central monetary institution could decide each year how much money should be created in the Community in order to support economic activity in a non-inflationary environment. Given the ~~required reserve coefficient applied to~~ the monetary base of each national central bank this could then be translated into a target for the creation of official ecus. Since total monetary base creation in the participating countries would also be affected to the extent that they undertake net unsterilised interventions in third currencies, a necessary complement of this objective would be guidelines regarding intervention policy in third currencies, especially the dollar. National central banks could conduct autonomous foreign exchange operations against third currencies, however, they would have to sterilise the monetary effects of these interventions by offsetting changes in credit extended to domestic counterparts.

multiplier of

18. The management of the system would be different in stage two and stage three. While in both stages the supply of official ecus should be

firmly controlled by the central monetary institution, the strictness with which the reserve requirements must be observed could differ between the two stages. For instance, during stage two reserve obligations could still be indicative and serve as a guideline in a learning process, but in stage three they would become compulsory.

19. While the basic operating features of a system of reserve requirements on national central bank liabilities are relatively simple, the implementation of the scheme ~~will involve distributional~~ differences in national money multipliers, the influence of currency substitution, the effects of realignments and the distribution of reserves among national central banks.

20. As far as national monetary base multipliers are concerned, they differ considerably at the margin and on average, in particular because of different (and sometimes absent) national reserve requirements on commercial banks. This would imply that, even with a given total quantity of official ecus, a transfer of official ecus from a national central bank with high reserve requirements and consequently a low multiplier to another central bank with lower reserve requirements and therefore a higher monetary base multiplier would increase total liquidity in the system and would thus have an unwanted expansionary effect. This would not represent an entirely new problem since in national systems different reserve coefficients usually apply to different types of deposit so that a shift across deposits always affects the observed multiplier. ~~The initial allocation of official ecus could take the differences in multipliers into account, the problem would therefore become relevant mainly in the subsequent operation of the system. While not new, the problem would involve, in an additional element of uncertainty and would require the central monetary institution to observe carefully the distribution of official ecus and to intervene, adjusting the overall quantity it makes available to the system, in order to offset the net expansionary or contractionary effects that arise from transfers of official ecus between national central banks.~~

21. ~~Monetary~~ currency substitution in the form of large international shifts of certain deposits across the

while only

ecu banks

would have to take account of a certain number of aspects, such as

at present

If such differences subsisted at the time the scheme is implemented, they

particularly with ecu reserve requirements applied to either assets or liabilities of the central bank,

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If the reserve requirement were applied to the monetary liabilities of national central banks,

# insert §§ 19-23 after § 28



interest in § 20

(A)

In principle, the differences in national monetary base multipliers would be incorporated fully into the system of monetary control if the reserve requirements were based on the domestic credit expansion of the banking system as envisaged in paragraph XX above.



currencies of the system. Such shifts would net out for the entire system, so that the central monetary institution would not need to adjust the overall supply of official ecu, but they would necessitate a redistribution of official ecu across national central banks because they would lead to an increase in the ~~monetary base~~ of the country towards which the currency substitution was going.

22. Similarly, a realignment ~~is just~~ a change in the market exchange rate inside the bands, would imply that the central bank of the devaluing country (or with a depreciating currency) would be left with free reserves of official ecu. The central banks whose currencies would appreciate against the ecu would instead need to acquire additional official ecus. These could be obtained ~~from~~ from the central bank with the devaluing currency, which would thus be put in a strong position. ~~In general, changes in market exchange rates would also have an effect on the overall demand for official ecu reserves if the distribution of monetary bases across the Community did not correspond to the eco-weights.~~

23. More generally there is an issue relating to the distribution of ecu reserves among the participating national central banks. This arises from the fact that the behaviour of commercial banks and national central banks is likely to differ. National systems of reserve requirements work predictably and affect all banks in the same manner because commercial banks act mainly on the basis of profit motives. There is therefore in most cases an active market for the asset that can be used to satisfy national reserve requirements in which the price, i.e. the interest rate, determines whether any given bank is willing to supply or demand additional reserves. Especially on inception of the scheme it would not be certain that in response to an expansion in the supply of official ecus national central banks would increase their national monetary base, and individual national central banks wishing to expand more than others, perhaps because of stronger growth in economic activity, could not rely on a market to obtain additional official ecu. In this case the ESCB ~~could~~ intervene to guide and adjust the distribution of ecu reserves among national central banks.

24. ~~Article A~~ At first sight ~~the~~ scheme ~~would~~ appear to imply that the main monetary policy instrument has to be ~~the~~ aggregate. ~~control~~

~~the objective~~ would have to be ~~adjusted~~ accommodated ~~the~~ shifts by the scheme.

→ need for ecu reserves and to a surplus in the "opposite" country, T, →, and to a lesser extent even

the logic is not perfect, but we could improve it later.

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~~However~~ However, the central monetary institution might also be guided in its supply of official ecu by national interest rates. Given fixed exchange rates, national interest rates would tend to stay within a very narrow band so that the central monetary authority could also target some average level of interest rate. If liquidity increased too much in any given country, interest rates in that currency would tend to fall and there would be tensions on the foreign exchange markets. The appropriate response of the central monetary authority would then be to call back official ecus to induce the national monetary authorities to rein in the expansion of liquidity.

⊗ it goes to page 9

(b) A reserve requirement on credit to the domestic sector

25. If the required reserves were imposed on the credit extended by national central banks to the domestic sector instead of the total monetary base, the instrument would impinge more directly on all elements of monetary financing of the public sector: the direct elements that show up in credit extended to the public sector and the indirect elements that show up as credit to the private sector because the central bank is undertaking larger open market purchases at a time of major public deficits.

{ underline }

Under this modified scheme the central monetary authority would estimate the overall amount of domestic credit expansion that was compatible with approximate stability in prices (allowing for anticipated reserve flows) and would expand the supply of official ecus by the same proportion. The overall expansion of the ~~monetary base~~ in the system would then be the sum of the national domestic credit expansion plus the net effect of unsterilised foreign exchange market interventions against third currencies. The central monetary institution would therefore have to take a stance on the desired overall amount of intervention. This could be achieved by allowing the central monetary institution to intervene directly in the market or by subordinating national central bank interventions to the guidelines of the central monetary institution. Given the target rate of domestic credit expansion there would be no presumption that these interventions would be sterilised.

→ central bank money

As far as interventions in third currencies are concerned, these would ~~be implicitly limited~~ if the reserve requirement was applied to the sum of the credit to the domestic sector plus changes in third currencies reserves.

It would also be conceivable to impose required reserves on the sum of domestic credit and official reserves in third currencies. In this case,



(a) A reserve requirement on credit to the domestic sector plus extra-EMS foreign exchange reserves

26. If the required reserves were imposed on the sum of domestic credit plus extra-EMS foreign exchange reserves, additional guidelines concerning unsterilised interventions against third currencies would no longer be needed. However, some guidelines concerning sterilised interventions might still be needed to the extent that the latter are believed to be effective. In all other respects this scheme would operate like the one based on domestic credit alone. The basis for including extra-EMS foreign exchange reserves is, of course, the assumption that these reserves are used only in intervention against third currencies.

27. Under the two schemes which envisage the imposition of a reserve requirement on national central bank assets, differences in national money base multipliers would remain a source of shifts in overall supply of money for any given overall domestic credit target. But the problem of the distribution of ecu reserves among national central banks would become less important since shifts in money demand due to currency substitution could be accommodated through reserve flows without any need for transfers of official ecus. For example, if the demand for deposits in a certain currency increases, either because of a shift in the activity in the country, the monetary base of that country could expand following the intervention. The monetary authorities might have to undertake, since the cause for the expansion of the monetary base would be reserve inflows - domestic credit of the central bank remaining constant - there would be no need for this central bank to acquire additional official ecus. The opposite reserve flows that would take place in other countries would also not require any transfers of official ecus.

(b) A reserve requirement on domestic credit expansion by the national banking system

28. ~~In principle, the differences in national monetary base multipliers would be incorporated fully into the system of monetary control, if the reserve requirements were based on the domestic sources of money and controlled domestic credit expansion in the total~~

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It could also be applied to the ~~market~~



~~national banking system~~ i.e. on the domestic sources of broad money creation. Such a system would still leave each central bank free in its choice of the instruments which it wanted to use for controlling credit expansion in its country; for the same reason it would not necessarily contribute to the convergence in the conduct of policy which is part of the purpose of stage two. It might also leave too much slack in the control mechanism. Despite the more direct linkage to a natural intermediate objective underpinning fixed exchange rate - domestic credit expansion - it may on balance have disadvantages compared to the first two variants which are based on items that appear directly on the balance sheet of the central banks.

~~As discussed in the text~~

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(§§ 19-23)

that would be necessary

for decision making

conclude

VI. CONCLUSION

The schemes outlined above have been considered by the Committee as possible ways to bring about the necessary operational framework for conducting a common monetary policy. They have in common the maintenance of a large degree of decentralization in the monetary policy process, because they ~~are~~ all referred to a <sup>in immediate</sup> stage in which ~~while the~~ new instruments and procedures are put in place and tested, <sup>but in which</sup> the ultimate responsibility for policy has not yet been assumed by the ESCB. In the final stage of ~~the~~ economic and monetary union such instruments and procedures would be fully used for the purpose of conducting a common monetary policy, and they could further evolve, if necessary,

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be analyzed further.