Dear Günther, June 29

This is my combined paper. Sorry for the delay. I shall check with the OECD,

NIELS THYGESEN

PROFESSOR, DR.POLIT

if I can get a clean version of p. 10. - Any comments welcome.

Regards

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A EUROPEAN CENTRAL BANKING SYSTEM - SOME ANALYTICAL AND OPERATIONAL CONSIDERATIONS

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INTRODUCTION

The purpose of the present note is to review briefly some analytical and operational issues which arise at an advanced stage of monetary integration. These issues are relevant to the present rather tightly managed EMS which has developed gradually since 1983, and their resolution could be experimented with in the decentralised and pre-institutional first stage. They are essential in any effort to clarify how monetary policy might be designed and operated in the second stage if a "graduate transfer of decision-making power from national authorities to a Community institution" has to take place (para. 57 of the main Report). This note accepts that it may not be possible at the present juncture to propose a detailed blueprint for accomplishing such a transition in stage two, but the considerations in the following sections are kept in sufficiently general terms to incorporate a range of analytical and operational approaches. The note is also relevant to the collective management through the proposed European System of Central Banks (ESCB) in stage three prior to the introduction of a common currency.

The note contains three sections. The first asks how the ultimate objective(s) of monetary and other macroeconomic policies might be formulated to give concreteness to the general description in the main Report. The second discusses to what extent intermediate objectives might be helpful in underpinning the attainment of the ultimate objectives. Finally, the third section looks at the possible instruments by which the ESCB and the participating national central banks might discharge and divide their responsibility for monetary policy. Throughout the paper reference will be made to Table 1 which lists ultimate and intermediate objectives and the main policy instruments.

All three subjects raised in this note obviously require much further analytical work, study of empirical regularities and assessment of practical feasibility. They are treated here in a highly preliminary way, though with some confidence that the issues will have to be addressed in order to properly prepare for the second and third stages outlined in the Report.

TABLE 1

ULTIMATE AND INTERMEDIATE OBJECTIVES OF MONETARY AND OTHER MACROECONOMIC POLICIES AND THE INSTRUMENTS OF MONETARY POLICY

	Collective	National/relative
Ultimate objectives	Maintain approximate medium-term stability of producer prices in the internal market. Maintain sustainable current account position for area vis-à-vis rest of the world.	Keep growth in nominal private final demand close to targeted path in each country.
Intermediate objectives	Keep growth of monetary aggregate for area as a whole within targeted interval.	Keep growth in domestic credit (DCE) within targeted interval in each country. Keep stable exchange rates vis-à-vis other currencies within the area.
Instruments available	General (and differentiated) reserve requirements against national DCEs. Lending rates of ESCB Intervention policy vis-à-vis third currencies	Intervention rates and policy in intra-area currency band. Interest-rate differentials within area. (Small) parity realignments

ULTIMATE OBJECTIVES

As regards the ultimate objectives of policies in an economic and monetary union the main Report states (para.16) that

> "these policies should be geared to price stability, balanced growth, converging standards of living, high employment and external equilibrium".

It is difficult to assess, in the absence of additional precision on the relative weight to be given to these wide-ranging objectives, how procedures may be developed for monitoring whether policies are appropriate. The present note assumes that the prime contribution of monetary policy to the attainment of ultimate policy objectives will be made, if the ESCB is committed to the objective of price stability, while supporting - subject to this proviso - the general economic policy set at the Community level by the competent bodies. This is the formulation chosen in para. 32 of the Report which describes the mandate for the ESCB.

Implicitly this division of responsibilities implies that all the remaining objectives would, in principle, be the concern of the non-monetary authorities at the national and Community levels. Since exchange-market interventions in third currencies would also be carried out "in accordance with guidelines established by the ESCB Council" (para. 57 on stage two) and subsequently "on the sole responsibility of the ESCB Council in accordance with Community exchange rate policy" (para. 60 on stage three) it is, however, necessary to recall that such interventions would provide not only an additional instrument for influencing price trends in the Community, but also the objective of external equilibrium. The ESCB Council would accordingly be faced with the problem of designing guidelines for interventions which take into account both its prime objective of price stability and the need to contain the build-up of unsustainable external disequilibria, most appropriately defined as large collective current account imbalances vis-à-vis the rest of the world. The Report does not say explicitly that internal price stability always has to take precedence over the external value of EC currencies in terms of third currencies, but it clearly envisages no significant degree of commitment to stabilise the latter. Though it may well be in this area that the issue of designing an appropriate mix of monetary and non-monetary policies will find the clearest expression, the attainment of some degree of external equilibrium would impinge primarily on the budgetary authorities.

In view of this interpretation, the judgement on the performance of monetary policy and the fulfilment by the ESCB of its mandate would hinge on an interpretation of the objective of price stability. That objective would have to be expressible in collective terms for the Community, but it could also usefully be linked to national indicators of a nominal nature in order to monitor the compatibility of policies. There appear to be two main contenders for the role of collective objective.

The first is to use medium-term stability of <u>average producer prices in the internal market</u> for goods as an indicator. The increasing competition and specialisation resulting from the completion of the internal market will tend to make prices for internationally traded goods more homogeneous, removing gradually the scope for price discrimination between national markets. A weighted average of national producer price indices for the participating countries, expressed in a common unit, e.g. the ECU, would provide an increasing reliable indicator of a common price trend. There is evidence from earlier periods of stable exchange rates, notably the gold standard, that close convergence in producer prices is observable in an exchange-rate regime of the tightness envisaged, see e.g. McKinnon and Ohno (1988).

While such an index would give expression in a meaningful way to a common price performance in the Community, it might be desirable to focus particularly on the domestic (i.e. internal to the EC) sources of inflation in producer prices for which ESCB monetary policy would be most directly accountable. A deflator of value added in manufacturing industry calculated as a weighted average for the internal market would leave out of account the inflationary (or disinflationary) shocks such as terms-of-trade changes resulting from swings in the prices of energy or of other intermediate imports or of raw materials. Such external shocks generate fluctuations in the inflation rate which may in practice have to be at least in part accomodated by variations in the collective money supply. An ultimate objective expressed in terms of stability in the average of national value added deflators would not be radically different from the course followed in the Community in the 1980s; the second oil price shock led to a temporary acceleration of producer prices in Europe, even in the Federal Republic of Germany, while the 1985-86 decline in import prices for raw materials, energy and other intermediate inmputs (as well as in the dollar) temporarily pushed the rate of change of producer prices below zero in the low-inflation EMS countries.

In short, by aiming to keep the rate of inflation measured by an average of value added deflators within a narrow band close to zero, say between 0 and 2 per cent, or to keep the average increase in producer prices within a slightly wider band, similarly centered around a minimal rate of inflation, the ESCB could give specific content to the notion of a stability-oriented monetary policy and simplify the monitoring of its policies.

The other main contender is a broadly-based index such as a Community-wide consumer price index, widely perceived to reflect the cost of inflation to the economy. In an area as large and diverse as the Community national price trends measured by consumer prices may, however, diverge substantially between countries even over the medium term, because the weight of non-traded goods and services in this index is substantial and price trends for these goods are less directly constrained by the process of market integration. It might be confusing to public opinion to announce a collective price objective around which substantial variation in national performances persisted.

A collective price objective formulated in terms of an essentially common indicator, such as average producer prices, may be sufficient for guiding the aggregate thrust of monetary policy. However, for the purpose of linking up with monetary instruments or with national macroeconomic objectives which will continue to have great importance throughout stage two and into stage three, the collective objective could be supplemented by criteria of national performance, consistent with the common inflation objective. One possible way of doing so, broadly in line with trends in national policy-making in a number of industrial countries in the 1980s would be to set targets for <u>the rate of increase of some measure of nominal income for each participating country</u>

To be more specific, objectives for the rate of increase in private final demand (private consumption, business fixed investment and residential construction) might be thought of as the national income measure most relevant in the context of monetary policy. For each participating country the national and Community authorities would make a judgement on the unavoidable rate of inflation in private final demand prices expressed in the national currency and a rate of increase of real demand judged feasible in the light of trend capacity growth and the initial situation. The national inflation rates thus calculated would typically in their average be a bit above the collective objective for producer prices in the Community, because the broader price indices for final demand would comprise non-traded goods and services for which productivity increases are typically slower than for the sectors producing internationally traded goods in the EC market. National inflation rates in terms of final demand prices might also diverge slightly year by year, as the differentials in productivity between sectors are unlikely to be uniform across countries. Gradually goods market integration would tend to impose approximate parallelism on national price levels in this broader sense, as the range of traded goods expands and factor mobility increases.

Various forms of nominal income targeting have appeared in national policy making in the 1980s when the confidence in monetary aggregates as intermediate targets was weakening, while a turn to objectives for the growth of real output was perceived as unrealisable and potentially inflationary. Maintaining a suitable measure of nominal income close to a steady growth path provides a framework for monitoring national economic policies and for coordinating them internationally, as is recognized in some of the main proposals for improving global policy coordination and reforming the international monetary system, see e.g. Williamson and Miller (1987) and Taylor (1989).

In the present context nominal income targeting would provide a linkage to potential intermediate objectives at the national level and through them to decisions relating to a money supply process which will remain, at least through stage two, largely national in execution if not in design. Such a framework would be suitable for the coordination of monetary and fiscal policies in the Community in so far as it would facilitate the identification of policy conflicts. The latter would arise if the execution by the ESCB of its mandate for assuring price were to be eroded by the sum total of national fiscal policies implying a growth rate in nominal final demand in one or more countries inconsistent with the objective for average inflation. In this way the framework would pinpoint requirements for fiscal coordination in an analytically more satisfactory was than by simply looking at the size of budget imbalances relative to GNP, or to national savings, as a basis for imposing "binding rules" on such imbalances. By monitoring both the national component of ESCB monetary policy and fiscal policy in terms of the same nominal income targets, the risk of open conflicts in reduced.

INTERMEDIATE OBJECTIVES

In principle, it would be possible to gear monetary instruments directly to ultimate objectives. If the Community-wide index of producer prices were to accelerate - and information on prices could be available with a time lag of one to two months - such an observed development would provide an indication that average interest rates in the Community should be raised to contain money creation. If the growth rate of nominal demand in a particular country were to run well ahead of the agreed national target that would - after a somewhat longer information lag - trigger a country-specific response by the tightening of one or more monetary instruments in the country concerned. Symmetric responses could be envisaged if a deceleration of average inflation or a shortfall of nominal demand became observable. Simple feed-back rules of this type could provide a stabilising framework within which both average and nationally differentiated departures from targets were dampened.

But further attention to the way changes in monetary instruments influence the ultimate objectives of average inflation and the rate of growth of nominal demand in the participating countries through monetary and/or credit aggregates is advisable for at least two reasons. First, formulating policy with respect to one or more appropriately chosen aggregate(s) will improve the understanding of monetary policy and enhence its credibility; it will become easier to monitor the actions of the ESCB than in the situation where policy performance is assessed only on the basis of the ultimate objectives over which monetary policy has, within any given shorter time horizon, only a limited influence. Second, if reserve requirements are to be applied as one of the main instruments of the ESCB, they have to be seen to work in a broadly similar way in the participating countries by relating to a monetary or credit aggregate which exerts some longer-run influence on the ultimate objectives.

A possible procedure would consist in setting a collective target for total annual money creation in the participating countries, consistent with the objective for average inflation. Abstracting temporarily from net interventions i third currencies by the participants, total additions to the broad money stock (M2 or M3) would be matched by the sum of domestic counterpants to money creation in each country, since purchases of other participating currencies by one participating central bank are offset by sales elsewhere within the system. There would in principle, be no sterilisation of interventions in partner currencies. The task of controlling total money creation would then consist in applying instruments which influence, through incentives or obligations, the readiness of each central bank to keep domestic credit expansion (DCE) close to a targeted, and collectively agreed, rate for the country in question. Setting the latter through a collective decision-making process in the ESCB would constitute the core of the <u>ex ante</u> coordination effort. The process would assist in making mutually consistent the national objectives for the growth of nominal demand from which the national DCEs are derived. Deviations between actual and targeted DCE would in turn give some early information on deviations between actual and targeted growth in nominal demand. A procedure of this nature has been outlined in some detail by Russo and Tullio (1988).

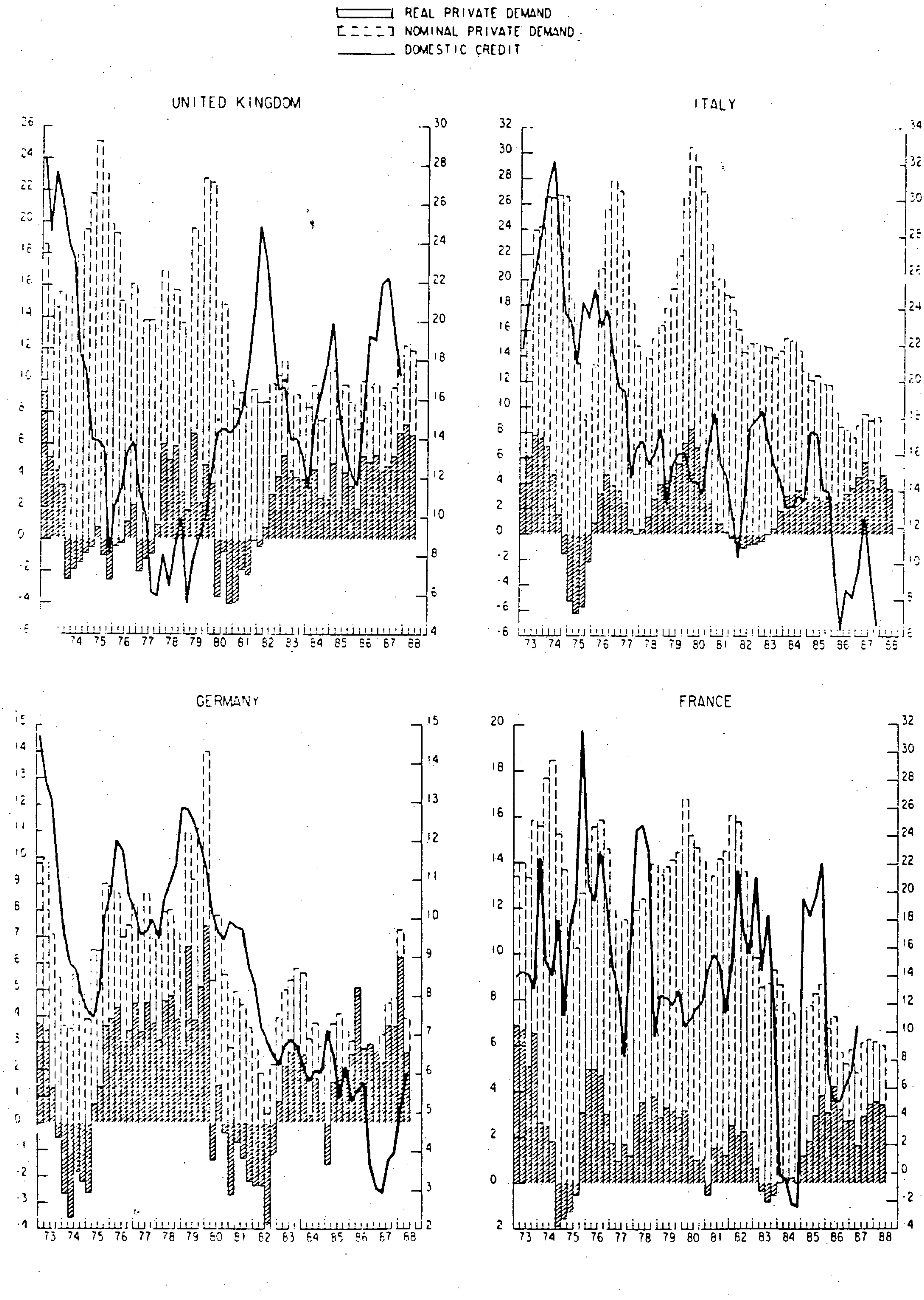
It can not be claimed with confidence that (1) national DCEs can be closely controlled or that (2) they are tightly linked to nominal demand over shorter periods of time, two desirable characteristics of intermediate monetary objectives, as analysed meticulously by Bryant (1980). A recent OECD study shows a fairly weak quarter-to-quarter relationship between DCE (and different monetary aggregates) and changes in nominal demand for the four largest EC economics. On the other hand, a clear tendency for both to decelerate has been observable in Germany, France and Italy (but not in the UK) since the early 1980s, see <u>Chart 1.</u>

Despite the evidently high degree of slack in the relationship of DCE and nominal demand, using the former as intermediate objective may be justified by two considerations: (1) it provides the most direct linkage to total money creation in the area; and (2) it is an extension, in the direction of symmetry, of the present informal practice in the EMS in which most countries, with the significant exception of Germany, look to rates of domestic credit expansion relative to others in the EMS as the consistent underpinning for the main intermediate objective of maintaining stable exchange rates in the EMS. For the Federal Republic of Germany the shift from the present intermediate objective (target for broad money, M3) to a DCE-target, with in principle no provision for sterilisation, should be acceptable, provided overall money creation in the area were seen to be more directly subjected to stability-oriented, collectively agreed decisions and efficient instruments for implementing them, as is proposed in the main Report through the establishment of the ESCB with a mandate to pursue price stability.

Total money creation would depart from the sum of national DCEs to the extent that non-sterlised interventions

CHART 1

DOMESTIC CREDIT EXPANSION AND GROWTH RATES IN NOMINAL AND REAL PRIVATE FINAL DEMAND



Source : OECD

vis-a-vis third currencies were undertaken by the ESCB directly or by one of the participating central banks. There is no presumption that such interventions would be sterilised; efforts to stem what was considered exessive depreciation of the area´s currencies vis-a-vis the dollar through sales of dollars might well require some overall tightening of monetary conditions and higher average interest rates for the Community as a whole, and vice versa in the case of purchases of dollars to stem overly rapid appreciation of the participating currencies. The degree of sterilisation would be a matter for discretionary decisions arrived at collectively through the ESCB Council. The latter would also, in consultation with the participating central banks, take a view on which currency or currencies to use in dollar interventions. One important criterion in reaching such decisions would be to maximise the cohesiveness of the currencies within the system as that finds expression in the exchange markets. Guidance would be found also in the degree of correspondance in each country between a central bank´s DCE objective and the observed growth in credit including potential effects of sterilisation operations linked to interventions in third currencies which the ESCB may assign to that particular central bank.

For the individual central bank the main short-term intermediate objective would continue to be the maintenance of stable exchange rates vis-à-vis other participating currencies. Some ex ante coordination of DCE objectives should make that task easier on average; but in practice, the DCE objective may, in particular situations, have to be overridden to maintain exchange-rate stability.

INSTRUMENTS AVAILABLE

Even prior to the attribution of any particular instrument to the ESCB the collective formulation of ultimate and intermediate monetary objectives would in itself constitute a major step towards ex ante coordination desirable in stage one. Nothing would prevent the EMS central banks from deeping their present exchange of information on their respective formulation of domestic monetary policy, or from giving the reports prepared by a special group of experts for the Committee of Central Bank Governors a more deliberately common analytical framework along the lines above. Similarly, the reports prepared by another expert group on exchange-market interventions could begin to be used in a more forward-looking way to formulate intervention strategies rather than to review the past record. Closer coordination could begin to replicate the effects of a more advanced stage, even while the policy analysis and recommandations emerging from it remain strictly advisory, as is the case for stage one.

Yet it is unlikely that anything ressembling closely a common monetary policy could be conducted merely through discussions, but without vesting in the ESCB genuine decision-making power with respect to at least some significant instruments of monetary policy. Indeed, that is the rationale of suggesting the set-up of the ESCB for stage two before the irrevocable locking of parities which makes a common monetary policy a simple necessity. But there are difficulties in determining how monetary authority might be shared betwen a centre - the ESCB Council and Board - and the participating national central banks. The efficiency of operations requires that there should never be any doubt in the financial markets, among national policy makers or elsewhere as to which body has the responsibility for taking particular decisions. Monetary authority is less easily divisible than budgetary authority where elements of decentralization and even of competitive behaviour between different levels of government, or within the same level, may be observed in national states.

Four types of policy decisions have to be considered as being at the core of any design of a workable allocation of responsibilities within an ESCB in stage two

(1) adjustment of short-term interest differentials;
(2) intervention policy vis-à-vis third currencies;
(3) changes in reserve requirements; and
(4) changes in intra-area parities (realignments).

Reference is again made to table 1 above.

<u>The adjustment of relative short-term interest rates</u> is the central instrument in managing the present EMS, and a high degree of coordination and occasionally <u>de facto</u> joint, or at least bilateral, decisions have been observed. As the paper by Governor Godeaux explains, participants have developed, particularly since the so-called Basle-Nyborg Agreement of September 1987, a flexible set of instruments for containing incipient exchange-market tensions: intramarginal intervention, wider use of the fluctuation band, and changes in short-term interest rate differentials. This combination has proved fairly robust in most periods of tension since September 1987. But a risk remains that the experience of earlier periods of tension will be repeated; then public criticism and mutual recrimination between Ministers of Finance occasionally intensified tensions and made monetary management very difficult. The main examples of such episodes are December 1986 - January 1987, November 1987 and - to a minor extent - April 1989. The participation of additional currencies in the EMS in the course of stage one, notably sterling, which has traditionally been managed with considerable involvement on the part of the UK Treasury and even of the Prime Minister, will make it urgent to strengthen procedures for genuine coordination further and to make the transition to a more joint form of management in stage two at an early stage.

While decision-making in this sensitive area would still remain in national hands in stage two, the launching of the ESCB at the beginning of stage two would in itself imply that national governments would be less likely than in the past to involve themselves directly in the management of exchange crises. In the course of stage one the Committee of Central Bank Governors will already have begun to perform more efficiently the role of a multilateral arbitrator that has been missing occasionally in the past. A common analytical framework developed around the intermediate targets will give more explicit guidance as to who should adjust to whom. If the proposal to develop a joint operational facility for exchange and money market operations, as outlined in Professor Lamfalussy's paper, is pursued that would in itself bring participating central banks into more continuous contact also with respect to their transactions in their domestic financial markets and facilitate coordinated action on interest rates.

The gradual and partial upgrading of decision making on relative interest rate adjustment from the purely national level to a Community body, in the first stage the Committee of Governors, from the second stage the ESCB Council, will not in itself assure that the average level of interest rates in the participating countries is appropriate, though it should tend to make such an outcome more likely than the present system with its occasional inefficiencies of interest rate escalations and tensions. To get a firmer grip on the average level of rates the attribution to the ESCB of an instrument which permits a collective influence on domestic sources of money creation would be necessary. Such an instrument is described briefly below in the form of the ability for the ESCB to impose compulsory reserve requirements on domestic money creation and to develop gradually a market for a European reserve base with its own lending rate.

A second instrument for which some degree of joint management could be envisaged is foreign exchange interventions in third currencies. There are two economic arguments for such an attribution: (1) the medium-term need to contribute to the containment of major misalignments and (2) the smoothening of short-term volatility vis-à-vis third currencies.

The former argument can hardly be assessed without making a judgement on the feasibility of a more managed global exchange rate system and the degree of commitment by other major monetary authorities, notably in the United States, to support, through interventions and domestic monetary adjustments, any understanding reached on the appropriate level of the main bilateral exchange rates. Given the experience of the period since 1977 and the major present current account imbalances, projected to persist well into the 1990's, it would be hazardous to assume that an emerging joint dollar policy of the EMS countries would be anything more than ad hoc guidelines for managing a collective appreciation of the EMS currencies as smoothly as possible. Calculations with large macroeconometric models suggest that the appreciation may have to be at least in the order of 20 per cent in real terms on average for the EMS currencies from the levels prevailing in mid-1989, if the European countries are to assume a reasonable share of the adjustment of the US current deficit to a sustainable low level, see notably Cline (1989). This will put the cohesion of the EMS currencies to a severe test, but it will also provide a unique opportunity, as was the case in 1985-87, for reconciling low inflation in Europe with a relatively expansionary monetary policy in the Community hence contributing to an improved and satisfactory price performance in the crucial transition period from the present more decentralized operation towards Economic and Monetary Union.

As regards the task of smoothening short-term volatility, it must be noted that tensions among EMS-currencies have often in the past decade been triggered by financial disturbances from third currencies, notably movements in the dollar. The currencies participating in the EMS were seen by the markets as being sensitive in different degrees to such disturbances. These perceived differences had their origins in varying degrees of controls on capital movements and in expectations of the likelihood of divergent policy reactions to the external financial disturbances. For example, a depreciation of the dollar was normally expected to strengthen the DM relative to most other EMS-currencies, both because the DM had a far larger domestic financial base and the most liberal regime for capital flows and because non-German authorities in the EMS were seen as more prone than the Bundesbank to try to avoid the contractionary effects of the appreciation of their currencies. The tensions to which these - real or perceived - differences in structure and/or behaviour gave rise were occasionally mitigated by an EMS-realignment. Conversely, in periods of an appreciating dollar, outflows from Europe were observed to be particularly strong from the DM-area, reflecting primarily the closer substitutability betweeen the US dollar and the DM than that prevailing for other EMS-currencies, but presumably also a decreasing probability of a realignment within the system. In recent years the liberalization of capital movements in France and Italy and in some smaller EMS-countries, the deepening of continental European financial markets and the improved cohesion of the EMS economies have all contributed to a weakening of the earlier negative correlation between movements in the US dollar (in effective exchange rate terms) and movements in non-DM currencies in the EMS vis-à-vis the DM, as shown e.g. by Giavazzi and Giovannini (1989). But the tendency for dollar movements to affect the EMS-currencies differentially may be expected to persist in moderate form into stage two. The task remains in that case to avoid that such tensions, if they are unwarranted by more fundamental economic divergence within the EMS, persist and force realignments.

While this could in principle be achieved through joint guidelines for essentially decentralized interventions by the participating national central banks, a visible capacity to intervene jointly in third currencies, and to do so in ways that further the cohesion of the EMS, is potentially important. Without a presence in the major exchange markets the ESCB would lack the capacity to check the impact of external financial disturbances on EMS stability at source. Hence "a certain amount of reserve pooling" (Report, para. 57) as well as ample working balances in EMS-currencies would be desirable in stage two.

It is possible to determine a priori what percentage of external official reserves would have to be pooled in order to create a credibility effect in the financial markets for an emerging joint intervention policy. Leaving the percentage low, say 10-20 per cent, would run the risk of simply complicating existing cooperative procedures without making a qualitative difference, though even with limited pooling some beneficial effects could be expected simply from the learning experience of coordinating interventions through the same trading floor rather than by concertations over the telephone. Governor de Larosière's paper describes these gains relative to the present EMS in his paper.

Joint interventions in third currencies by means of pooling of part of exchange reserves did not win general favour in the Report as a proposal for the first stage; too much emphasis might be put on external considerations relative to the correction of imbalances within the Community (para. 54). This argument would not apply to an ESCB capacity to intervene in stage two along with the atttribution of other monetary instruments with more direct domestic implications for the participants as proposed here.

A third instrument, specifically assigned to the ESCB would be the ability to impose variable reserve requirements on domestic money creation.

Whereas the two first instruments (and the fourth to be discussed below) are directed primarily at relative adjustments within the EMS, changes in required reserve ratios affect the overall thrust of monetary policy. International monetary agreements, including the Bretton Woods system and the EMS, have typically been more explicit on relative than on aggregate adjustment in the participating countries. The EMS procedures for relative adjustment may leave something to be desired, as explained above and they may leave too much discretion to national monetary authorities to remove ambiguities and tensions. Yet more attention has been given to these procedures than to discussion of whether monetary policy has an appropriate aggregate thrust.

The Bretton Woods system and the early EMS did not have to face up to this issue directly, becauce both systems were protected by a mixture of capital controls for the short term and some scope for changing the exchange rate in the longer term. The post-1983 EMS has had more difficulty in avoiding the issue. In the absence of some aggregate monetary target for the whole system, an implicit monetary rule has emerged: monetary policy in all participating countries has tended to be determined, via the ambition to hold more rigidly fixed nominal exchange rates, mainly by that of its largest and least-inflationary participant. The practice in the EMS that reserves used for intervention in defending a weak currency have to be reconstituted within the span of a few months is that convergence - provided that exchange rates do remain fixed - will be towards the low inflation in the Federal Republic of Germany and not towards some average as would be the case if intervention credits provided a more permanent safety net. In that case efforts at sterilization would have become more widespread in the weaker currency countries, and aggregate money creation could have drifted upwards.

By using the degree of freedom for aggregate monetary policy by implicitly attaching policies to the domestic monetary target in Germany the EMS has succeeded since 1983 to an unexpected degree in becoming "a zone of monetary stability" in the double sense of promoting both exchange rate and price stability. The challenge for stage two and stage three is to design intermediate objectives and monetary instruments so as to make likely an extension of these desirable features within the more collectively managed system marked by the transition to the ESCB.

A major reason why the past system would in any case have to be revised is that the hegemonial role of the largest country already shows signs of weakening and must be expected to be eroded further during stage one, as additional currencies join the EMS and short-term capital transactions are fully liberalized. This process affects the size of potential flows in the new member countries, in those countries that undertake additional liberalization, notably France and Italy, and in Germany herself. The ability of the Bundesbank to keep a preferred domestic monetary target as close to a desired path as has typically been the case for the past 15 years must be expected to weaken further. Financial integration increases the risk of policy errors and hence the incentive for all participants to modify the present paradigm. Another factor working in the same direction is the increasing ease, as the credibility of fixed exchange rates becomes more well-founded, with which all non-German participants can attract inflows of capital by maintaining short-term rates only moderately above those in Germany. The improved substitutability between participating currencies inexorably pushes their thinking in the direction of more attention to aggregate money creation in the areas and to the formulation of intermediate objectives for domestic money creation consistent with an aggregate target and to designing procedures whereby the latter can be kept roughly on their agreed course.

Governor Giampi´s paper spells out in some detail how an ability for the ESCB to impose variable reserve requirements on the domestic money creation for which each national central bank is primarily responsible could be set up in stage two, and the present note associates itself fully with the basic idea of that paper and the analysis of the various technical options available. The essential feature is that the ESCB should be empowered to impose - uniform or differentiated - reserve requirements on either the increase in the monetary liabilites of each national central bank or on the credit extended by the member banks to their respective domestic sectors. This requirement would be met only by holding reserves with the ESCB; and the supply of reserves would be entirely controlled by the latter through allocations of a reserve asset (official ECUs) to each central bank corresponding to the demand for reserves which would arise, if agreed targets for money creation or DCE were observed. Alternatively, the supply of reserves would be created by open market purchases of the ESCB. Both cost and availability considerations would provide central banks with an incentive to stay close to declared objectives. The ESCB would have to be given some discretion in extending or withdrawing reserves to provide marginal accommodation. The new system could replace the present method of creating official ECUs through temporary swaps of one fifth of gold and dollar reserves as well as the credits extended through the Very Short Term Facility of the European Fund for Monetary Cooperation.

The system would create, as described in Governor Giampi´s paper, a monetary control mechanism analogous to that through which national central banks, who use reserve requirements, influence money and credit creation through their banking systems. It would introduce a certain hierarchy in the relationship between the ESCB and its constituent national central banks, while leaving some freedom for the national central banks in designing its domestic instruments.

The reserve requirements could also be applied directly to DCE in the total national banking system, i.e. on the domestic sources of broad money creation. The advantage of this method would be to assign the collective monetary instrument more directly to a natural intermediate objective - DCE - underpinning fixed exchange rates, but it might introduce more slack in the control mechanism, as it would no longer apply to items that appear on the balance sheet of the central banks for which the latter could be regarded as more directly responsible.

In the variants of an operational framework for an integrated monetary policy described in Governor Giampi´s paper and in the previous para., the ESCB would not have any direct contact with commercial banks or with financial markets in general. Its sphere of operation would be confined to transactions with the second tier of the three-tier system, the national central banks. This would be unduly confining from the time during stage three when a common currency is introduced. To manage a common currency the ESCB would need to have direct transactions with commercial banks, as does any national central bank at present. To prepare for this during the earlier part of stage three, possibly already in stage two, it may be useful to explore in what ways the ESCB could be put into a position to have some direct influence on liquidity conditions without always relying on its ability through guidelines and incentives to exert its influence indirectly via the national central banks. In any case, since legislation enabling the ESCB to deal directly with financial markets in the final stage of economic and monetary union would also be part of a comprehensive Treaty revision, attention to the nature of such contracts is not premature.

One way to give the ESCB such influence would be to allow it to make open market operations in national markets. The ESCB might, for example, use the securities it has acquired from the national central banks for such open market transactions. One could inmpose, initially, limits on the total amount of purchases and sales which can be made within any given period. Thid would be especially important at the start, when the ESCB would mainly be purchasing securities, since its initial strock would be small. These limits could be raised over time, allowing in stage three the operations of the ESCB to become more important than those of the national central banks in their respective markets.

A different and complementary approach, more directly in extension of the reserve requirement system applied to national central banks, would be to introduce a uniform European reserve requirement on commercial bank_deposits, or on increases thereof. A small fraction of such deposits would be held with the ESCB and denominated in ECU. A federal funds market, in which the ESCB as the only issuer would have strict control of the total supply, could then develop in which commercial banks would trade among themselves the reserve balances they need to satisfy the European reserve requirement. The approach would imply that the ESCB be given direct influence on a market which reflects system-wide liquidity conditions.

The approach could be implemented by giving the ESCB the authority to set, within limits set in its statutes, a compulsory reserve requirement on all deposits of Community residents with Community commercial banks. To give banks initial access to deposits with the ESCB, the latter could initially buy the appropriate amount of securities in the market; hence the system could be regarded as complementary to the idea outlined above to permit the ESCB to undertake limited open market transactions in initial periods. The securities purchased could be denominated either in ECU or in national currencies, provided, if introduced in stage two, the proportions of the latter correspond to the weights in the ECU basket. Once the initial amount of reserves has been created and absorbed into required reserves, the ESCB could engage in additional marginal accommodation by supplying federal funds through modest discretionary open markets operations. A tightening og the federaL funds market would come about if required reserves were to run ahead of this process of supplying them; and a rise in the federal funds rate would induce banks to slow down the underlying deposit creation. The approach is compatible with the usual range of operating procedures for a central bank from interest rate to reserves targeting.

Different operating procedures would presumably be appropriate as the ESCB extends its authority from stage two to stage three and to the ultimate management of a single currency, but the basic mechanism would not have to be modified. In effect, the ESCB could, from its beginning, act in some respects as a true central bank, reinforcing its more indirect and orchestrating functions inherent in the way that the earlier proposals constrain it to being a bank for the central banks only.

Suggesting some form of reserve requirements as the major instrument for an emerging joint policy to influence the domestic sources of money creation - as a complement to the control over the external sources which a joint exchange rate and intervention policy vis-à-vis third currencies would provide - is bound to raise critical questions on the approach. Although reserve requirements have historically been the prime method by which central banks have achieved monetary control in most countries, reliance on that instrument may appear to be limited in the Community today. In most industrial countries the banking system has become indebted to the central bank to an extent that makes it dependent on the terms on which marginal accommodation of reserve needs is provided. The mechanisms suggested illustrate ways in which an analogous influence may be brought to bear through a reserve requirement system on the relationship between the ESCB and the participating central banks (the three-tier system) and gradually extended to financial mnarkets in genral. A direct contact between the central institution and financial market would provide a smooth passage to the final stage when the ESCB is to manage a common currency.

The three instruments proposed so far - collective guidance of relative interest-rate adjustments, joint interventions in third currencies with a definitively pooled part of foreign exchange reserves and imposition of variable reserve requirements on domestic money creation - are all major examples of shifts towards the European level of decision-making authority in well-specified areas of the kind that could be considered for stage two and extended into stage three as long asd there is no single currency issued by the ESCB beyond the restricted circuit for the management of the reserves market referred to above.

It remains to consider how the one decision in the EMS which is to-day subject to de facto joint decision-making, viz. realignments of central rates, could be handled in stage two. Would there be a case for vesting authority over this instrument with the ESCB as part of monetary management rather than leaving it as in the present EMS with the ECOFIN Council? There are arguments for and against such a transfer.

A major purpose of setting up elements of a collective monetary authority - the ESCB - before the irrevocable lacking of parities which marks the transition to the third and final stage of Economic and Monetary Union is to constrain realignments and eliminate the need for them. A more specific objective would be to assure that the occasional and rare recourse to them will be made in sufficiently small steps to preserve continuity of market exchange rates around realignments. This has been an important feature in the containment of speculative pressures in the recent EMS experience. If financial market participants would interpret a transfer of authority for making the residual small realignments to the participating central banks as part of the ESCB´s task as a signal of an intended tightening of the EMS in the transition to full Economic and Monetary Union, such a transfer could prove stabilizing and hence desirable.

Putting the question in this way, however, suggests the counterargument, viz. that governments might not succeed in conveying such a signal. They might instead feel relief at not having, as in the present EMS, to bear the political burden of visibly initiating a realignment - and without a new, more hidden, discipline inherent in membership of a union with irrevocably fixed exchange rates. The Council of the ESCB might be faced with fait accompli situations in which only a realignment would ease tensions and with national policy-makers blaming either private speculators or the central bankers themselves for the outcome. This would imply a deterioration relative to the recent performance of the EMS.

On balance, these arguments suggest that the decisive considerations in assigning the authority to undertake realignments are how close participants have come to meeting the prerequisites for full union. It would be dangerous, if feasible, to shift the responsibility for deciding on realignments to the ESCB in stage two, if any major divergence of economic performance has persisted into that stage. But it would be desirable to shift the responsibility, if the need for realignments were generally accepted as residual only and if adequate monetary instruments for underpinning fixed rates had been assigned to the ESCB along the lines proposed above. A tentative conclusion is that the authority to decide on realignments could become part of the mandate of the ESCB in stage two, but that this is less of a priority than the attribution of the other, day-to-day, instruments of an increasing collective monetary policy.

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