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TRIPOLAR ECONOMIC POLICY COORDINATION:

PROBLEMS OF A MULTI-COUNTRY POLE

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Foreword

International economic cooperation is almost by definition a subject that requires an inter-disciplinary approach. The academic economist, the historian, the political scientist, all have something to contribute to the analysis of phenomena where meta-economic considerations are often prevailing.

In past experiences of international economic cooperation the political authorities of individual countries have played a prominent role. Indeed cooperation has in most cases involved a political decision to establish an international institution, such as the International Monetary Fund and the World Bank in 1944, or the European Economic Community in 1956. The monetary authorities on the contrary have been mostly involved in a process of exchange of information about economic developments and policies.

Since 1985 cooperation has involved to an unprecedented extent monetary authorities, and particularly central banks, in coordinated action in the field of monetary and exchange rate policies. This fact has played an important role in our decision to overcome a justified reluctance to participate in a conference together with professional theorists of the discipline. This fact has also influenced our approach to the issue of economic policy coordination (EPC). We have not tried to build our own model or to provide a comprehensive theoretical explanation for the events of 1985-88. Rather, we have tried to describe the problems and the achievements of EPC as seen by practitioners of exchange rate and monetary policy coordination. Some of the views we will expouse will be regarded as rather "traditional", others are likely to be more "controversial".

In section 1, we conduct a brief survey of the literature on policy coordination to find out whether one

could draw from it conclusions that would be relevant for policy makers or could guide their choices.

In section 2, we touch upon a number of important issues that are crucial for the "feasibility" of policy coordination. We examine the question of whether or not there is a hegemon country on the international scene at large and within the EEC and how this influences the nature and the outcome of policy coordination. We also analyze whether or not countries, both in the Group of Seven or in the European Monetary System, have or can control all the necessary instruments to carry out policy coordination.

In section 3, we try to assess the outcome of the EPC exercise in 1985-88, paying particular attention to the reactions of monetary and financial markets to the implementation of the coordinated strategy, both within the G-7 and the EMS. The analysis is also extended to ascertain whether tripolar EPC has had an impact on the systemic configuration of international monetary relations.

In section 4, finally, we summarize our views on the relevance of EPC, and explain why we are not unsatisfied with the results achieved so far, but we are less optimistic about its prospects.

1. The economist's view of macroeconomic policy coordination: lessons from the literature

1.1 Introduction

Since 1985 policy makers in the major industrial countries have been engaged in varying degrees and with differing measures of success in the practice of international macroeconomic policy coordination. They have endeavoured, in a number of multilateral fora, to improve its instruments and procedures.

Professional economists were followers, rather than leaders or intellectual forerunners in this realm. Theoretical and empirical research began, then became fashionable, almost repetitious at times, only after cooperation was resumed in 1985, following a long period of oblivion, even rejection by governments.

Academic interest in policy coordination was thus influenced by a political and intellectual environment that was becoming gradually more conducive to its practice -- at least in the areas of monetary policy and exchange market intervention -- since it was being recognized, belatedly, that the instability of the world economy and the persistence of large external imbalances and exchange rate misalignments were related to the anticooperative, "insular" philosophy prevailing in the early 1980s. That philosophy attached priority to "putting one's own house in order" in the pursuit of disinflation -- which had come to be seen as the sole legitimate domestic policy objective -- by stricter monetary and fiscal policy and claimed that such a strategy coupled with flexible exchange rates and "international laissez-faire"[1] would ensure the smooth functioning of the

1. The expression was suggested by Corden (1983).

world economy.[2]

Academic economists were not only late-comers to the idea of coordination, but were also rather skeptical initially about its viability and desirability. Some have maintained throughout that coordination is not superior to decentralized, unilateral policy making, that is should not advance beyond information exchange and occasional policy agreements, and that "the best that each country can do for other countries is to keep its own economy in shape" (Fischer, 1987).

In this section we outline the standard view of economic policy coordination (from here onwards EPC) as proposed by economists and discussed in the recent theoretical and empirical literature. In the process we highlight some of the obstacles to effective coordination and also mention in scattered remarks the difficulties in applying the theoretical blueprints provided by the literature to "real-world" policy issues. These issues will be taken up in much greater detail in Section 2.

1.2 Definitions

A useful distinction is in order at the outset between cooperation and coordination. There are several varieties of economic cooperation: they involve information exchange, consultation among authorities and possibly common assessments of the international repercussions of national policies. Cooperation is thus a rather elusive concept. Coordination imposes stricter requirements on the actors; it requires that policy makers in a number of countries agree on common objectives and together take joint policy decisions

2. For a survey of the implications of such a philosophy on the institutions and procedures of international cooperation, see Saccomanni (1988).

that differ from those they would have taken independently. In this framework cooperation may be seen as a general condition, while coordination is a more episodic occurrence, often as a response to potential or actual conflict[3]. Coordination becomes possible, in some cases, since all sides can improve their welfare by making policy bargains that sacrifice some domestic goals but entail a smaller loss than would be incurred in the absence of agreement.

It should be clear from the previous propositions that full-fledged coordination involves, in general, a mutual agreement on the setting of instruments, not just on the formulation of policy targets[4].

Economists typically adopt what has been referred to as a "policy-optimizing" approach to coordination. The standard and simplified framework of analysis envisions each actor (country) as endowed with one instrument (monetary policy) aiming at attaining two targets, defined in terms of desired levels of real output and inflation. Each government is presumed to have a well-defined objective function over its policy targets and to derive the values of its instrument so as to maximize that function. If the world as a

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3. On the taxonomy of varieties of cooperation, see, for instance, Kenen (1987).

4. Nonetheless, it can be shown that a consistent choice of targets can replace, at least in part, the explicit coordination of instruments. If countries, for instance, agree on the need to correct their external imbalances, thus adjusting their current account targets accordingly, and take unilateral, uncoordinated action to attain them, a large part of the implied adjustment can be achieved in this way without coordinating instruments. This quite obviously simplifies the business of reaching agreements in the real world. See, on this point, Gomel, Marchese and Martinez Oliva (1989).

whole is interdependent[5], each country's targets will be a function of the instrument settings of all other countries. If policy decisions are decentralized or uncoordinated, with each country setting its instruments taking as given the policy actions chosen by each other country, a global optimum for the world economy will not be reached. In the technical lexicon, ignoring spillover effects or externalities arising from interdependencies will result in a non cooperative equilibrium which will be suboptimal. Coordination "internalizes" those externalities which no single government can capture on its own by setting its policies unilaterally and achieves a globally optimal solution.

These are the basic theoretical underpinnings of the case for coordination[6].

The view presented above is not, however, universally accepted. Advocates of decentralized policy making have been arguing that floating rates and the working of the "competitive" market mechanism will achieve optimal outcomes at the world level. Price variables -- interest and exchange rates, the general price level -- will adjust in such a way as to make national targets mutually consistent. In a sort of Darwinian process good policies will be

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5. There is an ample literature on interdependence. The growing integration in trade of goods and services and in capital flows, the resulting cross-country transmission of impulses and the policy interactions among countries are all by now stylized facts, almost common places of economics. For a discussion, see Fischer (1987), Cooper (1985) and Horne and Masson (1988).

6. The general proposition that coordination improves welfare requires at least one qualification. If each country has enough independent instruments to achieve all its targets regardless of others' actions, then there are no gains from coordination and the problem becomes the conventional one of "assignment", i.e. properly pairing instruments and targets for each country.

therefore selected against bad ones[7]. The process is, in reality, rather complicated, especially when countries target the same variable -- current-account balance or exchange rates -- giving rise to international inconsistencies which manifest themselves in different ways under different exchange rate regimes.

In principle, flexible rates could render national policy targets mutually and globally compatible. The experience of the 1970s and early 1980s underscored, however, the importance of interdependence and the risks arising from lack or low degrees of cooperation even in a floating-rate regime. The fallacies of the standard theory of the "insulating" and "reconciling" properties of floating rates have been distinctly revealed by the large trade imbalances, exchange rate misalignments and attendant protectionist pressures of those years. In the trade arena, in particular, the threat of conflict has become at times most acute, reviving fears of a disintegration of an open world trade system. These developments have given impetus to the resumption of policy coordination in 1985.

But, in the aftermath of the breakdown in cooperation and of the financial and exchange market shocks of late 1987, pronouncements against international policy coordination and in favour of the pursuit of enlightened self-interest by sovereign nations became once again popular.

The argument was presented most forcefully by Feldstein (1987). He claimed that the U.S. "should continue to cooperate with other countries by exchanging information about current and future policy decisions but should recognize explicitly that Japan and Germany have the right to pursue the monetary and fiscal policies that they believe are in their own best interests". He went on advocating that the U.S. abandon international policy coordination and be

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7. See, for this line of reasoning, Corden (1983), Vaubel (1985), Niehans (1988).

prepared to accept a further decline of the dollar to the extent necessary to eliminate the trade deficit, while Japan and Europe should recognize the inevitability of the dollar decline and provide the required offsetting stimulus to their economies through an increase in domestic absorption. Two objections to this policy prescription can be briefly mentioned. First, it involves the risk that a dollar depreciation may come to be seen as a substitute for required changes in domestic policies, namely on the fiscal front. On this point, Krugman (1987) and Branson (1988) argue that fiscal restraint in the United States and dollar depreciation should be seen as complements, rather than substitutes. Second, historical experience in a number of countries tends to show that exchange rate changes alone, unaccompanied by supportive policy moves, may lead to overshooting. Given the actual magnitude of the US trade deficit, a very large depreciation of the dollar would be needed to reduce it significantly.

1.3 Obstacles to coordination: criticisms and complications of the standard model

Although the "anti-cooperative" view of international macroeconomic policy making can be criticized on a number of grounds, the numerous obstacles in the way of effective policy coordination should be recognized. These can be listed under three main groupings: i) disagreements about the ways in which economies work and interact; ii) constraints and costs of negotiating and enforcing agreements; iii) incentives to renege and problems of credibility.

i) Disagreements about the ways in which economies work

The standard theoretical framework outlined in section 1.2 assumes that policy makers know the "true model"

of the economy and, in particular, of the transmission mechanism of economic policies to final targets. But governments do at times disagree about the functioning of the economic system.

Two examples will suffice to underscore this point. In the period between the Plaza and the Louvre meetings of the major industrial countries Japan and Germany objected to the desirability and effectiveness of fiscal stimulus in bringing about the desired expansion in domestic demand. This was partly because they viewed private sector behavior as likely to adapt so as to offset changes in spending and taxation and partly because they were concerned about the medium-term implications of countercyclical fiscal policies. On the other hand the US government long denied that there was any causal nexus between the US budget and current deficits while foreign governments emphasized, at times simplistically, that link.

Under such circumstances gains from cooperation are unlikely to be achieved or even recognized. It proves harder to reach agreement on a jointly-designed set of policies or, if governments do manage to reach agreement, then there is no guarantee that global welfare will actually be improved. More technically, in many instances if the "wrong" model is chosen, coordinated policies will lead to a cooperative equilibrium which is Pareto-inferior to the non-cooperative one.

Model uncertainty and disagreement constitute therefore, in principle, powerful arguments against the possibility of welfare-improving coordination. The problem is explored by Frankel and Rockett (1988) who use large multicountry models to represent two governments' views about the world economy and assume that each government uses its own model to measure the welfare effects of striking a

bargain with the other[8]. Once the governments have struck a policy bargain based on their beliefs, Frankel and Rockett show that if the "true" model of the world economy is different, coordination can cause welfare losses in a large number of cases.

But moving away from the theory and closer to the "real world" of practical decision-making, the problem and the attendant obstacles to coordination seem to be somewhat overstated. Frankel himself in a subsequent paper (1988) complicates the exercise by assuming that each government is uncertain about its own as well as the other's views, so both of them use a "compromise" model which is an average of the policy multipliers derived from the econometric models. Then, as Kenen (1988) suggests, prudential and reputational considerations come to the fore and help reach suitable agreements. In fact, under model uncertainty, each government will (i) assess how coordination would affect its welfare on the assumption that the other is using the right model and refrain from any bargain unless it can expect to gain under both models and (ii) have to persuade its partner that its own policy proposals will improve its partner's welfare under both models.

ii) Constraints and costs of agreements

These include a wide range of political and institutional constraints. In general, it can be argued that the domestic political process is so complicated that international requirements cannot be expected to be more than a small factor in policy making. Only at times of "crisis" will a common interest in coordinated action be more clearly recognized, thus permitting policy agreements to be reached.

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8. The authors further suppose that governments agree to coordinate their policies whenever each government's calculations lead it to believe that it will gain, given its own model and policy targets.

In addition, since cooperation is a "public good", any country participating in it will tend to be more conscious of the costs to itself -- the perceived loss of sovereignty -- than of the prospective benefits[9].

In addition, coordination is costly in terms of the negotiating process and time lags involved in reaching agreement. Further efforts are needed to enforce and monitor their implementation. These costs of coordination are an increasing function of the number of participants and the jurisdictional divisions within governments[10]. According to some, the costs of negotiating agreements across countries increase with the range of issues being considered. Others[11] retort that the gains from coordination might prove larger if the scope were broadened to other domains -- trade, defense or foreign policy -- because the probability of successful policy bargains and welfare improvements would thus increase.

iii) Reneging and credibility

The problem of reneging or cheating has attracted large attention in the game-theoretic literature on policy coordination. It relates to the wider issue of "time inconsistency" of policies, i.e. the fact that policy makers may find it advantageous to change their plans in the future

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9. See Dini (1988).

10. Finance Ministers can negotiate agreements, but fiscal policy is decided upon by national parliaments and monetary policy is the responsibility of independent central banks.

11. See Putnam and Bayne (1984), Putnam and Henning (1986). The usual reference on this point is the 1978 Bonn Economic Summit which was not concerned solely with macropolicies: the actual agreement was typically a cross-issue bargain in which commitments to fiscal expansion by Japan and Germany were exchanged for a commitment by the U.S. to combat inflation and control energy prices.

departing from the policy paths that were announced in advance if they deem they can obtain macroeconomic benefits from such course of action. Internationally, governments may have an incentive to make agreements, for instance to expand domestic demand in each individual country, but then to "renege" on their end of the policy bargain, though benefiting from the actions of the other players. The incentive toward such "free-rider's" behaviour might be a serious obstacle to cooperative agreements, unless there are penalties or credible threats of retaliation attached to non-compliance. The prescription would then be that governments confine themselves to time-consistent policies, thus depriving themselves of any temptation to cheat[12].

Others suggest that the advantages of preserving reputation largely outweigh the gains to be reaped by cheating. "The governments most likely to cooperate in macroeconomic matters are governments that also cooperate in other domains, economic and political. They will not lightly jeopardize their ability to do so, presently or in the future, by violating macroeconomic agreements"[13].

Another point which is of keen interest to political scientists, in particular, is related to governments' inability to bind their successors and the implications for cooperative behavior that follow from it. A new government coming to power may be tempted to violate inherited commitments simply because it perceives those to be incompatible with its welfare function -- different from that of its predecessor.

There are no easy solutions to such a problem. One popular suggestion has to do with rule-based systems of coordination: simple, explicit, automatic rules -- such as McKinnon's G-3 blueprint for monetary coordination or

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12. See, for instance, Oudiz and Sachs (1985).

13. Kenen (1987), page 33.

Williamson and Miller's extended target zone scheme -- would act as discipline on the actions of governments[14].

An entirely different avenue -- one probably favored by political scientists -- would be to build on governments' interest in establishing a reputation for reliability on economic as well as on other matters of policy in developing continuing and close relationships among them in the pursuit of common goals[15].

1.4 The gains from coordination

Potential gains from coordination have been estimated using large econometric multicountry models. These gains have been found to be consistently small across empirical studies: both in a static set-up, such as that of Oudiz and Sachs (1984) and of Canzoneri and Minford (1986), and in dynamic settings (Hughes Hallett, 1987)[16].

This general result is in stark contrast with the theoretical case for expecting significant welfare improvements from the exercise of coordination. There are, however, grounds for some skepticism over these "pessimistic"

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14. McKinnon suggested that money growth rates be coordinated among the United Stetes, Japan and Germany to keep exchange rates stable. The "target zone" proposal would require countries to announce wide bands within which the exchange rate could move around equilibrium levels steered by monetary policy; fiscal policy should be used to manage nominal demand growth.

15. This political "philosophy" can be detected in a number of official statements, most clearly in the Economic Summits declarations.

16. According to Oudiz and Sachs' calculations, the gains would have averaged 0.2 percent of GNP per year for the United States and Germany and 0.7 for Japan in 1984-86. Welfare gains would increase if the OECD area as a whole or the major EEC countries were made to cooperate. According to Hughes Hallet's findings, the gains would be slightly bigger and asymmetrically distributed, most of them accruing to Europe.

findings.

First, the estimates crucially depend on the way policy makers' welfare functions are specified. The gains increase considerably if, for instance, exchange rates or policy instruments are included as relevant arguments alongside with growth, inflation and the current balance, since there are costs to changing them[17]. More importantly, the estimates are sensitive to the weights attached to individual targets; since these weights cannot be measured unless the policy makers' aims are fully known,[18] their imputed values are largely subjective.

Second, gains are measured only in terms of macroeconomic performance while they may extend beyond that realm into the trade and other arenas. The case for coordination would be made stronger if it were realized, for instance, that trade and macropolicies cannot be divorced since the viability of an open trading system depends on maintaining a reasonable degree of cooperation and exchange rate stability. Protectionist tendencies would have been much more powerful worldwide if the U.S. had been following Feldstein's prescription and allowing an unconstrained fall of the dollar.

Lastly, gains may be small either because the degree of interdependence among participants is low or because the number of countries acting cooperatively is limited. On the first point, the evidence from econometric models tends to show that the size of spillovers and policy interactions is not large[19]. When this increases, the

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17. See Holtham and Hughes Hallett (1987).

18. The solution proposed by Oudiz and Sachs (1984) to overcome this problem -- making the model "reveal the preferences" of governments, or the welfare weights -- has been criticized as tautological by Martinez Oliva (1988).

19. See, for instance, Fischer (1987) for interactions between the US and the rest of the OECD area.

benefits from coordination may prove larger. This is true of the EC whose trade is mostly within herself and where there is an EMS as a zone of currency stability to underpin the intra-area trade. Similarly, Japan's high interdependence with the U.S. allows for greater benefits from reaching agreements between the two, hence stronger incentives to cooperate.

On the latter point, one should look for a larger number of actors, outside the Group of Seven or even the industrial countries as a whole. This brings up a separate set of issues concerned with macroeconomic linkages between the OECD (the North) and the LDCs (the South) and with policies relating to trade and debt[20].

20. See, for an overview of this literature, Vines and Muscatelli (1988).

2. Problems of EPC in the real world: the tripolar and the European dimensions

2.1 Introduction

In this section the focus of the analysis is shifted from theoretical issues to problems of crucial importance for the functioning of the EPC exercise in the real world. Nonetheless, these issues mare directly derivable from the analysis of theoretical EPC models.

The first one concerns the existence of a leading country, i.e. the question of "hegemony". In fact, the solutions offered by the theoretical models of EPC are themselves highly dependent on the hypothesis concerning the relative roles of the countries involved in the exercise.[21] For instance, within a game-theoretic approach, when all participants are of equal economic size and, more generally, do not have greater power vis-à-vis their partners, the solution falls within the Cournot-Nash class, while when there is a leading country, the solution is of the Stackelberg type. Since these two analytical frameworks lead to different results as to which policy the countries must follow for jointly maximizing their welfare functions, the economist's advice to policy makers will crucially depend upon his views of the organization of international economic relations.[22]

The second issue is that of the number of policy instruments which have to be coordinated in relation to the

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21. This issue is viewed here in "quasi-static" terms, because we are not interested in the popular issue of "hegemonic stability" of a certain regime. Our approach is coherent with that of eminently static game theories.

22. The issue of the asymmetries which can characterize the EPC game has been carefully examined, in a broader context, by Basevi and Giavazzi (1986).

number of objectives to be achieved. We have shown in section 1 that there are benefits from coordinating domestic policies when instruments are fewer than objectives. Yet, the situation is viable only to the extent that the gap between the latter and the former is small.

The two issues will be discussed with reference to the EPC conducted at both the international (tripolar) and intra-European levels.

2.2 "Hegemony" and the problem of a non-unitary actor

In the analysis of EPC recourse is usually made to the simplifying device of describing the industrial world as a tripolar entity consisting of the United States, Japan and Europe.

However, Europe is surely a non-unitary actor; it is made up by a large number of countries which are organized in groups (EEC, EFTA, EMS) with different degrees of internal organization. The most advanced, under this respect, is the area of the Exchange Rate Mechanism (ERM) of the EMS, since it is the only one with a well-defined monetary organization. Even the four European countries participating in the G-7 coordination exercise, which is mainly concerned with monetary aspects, do not constitute one single block. There are at least two distinct actors: the United Kingdom on the one hand and the three big ERM countries (Germany, France and Italy) on the other. We shall discuss in paragraphs 2.5 and 2.6 whether the ERM countries may be considered as a unitary actor.

In this context, the familiar issue of "hegemony" is particularly relevant. In fact, when a situation of lack of hegemony prevails, and the countries interact as oligopolistic agents with different national preferences and objectives, the existence of a large number of actors can significantly undermine the possibility both of achieving definite theoretical solutions and, especially, of reaching

an agreement on EPC in the real world.[23]

Moreover, even when there are only a few participants in EPC, the existence of a "non-unitary actor" is all the more worrying for its effective exercise, particularly if the relations among the countries concerned are not of the "leader-followers" type. Indeed, when a leading country is dominating the scene, the larger the number of the others, the more likely they are to be small in comparison to the leader, hence cannot pursue independent policy objectives and "have to follow" the leading country's choices.

In less simplistic terms, the issue here is that of the supply of the public good of monetary stability. A clear presentation of the entire problem, which has been extensively treated in the literature, can be found in Padoan (1986). Accordingly, efficiency in the production of public goods by a group of countries "is inversely correlated with the number of the members of the group as the propensity to take a free ride will increase". However, "the public good will be supplied, although in lower than optimal amounts, if one of the group members is substantially larger than the others" (p. 2). Moreover, the possibility of free riding is much reduced when the area is organized into a monetary arrangement with clearly defined rules.

The literature on this topic is extremely abundant. As a consequence, we have avoided any attempt to present an exhaustive survey, limiting ourselves to the discussion of our point of view, without pretending to be original in every respect.

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23. The conditions which allow for EPC in a situation characterized by lack of hegemony have been extensively examined by Axelrod and Keohane (1986).

2.3 Is there a hegemonic leader any longer?

It is a widely accepted view since the Bretton Woods system collapsed in 1971, that the world economy has been left without a leading country. Lack of hegemony and, eventually, fight for leadership since then have made it impossible to restore a system of rules and obligations under which international economic relations could have been organized.

Although we recognize that this picture of the situation has undoubtedly elements of truth, its relevance has to be assessed by using some definition of leadership. This, in turn, requires specific criteria for singling out the main features of a leading country. Among the different approaches available in the literature (Strange, 1982; Keohane, 1984; Padoa-Schioppa and Papadia, 1984; Padoan, 1986) we have adopted a criterion which is more similar to the one proposed by the last author, in that we intend to take into account both real and financial variables to define the "degree of power" of a country in the international economy.[24]

The issue to be addressed here, surely still open to debate, is that of the hegemonic power of the United States. We are, of course, leaving aside the important aspect of military power; in this area the United States is still the undisputed leading country among the Western democracies. If the analysis is confined to economics, one sees that, on the one hand, when real variables are considered, such as GDP or the share in international trade, the US economy's size relative to the other major industrial countries has continuously shrunk over the last two or three decades. In 1987 Japan's GNP, when expressed at current prices and

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24. On the concurrence of both trade and financial considerations in determining the role of a country in the IMS, see, for instance, Krugman (1984).

exchange rates, was just over half of that of the United States; the EEC four big countries' overall GDP was about 3/4 of that of the US. The corresponding figures in 1960 were: less than 1/10 and less than half respectively.[25]

On the other hand, the impression one gains from financial variables is quite different. In this area the dollar is still playing the dominant role: it is the leading reserve currency -- almost 70 per cent of gross reserves in convertible currencies held by the G-10 countries and Switzerland were held in dollars, at the end of last year -- as well as that in which most international trade flows are invoiced and settled. Moreover, primary commodities and oil are priced in dollars. Finally, and most importantly from our point of view, a very large share of private international financial assets is still denominated in dollars. For instance, about two thirds of the international business of banks reporting to the BIS are in dollars.

In weighting the two criteria, it must be noted that the most profound transformation undergone by the world economy during the last 15 years has surely been the development of large and sophisticated national and international financial markets. Moreover, the strengthening of economic interrelations among industrial countries which took place in the last two decades has been increasingly in the form of financial integration. Hence, by using a set of real and financial variables, the conclusion is reached that the United States still plays a dominant role in the international monetary system (Strange, 1982; Gomel, 1989).

The experience of the last decade also provides further support to the idea that the US position in the IMS

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25. This impression is confirmed if trade data are used. The market shares of the United States, Japan and the four big European countries in the exports of goods and services of the OECD area were, respectively, 24, 4.3 and 39 per cent in 1960 and 15.5, 12.4 and 39 per cent in 1987.

is unique. The United States has been, in fact, the only country able to pursue, for a long period, its own domestic objectives without paying any attention to the policy course of other countries. For example, already in the 1976 Amendment of the IMF Articles of Agreement, the United States has been able to introduce the principle of "put your house in order", as a substitute for international cooperation (see section 1 and Saccomanni, 1988). Of course, since in the first half of the eighties the size of the US economy was not much larger than that of the other major industrial countries and its degree of openness had become sizeable, the external consequences of this inward-looking approach were considerable also for the United States. They manifested themselves clearly in the accumulation of huge current account deficits. Nonetheless, the United States has been able to sustain such a situation for long, not least because of its unique position of being able to issue liabilities in its own currency to finance the external deficit and, more recently, to force the other countries to cooperate to correct it or abort it.

The accumulation of external debt by the country which issues the reserve currency has no historical antecedents (Gomel, 1989). The United States has been financing with liabilities denominated in its own currency the acquisition of real wealth from the rest of the world while, at the same time, the dollar has been substantially depreciating. Consequently, non-residents have suffered capital losses on their dollar assets which have not been compensated by the higher level of US interest rates in relation to those prevailing abroad. This notwithstanding, foreign investors have not significantly changed the currency composition of their portfolios, mainly because of the greater efficiency of the dollar financial market. In a sense, the United States has been able to increase the power

of seignorage over the world economy.[26]

Finally, the United States, as the more recent experience of EPC shows (see paragraph 3.3), is the only country able to opt out of the EPC process when it deems non-participation appropriate for internal considerations. The other major countries are much more constrained by external factors and, when taken in isolation, are unable to follow an independent policy course for long and to focus the EPC process on objectives which are "country-specific".

All in all, we are inclined to reject the idea that the international monetary system is without a hegemonic actor.[27] We can even define the present situation, conventionally, as a "non-hegemonic" one; nonetheless, it is clearly asymmetric, with one country being the dominant player. As a consequence, the present international economic setting is similar neither to that which in the theoretical models is approximated by Stakelberg games, nor to that described by a Cournot-Nash approach. The results, indeed not entirely robust, that economists are able to achieve through their elegant models of EPC need thus to be applied to the real world with great caution. Although this is a generally valid proposition for all theoretical models used in the social sciences, the gap between the necessarily simplified theoretical structure and the highly complex real phenomena is very large indeed in the specific area under scrutiny. This situation partly explains why in the effective exercise

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26. In a long-run perspective, these developments may represent an element of weakness, given the impending deterioration of the quality of the reserve currency (Minsky, 1979).

27. In the other important dimension of economic cooperation, i.e. in international trade, the United States cannot be considered as the leading country. In this area there is a large number of participants of similar power (including the less developed countries). Nonetheless this situation does not significantly differ from that prevailing after the Second World War, when the GATT was established.

of EPC pure political factors often dominate technical considerations.

2.4 The scarcity of policy instruments

Let us now take into account the other important element which makes it difficult to apply the conclusions of theoretical models of EPC to the actual international situation. The models are usually predicated on the assumption that two policy instruments are available to each country, i.e. monetary and fiscal policy. However, in the eighties fiscal policy has been losing its role as a tool to manage the economy. Active fiscal policy aiming at smoothing cyclical fluctuations (fine-tuning) and/or at modifying the path of domestic demand has indeed been increasingly considered inappropriate.

The reasons for this striking change in attitude towards the role of fiscal policy, vis-à-vis, for instance, the climate prevailing in the sixties, are to be found both in the prevalence of new-classical over neo-keynesian economists within the academic profession and, in the political sphere, in the success of ideologies opposed to government intervention in the economy.

Among economists the view became popular that there is no trade-off between output and inflation, not even in the short run, because output is entirely supply-determined. Consequently, fiscal activism is useless for increasing output and simply leads to higher inflation. Meanwhile, politicians were more attracted to the idea that the role of the state in the economy had to be reduced to leave room for private entrepreneurial initiatives which are the only ones that can be considered as "productive". In particular, these views were advocated by the governments of Mrs. Thatcher and

of Mr. Reagan.[28]

There were also two specific considerations behind the opposition to governments' economic action: the immoderate use of fiscal policies in the past and the negative effects of the coordinated reflationary fiscal package agreed on at the 1978 Bonn Summit.[29]

Without pretending to exhaust this complex subject, we want to stress that, at present, "fiscal consolidation" is the prevailing approach. Accordingly, the rule to be followed is that of achieving and maintaining a balanced budget over the medium term and, at the same time, gradually reducing both taxes and expenditures. In practice, this rule, whose analytical foundations are questionable, becomes a way to achieve the desired objective of reducing the size of the public sector.

Whatever the reason for the adoption of such policy, it is clear that fiscal activism is inconsistent with the rule: in other words, pressure for demand management through fiscal policy has to be opposed. Consequently, policy makers are in fact left with only one instrument: monetary

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28. The implementation of this principle has been, however, strictly successful only in the case of the United Kingdom, where the budget is at present running a significant surplus. The Reagan Administration's policy paradoxically led to a budget deficit which was, and still is, too high in relation to the low level of US private savings.

29. It remains to be seen whether the manoeuvre was unsuccessful because of its inappropriate objective of reflating the world economy, or it was only involuntarily "un-timely" since it was implemented a few months before the second oil shock.

policy.[30]

Fiscal policy has been replaced, in the minds of policy makers, by a new instrument, i.e. structural policies. This issue is usually treated under the heading of "structural reforms": it is concisely, but effectively presented, for instance, in OECD (1988). The basic philosophy of the approach is that government action should be addressed to the removal of the impediments to competition and the promotion of market flexibility and efficiency in the public sector as an "essential element of the strategy to sustain non-inflationary growth." (p. xiii).

In case a diligent reader wanted to analyze this subject in depth, we have to declare our inability to help him much and cannot do more than suggest the reading of the massive OECD Report on "Structural Adjustment and Economic Performance" (1987). Undoubtedly, the whole "structural reforms" issue has a solidly grounded basis in the idea that micro-economic factors have an important influence on macro-economic performance. Nonetheless, this matter is very far for being settled theoretically; it is even more unclear empirically. One has therefore to be very cautious in drawing conclusions about the precise impact of structural reforms on macro-economic performance. This view is all the more evident when one tries to assess the effects of such reforms on the problems which are the focus of policy coordination worldwide. For instance, if EPC is concerned with the correction of payments imbalances, and structural reforms are correctly viewed as a means to increase the overall

30. In fact, at present, fiscal policy has still some role to play in demand management for those countries, like the US and Italy, which have "excessively large" budget deficits, and must check expenditure as a means to reduce both the current account deficit and inflationary pressures. All in all, the present view of both national authorities and international organizations on fiscal policy may be described in terms of asymmetry of the instrument: it can be used actively for restrictive purposes only.

efficiency of an economy, their effects may run counter to the stated goals. In fact, structural reforms would likely serve the purpose of reducing the US deficit but, at the same time, might further increase the Japanese and German surpluses.

In sum, structural reforms cannot be viewed as a substitute for macro-economic policy, not least because of the significant lag between the inception of the reforms and their results, a feature which makes them particularly unsuitable for EPC. This, in conjuction with the prevailing negative attitude towards budgetary activism, leaves EPC only with monetary policy as an effective instrument.

Although, as shown in section 1, the theory suggests that scarcity of instruments calls for EPC, in reality conflict or dilemma situations may arise precisely for lack of policy instruments. For instance, tripolar and EMS coordination geared to maintain exchange rates within agreed zones may be carried out through monetary policy alone to the extent that this is consistent with the achievement of its primary goal, i.e. price stability. There is therefore an area of potential conflict between national and international objectives. Moreover, since exchange rates are not entirely determined in the financial and monetary spheres, but respond also to real variables, coordination of monetary policies alone may not be sufficient to drive them towards the agreed levels.

2.5 Is Europe a unitary actor?

Let us now address more directly the core issue of the paper: the EEC as a non-unitary actor. Here again, at this lower, regional, level of EPC, the problem to be examined first is that of the existence of a leading country, i.e. the issue of hegemony. In this and in the following paragraphs we shall argue that: (i) Germany has until now been the recognized leader of the EMS; (ii) the German

leadership has been due more to a contingent situation than to its stronger economic (and political) power; (iii) the EMS is moving towards a new setting where a more symmetric internal organization is likely to emerge.

By using the criteria adopted in paragraph 2.3, the following considerations seem to be valid for Germany. It is not significantly larger than the other three major EEC countries in terms of GDP/GNP, but it is much more important in terms of its role in international trade.[31]

However, contrary to the US dollar in the IMS, the DM has not a strikingly leading role in the EEC. At present, the role of the US dollar is still dominant in this area especially in commercial transactions, while, in perspective, the ECU seems to be more generally acceptable as the European currency. Nonetheless, the DM has increasingly become, without any explicit effort by the Deutsche Bundesbank, the most widely used currency in intervention in the ERM area (see, for instance, Mastropasqua, Micossi and Rinaldi, 1988). The DM is undisputably the only domestic currency of the ERM with an international role. In fact, the ERM is linked to the rest of the IMS through the US$/DM relation. This has led several authors (Basevi, Calzolari and Colombo, 1983; Micossi and Padoa-Schioppa, 1984; Kaufman, 1985) to consider the ERM as organized in a "currency pyramid". At the top of it there is the US$/DM exchange rate, through which, primarily, the external impulses are transmitted to the European currencies. Descending the pyramid towards its base, the currencies are found which, together with the DM, traditionally constitute the core of the ERM: the FLO, the

31. In 1987, Germany's GNP exceeded by about 25 per cent that of the next largest country (France), while its exports of goods and services were about 75 per cent higher than those of the second most important EEC country (France again).

DNK, the FB.[32] The central banks have always been keen to follow the Deutsche Bundesbank's actions. At the base of the pyramid there are the currencies of the countries which have maintained, over the entire EMS period, a higher degree of monetary policy autonomy, but experienced greater monetary instability: the French franc and the Italian lira.

However, while Germany's hegemony in the monetary sphere is undoubtedly remarkable, due to the superior reputation of its Central Bank in pursuing monetary stability, there are other important dimensions of the EEC in which the role of Germany is less central.[33] For instance, in the field of agricultural policy, France is able to dispute the German leadership. Moreover, London is a much more developed financial center than Frankfurt. Finally, although this is not a dimension we have ever considered in this paper, Germany does not have any predominant role in defence.

In the end, the formulation of a judgment on the issue under scrutiny is highly dependent upon the view of the nature of the EMS and its functioning during its ten-year existence.

There is, we believe, still some difference of opinion on the nature of the ERM of the EMS. Formally, it is solely an agreement aiming at stabilizing bilateral nominal exchange rates of member countries. In this respect, its success is undeniable.[34] The agreement does not provide for any rule or prescription on how these countries would have to pursue such a goal, namely which policy instruments they have to rely upon and the ways for coordinating such instruments.

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32. In this connection, it is worth recalling that the Belgian authorities have, since long ago, maintained a dual exchange rate regime, whereby only the rate used for commercial transactions was geared to the ERM obligations

33. On the peculiar nature of Germany's leadership in the ERM, see L. Tsoukalis (1988).

34. On this issue see Masera (1987), in particular Chapter IV, and Ungerer (1986).

Certainly, no member country accepted the idea of giving up its independence in setting its monetary policy when adhered to the ERM. Explicit devices for maintaining a certain degree of autonomy were capital controls, both in Italy and France, and the wide band of fluctuation of the lira. Moreover, there was no implicit rule which imposed the adoption, by high-inflation countries, of what has been called the "strong currency option".

In these circumstances, what really subjected the monetary policies of member countries to that of Germany, thus determining the hierarchical organization of the system, was the widely accepted objective of reducing inflation and the commonly shared view that the Deutsche Bundesbank had a comparative advantage on this front.

The original provisions aimed at making the system's functioning more symmetric, like the divergence indicator, were actually never used and have been gradually losing their role. More generally, the other members accepted, not without reluctance, the German idea that convergence on the inflation front would have to be guided by the best performance, i.e. the target would have to be the lowest inflation rate among member countries and not the average.

As a matter of fact, the ERM of the EMS has resulted in a monetary organization of the area characterized by the central role of the Deutsche Bundesbank, neither because this outcome was implicit in the original design, nor because Germany has forced the other member countries to accept it. Nonetheless, Germany has come to play the role of the "n^{th} country" in the system setting, through the exchange rate constraint, the monetary policy of the entire area because the other countries found it convenient that the public good of monetary stability be provided by the German Central Bank. Surely, there is a widespread consensus among the authorities that the EMS has been instrumental in curbing

inflation.[35]

Beyond providing the "monetary anchor" to the system, the Bundesbank has also been the dominant player in regulating the position of the entire set of the EMS exchange rates vis-à-vis the dollar (the top of the pyramid).[36]

All in all, the German monetary leadership has been equally based both on "country-specific endowments" (the DM role as an international currency, the Bundesbank's reputation) and on the common acceptance by the other members of the objective of reducing inflation as the top priority.[37] We shall try to assess, in section 3, whether this monetary organization has proved appropriate to EPC since it regained momentum in 1985.

2.6 Europe's monetary organization in transition

Germany's leadership has thus been the result of a contingent situation which may not necessarily persist. There

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35. In particular, in France there is a clear link between ERM membership and the turn-around in economic policy in 1983, from growth-fostering policies towards anti-inflation policies, and in Italy the exchange rate constraint has been used to tighten monetary policy and, eventually, to favour the achievement of a higher degree of independence of the Central Bank. This was institutionally reflected in the so-called "divorce" between the Bank of Italy and the Treasury in 1981, whereby the former was relieved from the (implicit) obligation of purchasing all residual T-Bills which were not placed in the market.

36. The question has been raised of which advantages Germany achieved in participating in the ERM. We believe that both theoretical (Melitz, 1988) and empirical (Vona and Bini Smaghi, 1988) studies show that Germany's advantage has to be found in the area of economic growth. Indeed, Germany's slower growth of domestic demand vis-à-vis most of its ERM partners has been largely compensated by the trade surpluses obtained in the area.

37. On the source of the monetary leadership of Germany in the ERM, see Thygesen and Gros (1987).

are two important reasons supporting this view. First, inflation differentials in the ERM have been considerably reduced. At present, cost developments are even more favourable in France and French prices are increasing only marginally (less than one full percentage point) faster than the German ones. Second, the abolition of most capital control measures in France and Italy (full liberalization is scheduled for June 1990) has led to a situation where the effects of divergent monetary policies begin to be felt also by the country at the centre of the system, given that the goal of exchange rate stability has been even strengthened.

Germany's leadership in the System has been increasingly questioned[38] and has to rely only upon the role of the DM as an international currency and the high competitiveness of German industry, which is reflected in the huge and persistent current account surplus. These two conditions are not sufficient to maintain the leadership, taking into account also the lack of German predominance in other important EEC dimensions and the still dominant role of the US dollar in the IMS. Moreover, the excessive reliance of Germany on trade with the ERM partners for generating its trade surplus is indeed becoming an obstacle for EPC in the area (De Cecco, 1988).[39]

Since the developments mentioned above are reducing the economic power of Germany relative to the other ERM countries, the system is departing from its pyramidal configuration. The entire area is moving towards a situation

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38. This has been partly mirrored in the institution of the French-German Economic and Financial Council, which first met in January 1988. To the extent that this move results in the explicit formation of a "Directorium" of these two countries over the EMS, it could complicate rather than help closer cooperation at the System's level.

39. On this front, the difference between Germany and the leading countries of the Gold Standard (United Kingdom) and the Bretton Woods (United States) regimes is striking.

where oligopolistic interactions, rather than leader-followers relations, are becoming predominant. In this new setting the economist's prescription clearly points to strengthening EPC. Nonetheless, there are many obstacles in the achievement of this objective.

Firstly, it is doubtful that member countries will still be willing to assign top priority to the target of maintaining or achieving a low inflation rate: the issue of growth is becoming more pressing and will even strengthen when Spain and Portugal join the ERM. Propensities and potentials to grow are quite different among EEC countries.

Secondly, there is the problem of the increasing trade imbalances in the area, which is becoming even more acute since the massive depreciation of the dollar in the past few years has considerably eroded the external competitiveness of the European countries.[40] The German surplus vis-à-vis the ERM partners for 1988 may be estimated at about 30 billion dollars, while France's deficit is roughly 18 billion and Italy's almost 10 billion.[41] Since the overall current account position of the latter two countries does not reveal weaknesses calling for policy corrections, while Germany's current account surplus will average, in the 1986-1990 period, 4 per cent of GNP per annum, pressures are increasing for policy initiatives by this country in order to bring about a reduction of its surplus.[42] These add up to those exerted on Germany by non-ERM countries, particularly the United States. Up to now the German authorities have consistently opposed any action aimed at sustaining the

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40. On this issue see Vona and Bini Smaghi (1988).

41. In 1979, when the EMS was established, these three countries' trade balances with the ERM partners amounted respectively to: 5.7, -7.0 and -0.9 billion dollars.

42. The source of the German trade surplus in the ERM area is mainly to be found in its low rate of growth of domestic demand (see Bini Smaghi and Vona, 1989).

growth of domestic demand, although they seem to be aware of the need to appreciate the DM (in real terms) within the ERM.[43]

Thirdly, an impediment is represented by the reluctance to coordinate other policies, in particular fiscal policy. This is an issue strictly related to the two previously mentioned, since fiscal policies may represent a suitable instrument to cope with both problems discussed above. In February 1974 the Council of the EEC issued a Directive on "Economic Stability, Growth and Full Employment" where it is clearly stated that "every member state must be equipped with an adequate set of policy instruments to pursue those objectives by controlling the conjuctural developments and make them compatible with the long-term targets". In the "Annual Economic Report, 1985-86" a strategy was presented for reducing unemployment, the main problem of the area, through the adoption of policies aimed at enhancing supply and sustaining demand. Member countries would have to follow a coordinated strategy, whereby demand stimulus through tax reduction and reorientation of public expenditure towards investment was considered desirable in those countries where budgetary situation allowed to implement these policies without compromising the overall macro-economic stability.[44]

This recommendation remained among the "good intentions". "Fiscal consolidation" has been in fact strictly

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43. On passing we want to stress that the explanation for the low growth rate of Germany, i.e. shortage of labour force, beside being implausible in a world of factor mobility (a characteristic of the European Unified Market), does not represent an answer to the problem under discussion. In fact, a given, moderate rate of GNP growth may be attained through a different contribution from domestic demand and the foreign balance. In other words, the problem is basically represented by the "export-led" growth model of the German economy.

44. The analytical foundations of this strategy (the famous "Two Handed Approach") are presented in Blanchard et al. (1985).

followed by almost all the EEC countries in the last five years.[45] Fiscal policy has therefore lost its status of an instrument for policy coordination: convergence on low budget deficits has, instead, become a target in itself. Because the monetary policies of the ERM members are, in an environment of high capital mobility, increasingly geared to the objective of maintaining quasi-fixed exchange rates with the DM, they are in fact losing their role in stabilizing the member countries' economies when disturbances of real nature occur. Consequently, unless margins of manoeuvre on the fiscal front are regained, most ERM countries will be powerless in the management of their domestic economies.

Fourthly, there is still some resistance in Germany to give up its hegemonic power in influencing the DM/$ exchange rate and agreeing on a common dollar policy, as required by most partners of the ERM, althogh progress has been made with the Basel-Nyborg agreement (see section 3).

Fifthly, the United Kingdom does not participate in the ERM and, more generally, in any attempt to coordinate macro-economic policies in Europe, thus reducing the role of the European pole in EPC, especially given the still relevant role of the pound sterling in the IMS and the importance of London as a major financial centre.

The problems mentioned above and the transformations under way are likely to require a deep change

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45. Germany's general government financial balance (GGFB) ranged between -1.1 and -2.0 per cent of GNP between 1984-88. France's GGFB, in relation to GDP, has been halved in the same period. The UK's GGFB turned into surplus in 1988 (0.5 per cent of GDP), from a deficit of about 4 per cent in 1984. In Italy, the GGFB was in deficit for much larger amounts than the EEC average; nonetheless, it diminished by some 2 percentage points of GDP between 1985 and 1988. Significant progress towards fiscal consolidation was achieved by Belgium, Denmark and, to a lesser extent, the Netherlands.
A critical view of the strategy of fiscal consolidation followed by the EMS countries may be found in Katseli (1988).

in the present setting of the EMS. It is still not yet clear what form the System will have: it is quite evident, instead, that it cannot remain in its present form and survive these challenges (Dini, July 1988).

Precisely because of the awareness of the situation and of the political momentum to proceed towards a deeper economic and monetary integration in Europe, the EMS countries are conducting high-level negotiations aimed at outlining "concrete steps towards the formation of a European Monetary Union".[46] In these circumstances, our judgment of the EMS position in the international EPC exercise has mainly to rely upon past experience, although this may be of limited relevance for future developments.

In conclusion, EPC has been confined to monetary policy alone. In this area the United States' still dominant role has surely helped the process; as suggested by Keohane (1984), the presence of a hegemon may be conducive to cooperative behaviour. Europe was surely a non-unitary actor in EPC, but the ERM's pyramidal monetary organization seems to have facilitated the exercise, although some costs in terms of exchange rate instability had to be paid (see section 3). Hence, an area where even the largest countries are small relative to the non-European two big economies has exploited the opportunity to play a major role in the process. Both the ERM area and the international community itself may have benefited from this situation.

In perspective, there are at least two acute problems which call for attention if the EPC process has to develop smoothly and fruitfully: (i) the first one is related to the need to bring into play other policy instruments to relieve monetary policy of the excessive burden of pursuing several, often incompatible, objectives; (ii) the second

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46. The quotation in the text is from the mandate given last June by the Heads of States and Governments of the EEC countries to a committee chaired by Mr. Delors.

concerns the EMS area, and is connected with the UK participation in the ERM and, more importantly, to the overall monetary organization which is in a phase of profound transformation.

3. The implementation of tripolar policy coordination in the Group of Seven: an assessment

3.1 Introduction

In this section an attempt will be made to evaluate the impact of the G-7 coordination exercise in terms of both its immediate results and its implications for the functioning of the international monetary system. Special attention is paid to the interplay of the cooperative game between the EEC countries and the rest of the G-7. The analysis does not pretend to be an empirical one, in the sense that no econometric proof is provided in support of the various propositions; rather, reference is made to the behaviour of monetary and financial markets in response to the coordination strategy and its implementation.

The G-7 coordination exercise has been labeled by critics in various ways, ranging from "useless" to "counterproductive", on the basis of a host of arguments of economic and political nature. Before assessing the results of policy coordination it is necessary to summarize briefly its main features. Three phases can be distinguished in this exercise:

(i) the first phase is concerned with correcting the overvaluation of the US dollar. It starts in February 1985 with the coordinated exchange market interventions of a group of European central banks led by the Bundesbank; it includes the Plaza Hotel Meeting of the Group of Five in September, when the United States joins in the effort, and ends in early 1987;

(ii) the second phase is characterized by the stabilization of the dollar; it begins with the Louvre Accord in February 1987 and ends roughly at the Toronto Summit of June 1988;

(iii) the third phase is characterized by a situation of uncertainty due to the slowdown of the adjustment

process and to the diverging trend of the dollar vis-à-vis the yen and the Deutsche mark. It still continues at this writing.

The main objective of the strategy was to reduce payments disequilibria among the main three poles of the industrial world - the United States, Japan and Europe, without generating a recession. In each of the three phases different policy instruments were used. In phase 1 a major role was assigned to exchange rate changes, achieved mainly through coordinated exchange market intervention. In phase 2 exchange market intervention was used to stabilize exchange rates at the prevailing levels, while external adjustment was to be pursued via differentials in domestic demand to be achieved through changes in fiscal policy: basically, the objective was that domestic demand should grow less than output in the United States and more than output in Japan and Europe. In phase 3 exchange market intervention continues to stabilize exchange rates while macroeconomic policies are geared to achieve domestic objectives, such as fiscal consolidation and control of inflation; the task to carry out the external adjustment is left, nominally, to "structural policies" and to the delayed effects of past exchange rate changes.

3.2 Managing phase 1 (February 1985-February 1987)

3.2.1 The impact of coordinated interventions - The most common criticism voiced against phase 1 is that monetary authorities exploited an autonomous turn-around in market sentiment about the dollar to claim that "they" had curbed its overvaluation. The criticism is based on the conviction that exchange market interventions, particularly when their domestic monetary effects are sterilized, do not have lasting effects and they cannot prevail over market forces. Such conviction, derived from both theoretical and empirical

analysis,[47] had been a main factor behind the laissez-faire attitude in respect to exchange rate developments adopted by the Reagan Administration in the period 1981-84. In fact, that conclusion had been confirmed only in the case of a single country intervening alone in exchange markets to alter the foreign currency price of its currency. Very little had been done to measure the effectiveness of coordinated intervention, although the comprehensive study conducted by experts of the G-7 in 1983[48] alluded to the possibility that coordinated intervention might be more effective than isolated intervention.

The events of phase 1 seem to corroborate such hypothesis. To start with, it may be useful to recall that the problem of the overvaluation of the dollar had been an issue for discussion in international fora since 1982. Indeed the decision taken at the 1982 Summit to conduct a study on the role of exchange market intervention was a compromise between the US Administration, practicing the usual "benign neglect" about the dollar, and the European countries, increasingly worried about the inflationary implications of a strong dollar. Market participants were thus aware that the major countries disagreed about the desired level of the dollar, and this made them confident that no action would be taken to alter its course, which was therefore influenced solely by the interest rate differential in favour of the United States.

The market was impressed by the concerted dollar sales conducted by the Bundesbank, the Banque de France, the Banca d'Italia and other European central banks on February 26, 1985. The dollar peaked on that day and has not risen to that level ever since.

There is no evidence whatsoever to support the

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47. See, for example, Henderson and Sampson (1983).

48. Group of Seven Working Group (1983).

argument that the market was changing its feeling about the dollar at that time. Indeed, following the re-election of President Reagan in November 1984, the rise of the dollar had accelerated. A statement issued after a meeting of the G-5 Finance Ministers on January 17, 1985 had been interpreted by the market as a confirmation of the disagreements about exchange rate policy among the major countries. This strengthened further the upward trend: indeed on the eve of the coordinated interventions by the European central banks most of the "chartists" were projecting a dollar/mark rate of DM 4.00. The concerted dollar sales began when the dollar was at DM 3.47 and continued throughout February 26 and 27. The dollar plunged against all European currencies and reached the level of DM 3.09 already at the end of March.

The impact of intervention began to fade away during the Summer months. The market had been impressed by the size of the intervention and by the "aggressive" attitude of central banks who were selling the dollar even after it had begun to fall; nevertheless it soon became apparent that no agreement had been reached between the United States, Europe and Japan on the need for an exchange rate adjustment. Nor was there any indication that the major countries were ready to adjust the stance of their macroeconomic policies to back the change in exchange rates. The Plaza Meeting of the G-5 added the missing ingredients to the strategy: the United States and Japan committed themselves openly to the objective of adjusting payments disequilibria through coordinated macroeconomic policies. The impact of the Plaza on the market was compounded by the consensus of all other industrial countries in the European Community and the Group of Ten, who actively took part in the coordinated intervention.

The decline of the dollar was also fostered by the relaxation of monetary policy in the United States, although similar attitudes by Germany and Japan limited the reduction of the positive interest rate differential on dollar assets (see Figures 1, 2, and 3 and Table 1).

Table 1

MONETARY AGGREGATES : OBJECTIVES AND OUTCOMES

(percentage rates of change (*))

		1983		1984		1985		1986		1987		1988	
		obj.	out.	obj.	out.	obj.	out.	obj.	out.	obj.	out.	obj.	out.
USA	M1	4-8	10	4-8	5.2	4-7	11.9	3-8	15.2				
	M2	7-8	8.3	6-9	7.7	6-9	8.6	6-9	8.9	5.5-8.5	4	4-8	5.2
	M3	6.5-9.5	9.7	6-9	10.5	6-9.5	7.4	6-9	8.8	5.5-8.5	5.4	4-8	6.3
JAP	M2+CD	none	6.8	none	7.9	none	9	none	9.2	none	11.8	none	10.7
GER	CBM	4-7	7	4-6	4.6	3-5	4.5	3.5-5.5	7.8	3-6	8.1	3-6(**)	6.7
FRA	M2	9	12.5	5.5-6.5	9.4	4-6	6.2			4-6	4.0	4-6	4.0
	M3							3-5	4.5	3-5	9.1		
UK	M0	7-11	6.3	4-8	7.2	3-7	3.8	2-6	5.2	2-6	4.3	1-5	7.4
	M3	7-11	8.9	6-10	10.3	5-9	13.4	11-15	19.1				

(*) Fourth quarter of current year over fourth quarter of previous year. Data for 1988 are provisional.
(**) M3.
Source: B.I.S., I.M.F.

Figure 1

EXCHANGE RATE OF THE US DOLLAR
(1980=100)

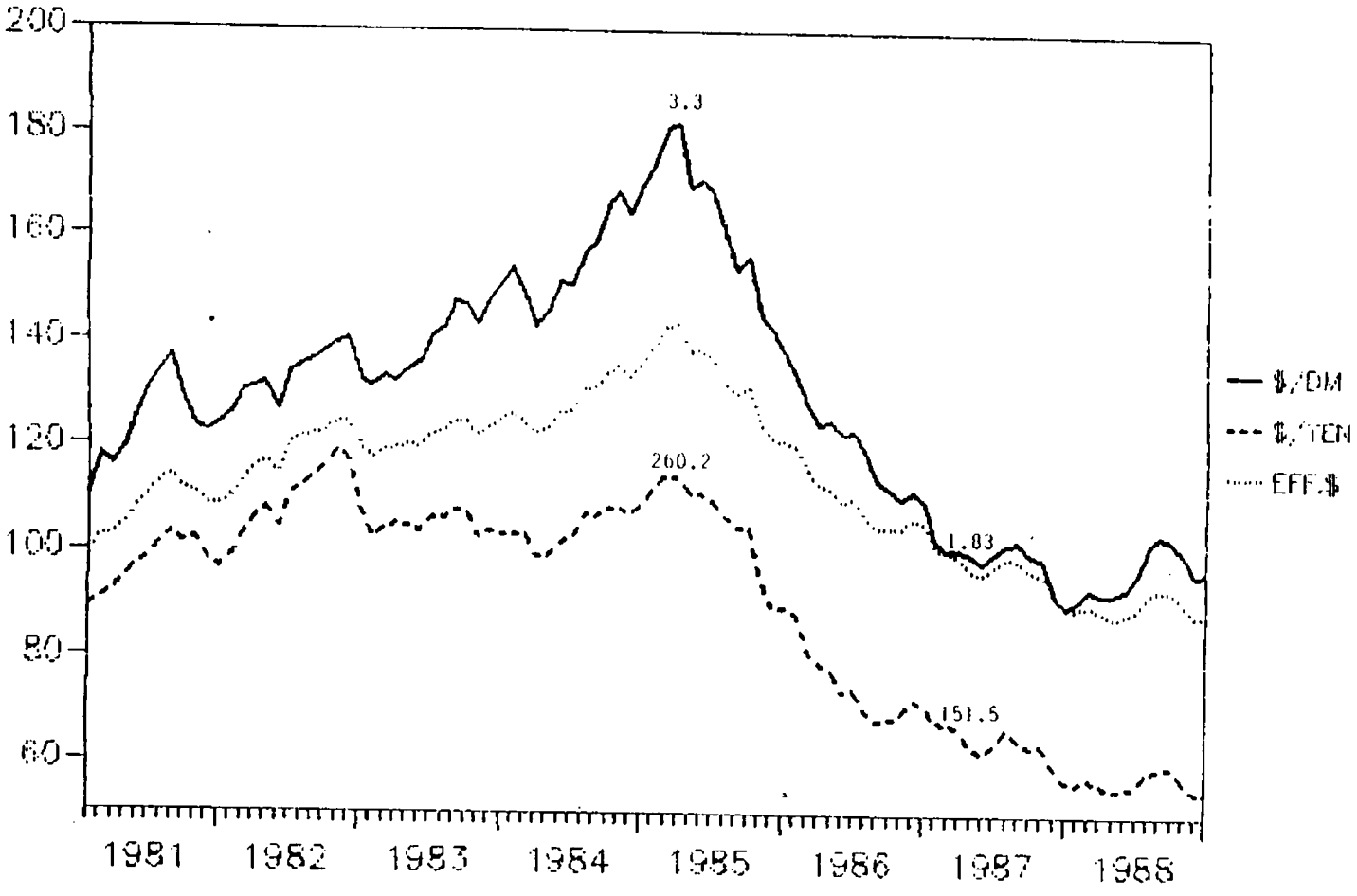
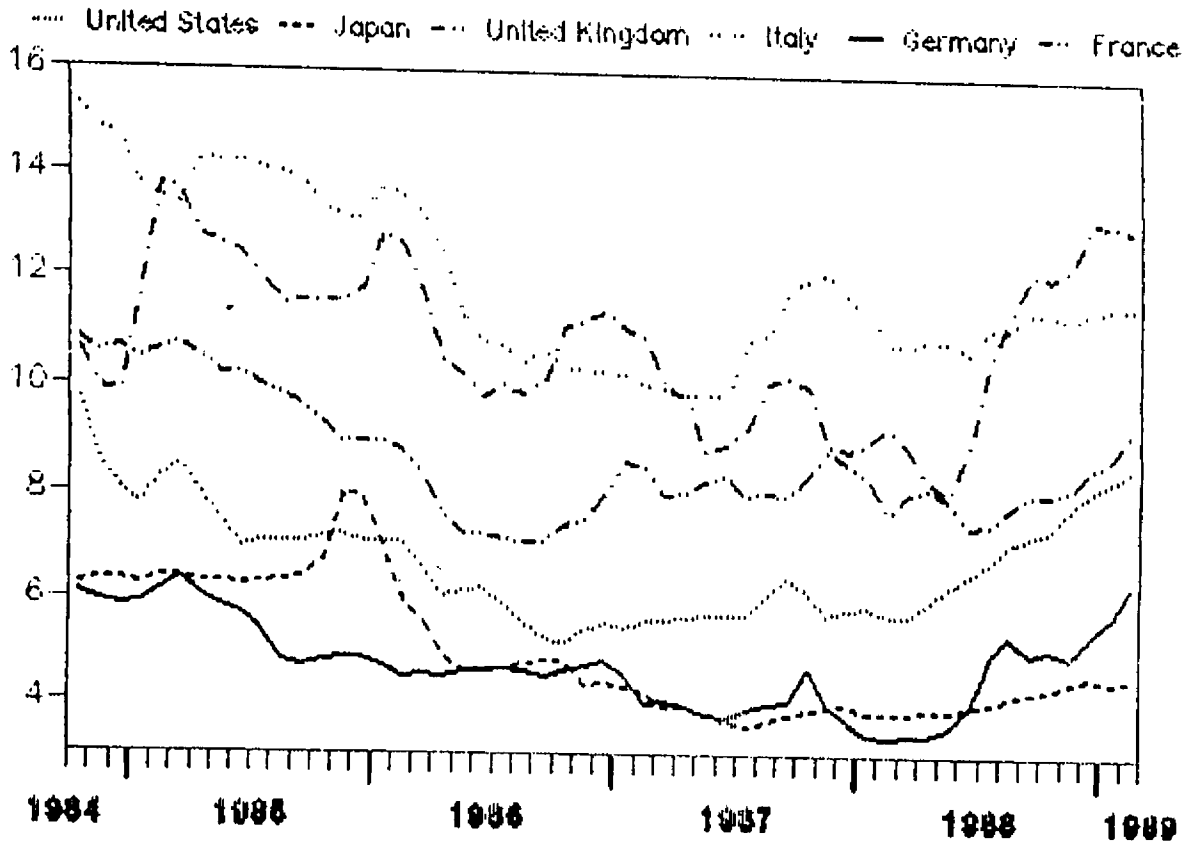


Figure 2

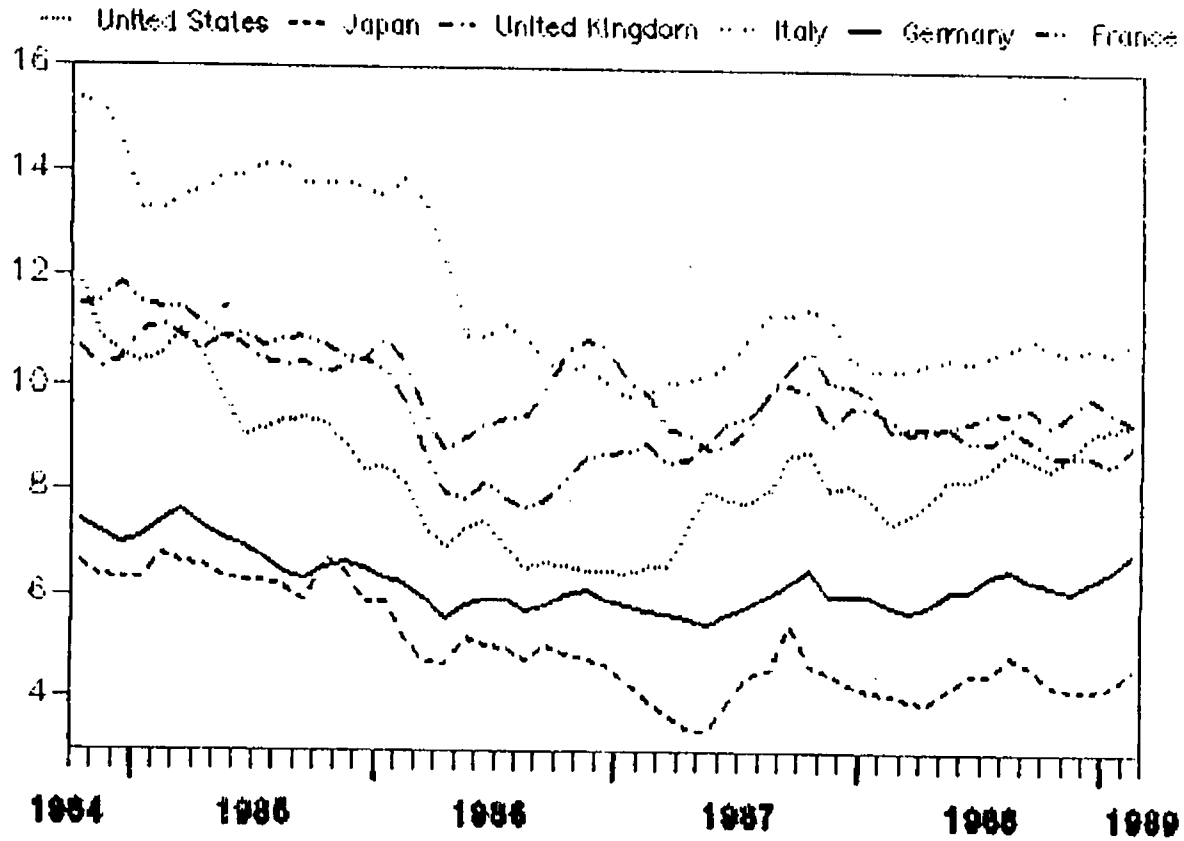
Short-term nominal interest rates



Sources: B.I.S., Bank of Italy.

Figure 3

Long-term nominal interest rates



Sources: B.I.S., I.M.F., Bank of Italy.

The events of phase 1 are probably not sufficient to demonstrate that the effectiveness of exchange market interventions is greater than that implied by theoretical and empirical analysis. We believe however that the evidence is sufficient to conclude that coordinated interventions, involving all the parties concerned, are indeed effective in breaking exchange market trends unrelated to the fundamentals (variously defined as overshootings, bubbles, band-wagons, etc.). The fact that such trends are not warranted by underlying economic conditions in the countries whose currencies are misaligned does not make the trends less resilient or more easily modifiable. In fact under the present conditions of near perfect capital mobility in international financial markets, any country with a liberal exchange system, favorable interest rate differential and a reputation of creditworthiness can attract large amounts of foreign capital for prolonged periods; this will lead to an appreciation of the exchange rate irrespective of fundamentals. Under these circumstances occasional, uncoordinated, interventions are useless and they indeed contribute to the popular credence that monetary authorities are too "small" to fight "big" markets. Coordinated interventions, on the contrary, can have a lasting impact because they are more likely to convince market participants that the monetary authorities have a superior set of information, i.e. they recognize the existence of the bubble and are convinced that it is a negative phenomenon despite its possible short-term advantages. Their intervention is therefore interpreted as a commitment to shape policies in such a way as to eliminate the underlying causes of the bubble.

3.2.2 **The impact on the European Monetary System** - The second lesson that can be derived from the analysis of phase 1 is that a tripolar strategy based almost exclusively on exchange rate changes creates problems for the exchange

rate grid of the multi-country pole. Although the EMS has on the whole withstood well the sharp depreciation of the dollar, tensions have developed at times which have led to unwarranted parity realignments within the Exchange Rate Mechanism (ERM) of the EMS.

The reasons why the EMS cohesion is affected by sharp movements of the dollar are two. One is the well known asymmetry caused by the fact that the DM is the only currency in the ERM with a reserve currency status[49]. This implies that when the dollar is strong, the DM tends to be weaker than other ERM currencies because it feels the impact of portfolio diversification; conversely when the dollar is weak, diversification out of dollar portfolios is reflected in larger inflows into the German market than in other European countries, thus pushing the DM upward in the ERM.

The second reason is of a technical nature and is related to the coexistence of different exchange rate commitments undertaken by countries that are members of both the EMS and the G-7. As indicated in Section 2 the main intervention currency in the ERM is the DM. Although the US dollar remains the major vehicle currency for foreign transactions, the share of the DM in national foreign exchange markets has increased and the DM has become an important "parking currency" whenever fears of EMS realignments affect market expectations; thus, at present, one could say that payments disequilibria in the EMS are DM-denominated, with central banks being obliged to intervene in that currency to give signals to the market.

The agreement to sell dollars among the G-7 countries implied for the ERM members the obligation not to sell DM in case of exchange market tensions. Any departure from this rule would have been counterproductive (the objective being to support the DM vis-à-vis the dollar) and likely to be interpreted as a sign of disagreement among

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49. See Giavazzi and Giovannini (1986).

central banks. Thus for the ERM members other than Germany the decision to bring the dollar down had the simultaneous effects of creating a situation of tension within the ERM and of blunting the weapon to deal with it. It is true that in theory selling dollars should have the same supporting impact on the national currency than selling DM; the effect of coordinated intervention, however, is to strengthen the DM vis-à-vis all currencies, including those of the countries participating in the coordinated efforts. In each market therefore the immediate impact of the intervention would be to strengthen the domestic currency vis-à-vis the dollar and to weaken it vis-à-vis the DM. As the authorities appear to be unwilling to check this latter movement, the market becomes temporarily unsettled, before arbitrage operations align the cross-rates. In any case, short term volatility of exchange rates is increased. In these circumstances market participants become afraid that new parities may be sought for the EMS countries and hesitant to take positions in favour of the domestic currency; they are also likely to watch carefully for any indication that may signal or confirm a policy shift on the part of national authorities.

Four realignments have taken place in the EMS during phase 1. The first three realignments could be regarded as being part of an overall adjustment of EMS parities to reflect inflation differentials following a period of stability that had lasted for over two years[50]. One could argue, however, that such realignments could have been postponed further since important progress towards convergence of policies and performances was being realized within the EEC. The fourth realignment, that of January 12,

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50. These realignments involved all EMS currencies but at different times: on July 22, 1985 the Italian lira; on Ap French franc, the Belgian franc and Deutsche mark; on August 4, 1986 the Irish punt. The last realignment before this round of parity changes had occurred on March 22, 1983 and had involved all currencies simultaneously.

1987, was instead forced upon the authorities by a market situation that had become unmanageable as a result of conflicting objectives among the G-7 and EMS countries and uncoordinated policy actions.

The circumstances surrounding the 1987 realignment have been the subject of extensive investigations within the Committee of Governors of the EEC central banks. Indeed, in the six months before the realignment, net intervention sales amounting to the equivalent of $ 35 billion had been conducted, the largest amount in the history of the EMS in such a short period. Moreover, about one third of the intervention was carried out at the margin, also an unprecedented feature of EMS realignments. The review eventually led to the Basel-Nyborg Agreement of September 1987 which effectively strengthened monetary cooperation among EMS central banks to cope with cases of destabilizing capital flows.

In the present context, it will sufficient to recall that the tensions leading to a new realignment materialized against the background of an emerging policy disagreement within both the G-7 and the EMS. Within the G-7, the policy disagreement resolved around the question of whether the time had come to stabilize the dollar. The European countries and Japan were in favour of putting an end to the depreciation of the dollar, while the United States was still using the threat of "talking the dollar down" to extract assurances of more expansionary fiscal policies from Germany and Japan. The deterioration of the US trade performance in the second half of 1986 lent substance to market expectations of a further dollar fall, while indications to the contrary emerging from the Gleneagles meeting of the EEC Finance Ministers and Central Bank Governors in September and from the Baker-Miyazawa meeting of October were regarded as too timid to affect market trends. In this climate, substantial capital flows moved into Germany creating tensions in the EMS.

Within the EMS, the policy disagreement stemmed from the fact that, following the April 1986 realignment, depreciating countries (particularly France) had been ready to reduce domestic interest rates, as a result of the usual post-realignment reflows. Germany, on the other hand felt the pressure of capital inflows on domestic monetary conditions and tried to control monetary aggregates by open market operations which resulted in a moderate but constant upward crawl of market interest rates. Social tensions in France and the pre-electoral climate in Germany turned an interest rate policy disagreement into a political issue, with an inordinate amount of public bickering from one side and the other of the Rhine. The ensuing market reactions to such tensions were of such magnitude and intensity that it proved impossible to contain them even through massive interventions, a decline in interest rates in Germany and a rapid downward movement of the French franc in the EMS band.

The realignment of January 1987 provided one important lesson for the multi-country pole in a tripolar coordination: it must have a common policy vis-à-vis outside currencies. In the absence of such policy that pole is not in a position to undertake policy commitments vis-à-vis third currencies without running the risk of internal tension and conflict. The realignment was a dramatic example of the consequences of a lack of an EEC policy vis-à-vis the dollar, and, although it did not induce member countries to formally adopt one, it led them to rethink their arrangements for handling situations of tensions not warranted by underlying economic conditions. As it turned out the Basel-Nyborg Agreement involved a first step in establishing an EEC dollar policy inasmuch as it endorsed temporary departures from the pursuit of domestic monetary objectives for the sake of

preserving the cohesion of the ERM.[51]

3.3 Managing phase 2 (February 1987-June 1988)

3.3.1 The cost of stabilization - The most common criticism of the strategy of policy coordination in phase 2 is that it stabilized the dollar at the cost of shifting instability from exchange to financial markets, thus contributing to the crash of October 1987. Such criticism was generally voiced soon after the crash itself, in line with the requirements of a fashion that rewards immediacy over accuracy.[52]

The events of phase 2 can be quickly summarized as follows. The Louvre Accord implied a trade-off between the three major countries. The United States would cooperate to stabilize the dollar, provided that Germany and Japan would take fiscal measures to reflate their economies. This was expected to reduce significantly the US defict in time for the Presidential elections of November 1988, without forcing the Administration to introduce import restrictions (through the Trade Bill) or to increase taxes to curb the budget deficit and domestic demand. Germany and Japan were worried that a further appreciation of their currencies would put an excessive burden on export sectors and generate recession and unemployment. Other European countries in the G-7 were also worried about the inflationary implications of yet another

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51. The Agreement enjoins members to take action designed to widen interest rate differentials between strong and weak currency countries through coordinated interest rate changes in both sides. The Agreement also envisages community financing for intra-marginal interventions and recommends a more flexible management of exchange rates within the band.

52. See Feldstein (1987). A more meditated, and less sanguine, elaboration of these arguments, based on an econometric model, is presented in Gaiotti, Giucca and Micossi (1988).

EMS realignment that may result from the dollar depreciation.

In retrospect it must be recognized that all countries tried hard to implement the undertakings; political factors contributed, however, to reduce the size of the required measures ot to delay their application. Exchange market intervention was conducted in a vigorous and tightly coordinated manner, involving unprecedented amounts. The burden of interventions however was shared unevenly among the "Big 3", with Japan and Germany doing the largest part, although all countries were jointly intervening whenever required. Monetary policy was relaxed in Germany and Japan, in pursuit of the twin objective of stimulating domestic demand and weakening their currencies; the reverse was done in the United States (see Table 2). Fiscal policy was also activated although perhaps too late to affect domestic demand as envisaged in the Accord: a fiscal stimulus was imparted in Japan, while the budget deficit in the United States declined significantly, but mostly as a temporary effect of the tax reform. In Germany fiscal policy remained broadly unchanged, as the authorities did not modify the schedule of a tax reduction envisaged for January 1988, although its scope was made larger than originally planned (see Table 2).

Despite the good intentions, the situation deteriorated rapidly since mid-1987. The main problems were the stubbornness of the US trade deficit that appeared unaffected by the strategy and the revival of inflationary expectations that was putting pressure on market interest rates. In this climate the US decision to "opt out" of the coordinated strategy was taken, in response to a tigthening of monetary policies in Germany that was regarded as violating the Louvre Accord. In reality monetary policy had been tigthened also in the United States as the Federal Reserve, like all other central banks,became concerned about the potential inflationary consequences of the large dollar interventions. The market compounded the problem by acting on the basis of widespread expectations of official interest

Table 2

GENERAL GOVERNMENT FINANCIAL BALANCES AND INDICATORS OF FISCAL POLICY
(As a percentage of nominal GNP/GDP)

	1984		1985		1986		1987		1988	
	Change in actual balance	Change in cyclically-adjusted balance (*)	Change in actual balance	Change in cyclically-adjusted balance (*)	Change in actual balance	Change in cyclically-adjusted balance (*)	Change in actual balance	Change in cyclically-adjusted balance (*)	Change in actual balance	Change in cyclically-adjusted balance (*)
United States	1.1	-0.5	-0.7	-0.8	-0.2	-0.4	1.1	0.8	0.6	0.1
Japan	1.5.	1.0	0.8	0.5	-0.1	0.3	0.8	0.7	0.1	-0.6
Germany	0.6	0.2	0.8	0.6	-0.1	-0.3	-0.5	-0.4	-0.3	-1.1
France	0.2	0.4	0.3	0.6	-0.1	0	0.4	0.3	0.9	0.3
United Kingdom	-0.4	-0.8	1.3	0.5	0.2	-0.3	1.0	0.1	1.8	1.0
Italy	-1.3	-1.7	-1.0	-1.2	1.2	0.8	1.0	0.6	0.5	-0.1

(*) Reflects deliberate policy actions, fiscal drag, changes to debt service costs and variations in rsource revenues. A positive sign indicates a move towards budgetary surplus; a negative sign indicates a move towards deficit.
Source: OECD.

rate hikes. This combination of factors led to the stock market crash of October 1987.

As it turned out, reports about the world coming to an end on October 19, 1987 were grossly exaggerated and the analysis of the working of the policy coordination strategy must accordingly be extended beyond that date.

One point however has to be made. It is possible that the day-to-day execution of monetary policy by the Fed in October might have given the impression that interest rates would be pushed as high as necessary to preserve exchange rate stability. Such conclusion, however, is contradicted by the fact that, in the six weeks preceding the crash, no interventions in support of the dollar were conducted neither by the Fed nor the other G-7 countries.

What is more important in the context of this paper is to note that the stock market crash provided a very powerful argument for a resumption of EPC. The stance of monetary policies was suddently relaxed in all G-7 countries, and possibly because of that, none of the feared repercussions of the crash materialized. There were no contraction of demand, no bankruptcies, no increase in unemployment. Towards the end of phase 2, in the Spring of 1988 economic activity actually appeared to be growing much faster that expected, resuming the strong upward trend that had materialized since mid-1987.

Cooperation in exchange market interventions was also resumed within both the EMS and the G-7. Within the EMS, the tensions triggered by the fall of the dollar at the end of October 1987 led to an early activation of the Basel-Nyborg agreement which effectively prevented the emergence of a crisis situation:[53] the interest rate differential between the DM and other currencies was widened, strong intramarginal interventions were jointly conducted,

53. It is important to note that the agreement was activated before its formal ratification by the EEC Governors.

and exchange rates were allowed to respond more flexibly to changes in demand and supply conditions.

Within the G-7 the resumption of cooperation in exchange markets took a little longer, but was eventually achieved and made public with the G-7 statement of December 22, 1987. The market reaction to the statement was one of skepticism and heavy selling of dollars took place pushing the dollar to its lowest levels vis-à-vis the DM and the yen. Here again, the response of the G-7 central banks was very firm and an unprecedented round of coordinated interventions was conducted around the clock in all markets (in the United States, Europe and the Far East) in early January 1988. Dollar purchases were divided in broadly equal shares among the three poles, to signal to the market the existence of a burden-sharing agreement. Like after Plaza, the interventions had an aggressive character, as central bank continued to purchase dollars even after the rate had begun to move higher. This was done with the deliberate intention to penalize market participants who had sold dollars short in large amounts and were forced to cover their positions at rising prices.

The actions undertaken by the G-7 in the field of monetary and exchange rate policies convinced market participants that the United States had "opted back" in the EPC exercise and this proved to be a major factor in restoring business confidence and in stabilizing expectations.

3.3.2 **The birth of a new regime?** - One may wonder whether the events of phase 2 justify the conclusion that a new international regime had been established in world economic relationships. As defined by Krasner[54] a regime is a set of "principles, norms, rules and decision making procedures around which the expectations of international

54. See Krasner (1983).

actors converge in given issue areas". To decide whether the events of phase 2 are consistent with this definition, one needs to qualify the concept of "international actors", by distinguishing between governments and market participants.

The attitude of governments was, as we have shown, rather "convergent" on the objectives of the EPC strategy, at least in the early part of phase 2, although the emphasis put on the various policy instruments varied from country to country: Germany was more hesitant to coordinate fiscal policy, the United States was lukewarm in its exchange market interventions and so on. Convergence was however shattered by the opting out of the United States, which was done with a degree of public clamor reminiscent of the Nixon-Connally rhetoric of August 1971. In opting out of the cooperative strategy the United States revealed an intention to use EPC much in the same way as one may use a taxi-cab: a means to be used occasionally to obtain a service at a moderate cost, but a permanent arrangement.

The attitude of market participants was more puzzling, as it appeared, paradoxically, to be more consistent with the perceived requirements of a policy coordination regime, than that of the monetary authorities. More precisely, market participants acted as if a regime was in place when governments told them there was one, and acted as if no regime was in place, when governments told them there was no longer one. One attempt to explain such attitude is provided below.

In response to an increased liquidity preference of investors, market intermediaries have developed the ability, through financial innovation and technological progress, to handle huge amounts of liquid funds using all available instruments, currencies and markets. Increasingly, the possibility of making profits in this business depends on the ability to react promptly to "news" that are likely to change the price of currencies, bonds, stocks and so on. Among the "news" are those emanating from the monetary

authorities, who have the power to influence the price of currencies and financial assets. Markets have thus become attentive watchers of any sort of economic data that may foreshadow a policy change on the part of the authorities. In this context, the continuing adherence of major countries to a strategy of policy coordination or its collapse are indeed very powerful news, likely to influence significantly the behaviour of markets. Under these circumstances, governments may find themselves, on the one hand, locked-in in a cooperative strategy, in the sense that opting out could be extremely costly, if because of that the Dow-Jones loses 500 points in one day, or also in terms of purely domestic politics. On the other hand there may be a "prodigal son effect" in the sense that a return to the cooperative strategy after a short leave may be rewarded by market participants more than it would deserve.

In sum, phase 2 has confirmed that something is changing in international monetary relations with the practice of EPC: the old regime of independently managed floating is perhaps gradually turning into a new regime based on joint management of exchange rates and on coordination of monetary policies. Markets appear ready to live with such a new regime provided that the objectives are the "right" ones (i.e. sustainable, non-inflationary growth, external adjustment, etc.) and all the major countries take active part in the game. Paradoxically, markets seem to pay less attention to the actual achievement of objectives and appear content - so far - with the belief that major international imbalances will be corrected in the medium-term.

3.4 Watching phase 3 (June 1988-)

The implementation of the EPC during phase 3 was influenced first by the need to ensure a stable situation at

the time of the US Presidential elections,[55] and subsequently by a revival of inflationary pressures.

Stability in exchange and capital markets and the fight against inflation took thus priority over the adjustment of international imbalances; in a situation of standstill on fiscal policies in major countries, monetary policies were assigned to pursue these goals. No attempt will be made here to forecast the implications for the world economy of such change of emphasis in the objectives of EPC. Rather, some attention will be paid to the implications for the working of the international monetary system.

The evolution of exchange rates in phase 3 has been a major source of uncertainty and puzzlement for market participants, as the dollar has remained roughly stable vis-à-vis the yen, while appreciating by about 10 per cent vis-à-vis the DM. Central bank interventions have thus concentrated on the US$/DM market on which both the Fed and the Bundesbank have been selling modest amounts of dollars while the Bank of Japan has been conspicuously absent. Only on one occasion a powerful coordinated action was undertaken by all parties concerned, and that was to counter the strong downward pressure on the dollar that materialized immediately after the election of President Bush. This uneven behaviour led the market to believe that the G-7 agreed on the need to prevent a fall of the dollar, but disagreed on the need to prevent its rise. As governments have not provided additional evidence of a policy disagreement, exchange rates have suffered from some short-term volatility (particularly at times of increases in interest rates in one or the other of the G-7 countries) but in the Spring of 1989 they were very close to the levels of March 1987, just after the Louvre Accord.

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55. An understanding on this point was apparently reached at a "G-2" meeting of the United States and Japan during the Toronto Summit of June 1988.

The systemic implication of these developments could be that the Louvre Accord is interpreted by market participants as a system of non-adjustable target zones for exchange rates, rather than a flexible strategy to coordinate a broad range of policies. Alternatively, market participants may perceive the absence of a downside risk on the dollar and operate purely on the basis of interest rate differentials to build again an upward trend for the dollar.

Both situations would create confusion in the markets particularly if no progress were achieved, through other instruments, in the adjustment of payments disequilibria. This may undermine the credibility of the entire EPC exercise with potentially destabilizing consequences for the international monetary and financial system.

4. Conclusions

The conclusions of our analysis can be summarized as follows.

1. The literature on international policy coordination is still an "infant industry" with regard to both its theoretical foundations and its empirical applications. The theoretical case for welfare-improving coordination is still disputed; nonetheless a majority of the academic profession argues that the case is proved.

2. Economists recognize that there are strong obstacles to the effective exercise of EPC, especially in its practical implementation.

3. Empirically estimated gains from coordination are generally small. It is, however, widely recognized that because of difficulties in properly measuring them such gains may be underestimated.

4. In the international monetary system the United States is still the "hegemonic" country, although it has lost some of its role as the leading economy in terms of real variables. Its leadership is primarily grounded on the status of the dollar as the key international currency, a feature which has given the United States a central role in the system, since coordination has been mainly conducted in the monetary sphere.

5. The exercise of EPC has been undercut by the reluctance to use fiscal policy as an instrument, because of the prevailing attitude in favour of "fiscal consolidation". Consequently, monetary policy has been overburdened with the task of pursuing several, at times conflicting, objectives.

6. Europe is a "non-unitary" actor. Nonetheless, Germany came to play the role of the leader within the ERM, thus contributing to a greater cohesion in the area. This fact resulted in a more effective EPC at both the regional (ERM) and the tripolar level, although in playing the game at these two levels the European countries incurred some costs.

7. The conditions which led to the German leadership are changing. Although the new set-up cannot be easily predicted at this stage, the EMS will be a more unitary actor only inasmuch as significant progress is made in strengthening EPC in the area both at the institutional and the operational level.

8. The experience of tripolar EPC since 1985 shows that it has been a useful tool for "crisis management" and, more generally, has been effective in coping with potentially "unsustainable" international imbalances.

9. The practical exercise of tripolar EPC has led international actors, especially market participants, to perceive the emergence of a "regime" of policy coordination, thereby increasing the costs for individual countries to "opt out" of the cooperative game. This, however, if not supported by concerted action in other domains of economic policy -- fiscal and trade -- could deprive the system of the still needed flexibility in exchange rate arrangements.

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