TWO LEVEL GAMES AND STRUCTURAL ADJUSTMENT:

THE ITALIAN CASE

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Introduction

Until very recently the literature on the political economy of cooperation had taken two separate approaches. The systemic approach which considers nation states as unitary actors and studies their interaction in the formation and implementation of international regimes (see e.g. Keohane 1984). The unit-level approach which considers foreing economic policy of nation states as the result of the interaction among interest groups and between them and national governments (see e.g. Katsenstein 1977). While considerable progress has been made along both strands of research several scholars have suggested to integrate them into a unitary framework (see e.g. Putnam 1988, Haggard and Simmons 1987). Robert Putnam has recently proposed an ingenious framework which takes up this point. He suggests that the process of international cooperation is the result of two separate yet interacting games which each national negotiator has to play simultaneously. One game is played at international level (level I politics) where he, or she, faces other governments' officials. A second game is played at the domestic level where he or she faces the interest groups of his/her own country. A cooperative agreement will be reached if there exist a set of policies, a win-set that

is simultaneously accepted at both levels.

In this paper we present a simple framework which builds on the idea of two-level games. In the next section we offer a determination of the win-set which rests upon the idea of a government maximizing reputation abroad (i.e. vis-à-vis other governments) and popularity at home (i.e. vis-à-vis interest groups and state bureaucracy). We show how the structure and nature of international regimes influences the interaction between the two levels of politics. Then we introduce a new level in the picture: the policy and politics of structural adjustment. One reason for this is that the progress of international economic cooperation today should rest on something more than the coordination of macroeconomic policies. A stable international regime requires that countries are able to adjust their economic systems and eliminate the causes of structural imbalances. Bringing structural adjustment into the picture requires a brief discussion of the relation between public expenditure and economic growth. For the purpose of this paper this huge topic is rapidly summarized and the question of whether this relation is either positive or negative addressed.

The message coming out of this first part is the following. Cooperation, considered as the interaction between international and domestic politics (itself split into two parts), should be considered and studied as a process during which new regimes and institutions are the dynamic outcome of such an interaction.

The second part applies this framework to the Italian

experience over the last two decades. After the fall of the Bretton Woods system Italy has gone through a number of different experiences, each characterized by a different interaction between the three levels of politics. In the second half of the past decade industrial restructuring was carried out also through the help of a public policy not constrained by an international regime. During this period the industrial system has succeded in reacquiring a significant degree of flexibility and profitability. The picture has changed at the beginning of the present decade with Italy joining the EMS mechanisms. This has introduced a more binding international constraint which has influenced the process of industrial restructuring as the monetary authorities have chosen to "tie their hands" by pursuing a policy of real appreciation justified by the external discipline. In the period ahead Italy will face both capital liberalization and further integration in the market for goods and services in the perspective of the completion of the European single market. Our framework suggests that this new challenge will be met with success if the proper mix of the interaction between domestic and international politics is obtained.

THE THEORETICAL FRAMEWORK

Level I Politics

Level I politics deals with negotiations among heads of government to define new agreements, norms and rules for the international system, i.e. to build new institutions (Keohane 1988). The incentive to engage in level I politics will persist as long as expected benefits from partecipation in new institutions exceeds perceived costs. Benefits in partecipating to the process of institution building derive from the opportunity of incluencing the content of the rules themselves in a way which is favourable to one's interests. Benefits also accrue from the stabilization of expectations about other actors' behaviour and from the increase in the availability of information about the operation of the system (Runge 1984, Keohane 1988). Costs are determined by the loss of policy autonomy that derives from the respect of the rules that have been agreed upon.

We may espress this problem in a very simple way. In order to partecipate actively in the process of institution building a country must acquire some international reputation. As Axelrod (1986) has noted, reputation is one of the necessary conditions for the implementation and the operation of informal agreements such as the ones which often arise an international relations. A high level of reputation, vis-à-vis other countries, enables one to influence significantly the process of institution building

and hence shape the emerging international regime in away that is favourable to its own interests. In other word a country has an interest in acquiring international reputation in order to reap the benefits of both building and partecipating to international institutions.

Following Schelling (1960) we assume that reputation derives from the ability of an actor to precommit oneself to an irreversible commitment. More loosely, reputation derives from one's ability to give up (part of) one's freedom of manouvre. For the purpose of this paper we assume that reputation R is a negative function of X, our policy variable, which we define as the share of government expenditure to GDP. This inverse relation expresses, although in a very simple way, the ability of a government to "show a hard nose", i.e. to resist to domestic pressures for expansion and, more generally, its ability to control the macroeconomy . Although discussion of this point is impossible here we may suggest three arguments in support of our statement. An increasing level of X is usually associated with an increasing government debt and hence with increasing difficulties in debt service. An increase in X, in addition, reveals a growing pressure from public bureaucracy which tends to limit the room of manoeuver for the government (Breton 1981, Van Der Ploeg 1984). Finally a growing government expenditure may and often does requires an increasing recourse to inflation as this produces government revenue through seignorage (Giavazzi 1988) and fiscal-drag (i.e. an increase in tax brackets along with

price rises). The required rate of inflation is, in general, not consistent with the partecipation to international regimes such as exchange rate agreements.

We assume that, in order to partecipate to an international institution, a government must obtain a minimum level of reputation R*, which, of course, implies a upper limit for X. This represents the cost a country has to incur into in order to partecipate to an international institution.

Level II Politics

At the domestic level the government will try to maximize its popularity P, in order to maximize the probability of reelection and to pursue its ideological targets (1). In order to do so it will control the policy variable X. The level of domestic popularity P will be positively correlated to X. The relation between X and P will depend _ceteris paribus_ on the degree of "social sclerosys" in Olson's (1982) sense. In a country in which there is a large number of interest groups and no "encompassing group" is present, in order to increase its popularity the government will have to increase the level of X proportionally more, as it will have to meet the demands of a large number of groups, i.e. its constituency will be less efficiently organized _ceteris paribus_.

The ideology of the ruling coalition will influence the

relation between P and X. A conservative coalition will pursue a more restrictive policy than a progressive one as its popularity will depend, _ceteris paribus_, more on lower inflation than on lower unemployment (see e.g. Minford and Peel 1982). In addition to the pressure from interest groups the level of X will be influenced by the inertial effect of bureaucracy. A larger role of state bureaucracy will require a higher level of X _ceteris paribus_.

We may assume, as it generally done in the literature, that there is a minimum level of popularity P* which the government must obtain in order to assure reelection. This implies a minimum level of X which must be obtained.

The determination of the win-set

With these very simple tools it is possible to determine the win set. In that follow we will present a graphical solution to the problem. First of all we present a graphical representation of the reputation function (R-function) and of the popularity function (P-function), see fig. 1.

The R-function links inversely R and X. The position of the R-function depends on the nature of the international regime. A more expansionary regime - i.e. one in which all countries are relatively more expansion oriented - shifts the R-function to the right as the government of the country will enjoy the same reputation vis-à-vis other governments

with a higher level of X.

The P-function links P and X directly. The position and shape of the P-function depend on the economic and social characteristics of the country. A higher degree of "social sclerosys" shifts the P-function to the left while a greater weight of bureacracy in determining inertial government expenditure makes the P-function flatter as a higher level of X will be needed to obtain the same level of P and as the efficiency of the "production of popularity" through X will be lower. In addition the more expansionary oriented is the constituency of the incumbent government the more shifted leftwards the P-function.

At level I politics the problem of the government is to maximize reputation subject to a popularity constraint, hence: max $R = R(X,E)$ sub $P \geq P*$, where E is the exogenous level of the "propernsity to expand" of the international regime. The government will therefore chose a policy X_1 which yields a level R_1 of R and a level $P*$ of P.

At level II politics the problem of the government is to maximize popularity subject to a reputation constraint hence: max $P = P(X,S,B,I)$ sub $R \geq R*$ where S is the degree of social sclerosys, B is the exogenous weight of national bureaucracy and I is the exogenous influence of government's ideology.

The government will choose a policy X_2 which yields a level P_1 of P and a level $R*$ of R.

The segment X_2-X_1 determines the win-set in Putnam's (1988) sense, i.e. the set of all values of the policy

variable X which satisfy simultaneously the constraints of both level I and level II politics. Figure 1 is built in such a way as to admit the existence of a win-set. However one may consider the case in which the win-set does not exist. Such a case is presented in figure 2. Level I politics requires that the X is not pushed above X_2 in order to satisfy the reputation constraint $R \geq R*$. However this produces a popularity level P_1 which is below the minimum level $P*$. Conversely level II politics produces a level X_1 of X yielding a level R_2 of R which does not satisfy the constraint $R \geq R*$. In such a case level I and level II politics are mutually incompatible.

Clearly the existence and the dimension of the win-set depend on the relative position of the two functions, given the values of $P*$ and $R*$. In the case presented in fig. 2 international cooperation, i.e. the partecipation of the country under scrutiny to the international regime, is impossible both because the international regime is too restrictive (the value of the parameter E, which determines the position of the R-function in the plane, is too low) and because the values of the parameters S and B are so high that they require an over-expansionary policy.

The question then arises of what can be done to achieve international cooperation, i.e. to increase the dimension of the win-set, or, as in fig. 2, to generate a win-set when it does not exist and allow, therefore, the country in question to partecipate to international institutions. This can be done into two, not mutually alternative ways. One is to

adopt an outward looking strategy aiming at the modification of the existing regime. Such a strategy would try to increase the value of E and shift the R-function to the right. This would allow for a more expansionary regime and, at the same time, to maintain a minimum level of reputation (R*), so as to secure access to the international institution.

The second alternative is to adopt an inward looking strategy aiming at modifying the domestic environment. Such a strategy would try to decrease the value of B and S in order to shift the P-function upwards as well as to make it steeper to allow for a more politically efficient policy and to achieve the minimum level of popularity P*,

The first strategy requires a government that is strong internationally, i.e. a country with enough international power to force a change in the international regime. The second strategy requires a government which is strong domestically since this is equivalent to engineering a change in the structure of preferences within the country (2). Such a strategy is likely to be implemented by a newly elected government as a change in policy preferences is facilitated by a change in government's ideology (the I parameter).

The two levels of politics influence each other. As Putnam (1988) suggests a domestically weak government may obtain substantial concession at the internatinal level as other government leaders wish to avoid a political crisis in that country. In such a case a domestically weak government

may result quite powerful at the international level (level I politics) and the win-set would be obtained by a shift to the right of the R-function (an increase in E). Alternatively a weak government may wish to use the existing international regime as a political leverage to impose a change in the domestic policy stance. This is the case in which the domestic government does not enjoy a large enough popularity surplus to impose its own ideological goals internally. In such a case it may be in the interest of domestically weak governments to adhere to an international regime, and hence increase cooperation, to enforce a change in the domestic policy stance. The win-set would then be obtained by a shift upwards of the P-function as well as an increase in its slope.

Consider now two cases in which international cooperation may be implemented, i.e. an international regime may be established and mantained. According to the approach followed in this paper international cooperation will persist as long as there is a win-set in each of the partecipating countries. One case is hegemony. Under hegemony the leading country is able, by definition, to produce a change in the international regime, a change in the value of E, so as to allow for a rightward shift in the R-function facing other countries and generate positive win-sets in each of them. The change in regime engineered by the egemon will therefore produce popularity surpluses in each of the other countries irrespective of what the other governments do (3). This provides an example of the public

good nature of the international regime. It also shows that the probability of establishing an international regime increases with the value of E., i.e. if the hegemon pursues expansionary policies.

A different case is the following. Consider a country which enjoys a rather large popularity surplus given the international regime. This is described in figure 3. The international regime determines an R-function requiring a minimum level of reputation R* and a maximum level of $X = X_2$ which is larger than the one $-X_1-$ necessary to obtain a minimum level of popularity P*. The popularity surplus is X_2-X_1. If the government is ideologically oriented towards more restrictive policies it will try to change the international regime towards a more restrictive configuration (a decrease in the value of E) by shifting the R-function to the right and producing a win-set X_3-X_1.

This is not an unrealistic case. International regimes, even those based on a leader country, need not be organized around expansionary polices.

Some of them, like the Gold Standard (De Cecco 1978) and the European Monetary System (Giavazzi and Giovannini 1988, De Cecco and Tsoukalis in Guerrieri and Padoan 1989), are organized around the provision of another public good, that of monetary stability. The possibility of establishing "restrictive" international regimes rests - as we have said - on two conditions. One is the existence of a large popularity surplus in a country whose government is, at the same time, ideologically oriented towards restriction (whose

constituency is anti-inflation biased) and powerful enough, has enough reputation (4), to force such a preference on other countries. The second one is that some less powerful and weaker country finds it convenient to adhere to such a regime in order to impose a shift in domestic preferences which would otherwise be impossible.

This second example allows to consider the case of cooperation without hegemony. As it has been suggested (Oye 1986) one of the conditions for cooperation in such a case is the possibility of changing the precerences of the actors' (countries) involved (5). We have seen that insofar as this is reflected in a shift of the P-function, this increases the win-set and hence the chances of establishing international cooperation. This also indicates that, "under anarchy", success of cooperation depends much more on the interaction betweeen international and domestic politics with respect to the hegemonic case.

International Cooperation and Structural Competitiveness

The definition of a win-set represents only a first step in the process of policy selection. Once, and if, the win-set is established the problem remains of picking one of the several policies, i.e. the values of X, that are feasible (apart the obvious case in which the win-set includes only one point). This really means that the definition of a win-set opens a degree of freedom for national policy-makers. In this paper we will assume that

such a degree of freedom will be used to pursue an additional target: economic performance, or "structural competitiveness".

Following Mistral (1983) we define structural competitiveness as the ability of a contry to obtain high rates of output growth in the international markets. An improvement of the structural competitiveness of a country requires a policy of structural adjustment, i.e. a transformation in its productive system to adapt it to the changing international environment. In our view the introduction of this new variable allows a better understanding of the process of cooperation. The aim of international cooperation is to cope with, if not to eliminate, imbalances among national economies. The debate on international cooperation (6) has focused on macroeconomic adjustment and on the coordination of monetary, fiscal and exchange rate policies. The persistence of payment imbalances among the major countries, however, suggests that the obstacles to adjustment may require more than the adoption of the appropriate macroeconomic policies. What seem to be needed is a structural adjustment of the economic systems involved and of their structural competitiveness.

Structural imbalances may of course be financed, and then persist over time, but a sound international financial system requires that debt be serviced and eventually repaid. In all cases what an international system cannot stand is a persistent accumulation of disequilibria. This has important

implications for the process of international cooperation. In such a situation an international regime will be viable and robust as long as it will allow structural adjustment policies to be implemented.

To deal with this problem in our simple framework we must consider the effects of the policy variable X on the rate of growth of the economy. The literature dealing with the effects of public expenditure on economic growth usually takes two extreme views; the effects are totally negative or totally positive. The arguments supporting the first view are: a) the increase in government expenditure crowds out private investment; b) government's policies distort the incentive system provided by the market and lower the productivity of the system; c) the public sector conducts its operations inefficiently with respect to the private one, d) the regulatory process imposes excessive burdens and costs on the economic system. Arguments in favour of the second view are: a) public investment and public support to basic R & D increase the system's overall productivity, i.e. they provide positive externalities; b) a large public sector is needed to armonize social conflicts and thus increase the system's flexibility; c) a large government is necessary to support the national industry in the international market.

In general the first view stresses the role of the market as the most efficient allocation system, while the second view stresses the behaviour of the economic system as a whole and assumes that the government provides positive

externalities on the growth performance. The available evidence is mixed (7). In this paper we make a third assumption which tries to combine elements deriving from both positions. Our hypothesis is the following. Initially the share of public expenditure to Gdp has a positive effect on growth. This effect becomes negative after reaching a maximum. Furthermore for a given level of X its effect on the rate of growth Y changes with the composition of X between T and C, where T includes all items of public expenditure which benefit directly or indirectly the industrial system (transfers to firms, R & D expenditure, etc.) and C includes all remaining items both in terms of Gdp. This highlights the distinction between governments spending on, say, salaries, which increase only popularity, and spending for investment which generates future income and higher rates of growth. In other words the governments faces a trade-off at level II politics between popularity and economic performance. This modifies the framework discussed in the previous paragraph as follows. Given the trade-off, the government either maximizes popularity given a growth (and a reputation) constraint or maximizes growth given a popularity (and a reputation) constraint. In order to see how this fits into our framework we must consider the effects of X on Y together with the effects of X on P. Once the distinction between the two components of X is made this becomes necessary as we may ssume that only the C component of X influences popularity.

The relation between X, Y and P is expressed in figure

4. In the left-hand quadrant we replicate the P-function which now is expressed as follows $P = P(X,B,I,1-\delta)$ where $= T/X$ is the share of T of X.

The right-hand quadrant present a relation between Y and X, $Y = Y(X,E,Z,\delta)$.

Ceteris paribus Y will increase with E, a more expansionary regime, with Z, a vector of variables affecting competitiveness, and with δ. The effect of X on Y will be positive up to a certain point where $Y = Y_{max}$ and negative afterwards. A given value of X, ceteris paribus will determine a value of P and Y. For a given value of X an increase in δ (T/X) will increase Y and decrease P thus producing a shift, respectively rightwards of the Y-function and upwards of the P-function.

The position of the Y-function in the plane is influenced also by the nature of the international regime. A more expansionary regime, a higher value of E, will shift the Y-function to the right is domestic growth will benefit from it. This last point is important as it introduces a crucial interdependence between domestic and international politics.

Let us now reconsider the problem discussed in the previous paragraph. First we may note that domestic politics is now split into two parts. The first one, which we will now call level IIA politics, is the problem of popularity maximization discussed above. The second one, level IIB politics, is the following: maximize the rate of growth of the national economy, given the expansion of the

international system, subject to a reputation and a popularity constraint, i.e. max $Y = Y(.)$ sub $P \geq P*$, $R \geq R*$.

An additional constraint may be introduced if we assume that there is minimum level of $Y = Y*$ below which the government is not prepared to go.

The problem so defined allows to fill a gap in the original Putnam framework, that is the choice of a policy given a win-set of feasible policies. Let's assume that, given the P and R functions, the win-set already exists (as in the case described in Fig. 1). The introduction of level IIB politics allows the policy-maker to pick one value of X - for a given δ - in the X_2-X_1 range, i.e. X^+ in figure 5. In other words one assume that the government maximizes growth given the popularity and reputation constraints.

The framework we have developed opens the way to a number of exercises and to a description of a variety of national cases. In what follows we will provide an example and in the next section we will offer a brief description of the Italian experience.

The aim of the exercise is to stress one of the basic points of this paper. International cooperation is the result of the interaction of domestic and international politics. However, this basic message contained in Putnam's (1988) seminal contributions must be specified in two ways. In the first place, as we mentioned above, an international regime, to be feasible, must allow for structural adjustment to take place. Secondly, institution building should be seen a process in which different level politics interact almost

with no discontinuity rather than a once and for all choice.

To stress this point let us consider the following example (see fig. 6).

We assume that the country under consideration takes part into an international regime and this allows for a positive win-set X_2-X_1. Given the Y-function Y_a, the policy chosen will be X_2 and the rate of growth Y_1. However the position of the Y function implies an inefficient use of public expenditure in the sense that δ, the share of the productive component in X, is too low while the value of Y is not at its satisfying level, more simply that $Y_1 < Y*$, i.e. the performance constraint is not satisfied. An improvement of this situation involves both level IIA and level IIB politics. A higher level of Y could be reached, given the Y-function, by an increase in X. However is impossible given the reputation constraint (R*), however loose. At the domestic level, an alternative would be, given the value of X, to increase δ. This would shift the Y-function to the right and the P-function upwards in the left-hand quadrant. This second shift could be counterbalanced, by the existing coalition, through a decrease of the value of B, the weight of bureautracy, or the value of S, the weight of social sclerosis, or both. However this may be quite difficult for the ruling coalition to achieve, and perhaps not really desirable since it would require a major change in domestic political equilibria. A country powerful enough internationally could try to alter the esisting regime by making it more expansionary, increase

the value of E and shift the R-function upwards. In general, however this may be even more difficult than the previous option.

At this stage the country faces two alternatives: to give up the possibility of joining the international regime (which eliminates, in our extreme example, the reputation constraint) or to adjust its level II politics. The first alternative is extremely costly in the longer term as it inhibits the country from partecipating to future international institution building. The second alternative requires a radical change in level II politics. To do so the government may use level I constraints to impose such a change on level II politics. The new domestic political situation could allow for a change in δ for a given level of X (=X_2), imposed by the respect of the reputation constraint. This would shift the Y-function in Y_b allowing for $Y_2 = Y^*$ to be reached and the P-function in P_b which still allows the popularity constraint to be satisfied.

The decision of the government to commit itself to a new international regime has therefore produced a substantial change in the domestic economic and political situation. Level I politics has influenced level II politics in both its dimensions. However the opposite causation may now emerge. The new situation has both increased the international reputation of the country and its economic performance since $Y_2 > Y_1$. This gives the government additional leverage to negotiate at level I politics for a modification of the regime. Eventually this might produce a

higher level of E, hence a movement upwards of the R-function and a movement rightwards of the Y-function leading to a higher value of Y.

The case just described is one in which international cooperation exerts a beneficial effect on domestic performance. However this need not be always the case. Suppose that the partecipation to the regime is perceived as too costly so that no domestic political change is possible, i.e. the required shift in the P and Y functions are too large. This envisages a situation of a domestically "weak" country which, however, might be in the interest of the other countries not to leave out of the institution building process. In such a case, as recalled in the previous paragraph, the loosening of the regime, i.e. a shift of the R-function upwards, might be implemented by the other countries. What these examples suggest is that international cooperation is a process of repeated interaction among economic performance (shifts in the values of Y) international regime building (shifts in the R-function) and domestic politics (shifts in the P and Y functions). This process might be cumulative if an improved international regime allows for a better economic performance and hence greater incentives to partecipate to the regime. It confirms both the view (see e.g. Keohane and Nye 1985, Pfister and Suter 1987) that international istitutions change (the R-function shifts) in response to situation of crisis within countries (the impossibility of defining a feasible set of policies) and the view (Putnam and Bayne 1984) that

international institutions ma offer leverage for changes in domestic politics.

The Italian example

The model sketched in the previous pages may provide some empirically testable hypothesis for the study of domestic and international conditions in international adjustment. At the present stage however the use of the model, which might be expressed in terms of testable equations, run against the difficulty of finding suitable data for at least one of the equations that have been considered, namely the reputation function. While both popularity functions and equations relating the rate of growth of output have been tested, more or less succesfully, it is impossible to find evidence of the international reputation of government suitable for quantitative analysis.

In the rest of this paper we will follow a different approach. We will briefly rerun the history of the italian economy over the last two decades and show that its, for many ways remarkable, achievements may be described, if not explained, by the interaction of the three levels of policy we have discussed above. Such an exercise may prove useful both for putting the proposed framework to work and for providing a hopefully useful instrument in the comparative analysis of national and international adjustment experiences.

The evolution of the italian economy since the breakdown of the Bretton Woods system may be divided into four periods (9): a) 1973-1976 the period of the oil shock, the start of the big inflationary episode and the beginning of the devaluation of the lira; b) 1977-1980 the period of state-supported expansion and growing inflation; c) 1980-1986, the EMS discipline and internal adjustment; d) 1986 to present, the challenge of financial readjustment in the face of further European integration.

In what follows we will rerun briefly each of these four episodes using the framework developed above. In brief it is possible to describe each of the four periods as being characterized by a different relative and absolute position of each of the three functions considered, and hence a different determination of the win-set and a different position of Italy in the process of international cooperation.

1973-1976: Entering the vicious circle. During this period Italy rapidly leaves the international macroeconomic regimes to which it had adhered up to that moment. In 1973 the Bretton Woods fixed exchange rate system collapses, while, after a number of unfortunate attempts, Italy also abandons the experience of joint floating, set up by the major european countries and centered around the D-mark. In 1972-73 the Italian government adopts a devaluationary strategy. In the presence of rising domestic inflation devaluation is considered the most efficient way to support

the industry's pricing policy. Firms can increase their profit margins, and hence support capital accumulation without losing export shares in the world market. While the pressures from the international environment are practically non-existent in this phase most pressures arise from domestic politics as unions are able to obtain significant wage increases. Wage settlements in the manufacturing sector lead to pay rises in other sectors, while governemnt policy is not oriented to industrial support (as this is provided by the devaluation).

This strategy initially produces a counter-cyclical behaviour of the Italian economy which is growing while other industrialized countries are slowing down. The current account deterioration which follows is suddendly and dramatically aggravated by the first oil shock. The first oil crisis pushes upwards both price inflation and currency devaluation thus making it increasingly problematic to pursue the devaluation-led support of the industrial system. As a consequence the process of industrial adjustment is choked off at its beginning. In the midst of the inflation - devaluation spiral an increase in formal indexation is agreed upon benefiting at first industry and then the entire private and public employment.

In terms of our framework (see fig. 7) level I politics is not operating, since there is no explicit regime in the international system. Hence the position of the R-fnction is such as to reflect a moderate expansion but, more importantly, no reputation constraint is operating ($R^* = 0$).

While level IIB politics is also non-important, as no industrial policy is at work (the value of δ is very low) the only true constraint comes from level IIA politics. Not only there is a positive level of P* but the increase in unions strenght in the presence of a conservative oriented government (i.e. an incoherent social structure in Garret and Lange's 1985 sense) pushes the P-function upwards from P_1P_1 to P_2P_2 thus pushing upwards the level of X with respect to the previous period in order to satisfy the popularity constraint. Clearly no win-set determination problem arises.

1977-1980: Industrial adjustment and growing public expenditure. In the following years, given a state of general depression, that had hit the international economy in 1975-76, the italian economy underwent an important adjustment process which was strongly supported by public policy. Profit margins, which had fallen dramatically in the previous period, soared thanks to a compression of factor prices. This was obtained, contrary to the experience in other countries where apparently efficient income policies were implemented, through a generous support from the government. Social contributions were shifted from industry to the budget while pensions were increased (Cipolletta 1986). As a result public expenditure over Gdp - i.e. X - increased in both its component (T and G). The percentage of industrial support measures with respect to Gdp rose from

1.4 per cent in 1976 to 7.3 per cent in 1980 (Cipolletta 1986). At the same time the wage indexation mechanism was substantially softened through an agreement with the unions and the political support of the major opposition party. The effects on the economy were remarkable. In 1978 there was a major turn-around in profitability. Industrial production which had risen by 2.1% in 1977 and by 1.8% in 1978 rose by 6.7% in 1979 and by 6.3% in 1980. This recovery was led both by an export and an investment boom (Cipolletta 1986, Giavazzi, Spaventa 1988).

The export boom was sustained both by the recovery of world demand and by the devaluation of the lira. During this period there was practically no constraint coming from the international system. To sum up the recovery was the result of a combination of devaluation (ence no external constraint) and "supply-friendly" policies. This can be described in terms of our framework as follows (see fig. 8).

The international environment was still not representing a constraint as Italy did not partecipate in an international agreement. This was the necessary condition for big devaluation to be implemented. Hence no reputation constraint was present ($R*=0$). A relatively more sustained world demand shifted the R-function slightly upwards, in R_2R_2 (E is higher). A more complex picture emerges in the domestic scene. At least initially the cost of popularity is slightly lower, thanks to the agreements with the unions (which, given the external support to the government by the Communist party, determines a "coherent" socio-political

structure). This may be interpreted in the sense of a lower value of S. Therefore since δ, the share of "productive" public expenditure remains unchanged, the P-function shifts downwards in P_3P_3 and X rises to X_3. This yelds, given X_3, a popularity surplus of P_3-P*.

The higher level of E shifts the Y-function outwards. The new position is Y_2Y_2 which, given X_3, gives a value of Y_2, which is higher than the level obtained in the previous period. Again no win-set determination problem arises since level I politics is virtually non operating in the Italian case.

1980-1986 EMS discipline and structural adjustment

In order to discuss this period one must face a preliminary question. Given the relative success of the adjustment policy followed in the second half of the previous decade why the Italian government decide to join the EMS? This story has been told many times already (9) and need not be repeated here. The decision to join the new monetary arrangements was a very contrasted one and was eventually taken after overcoming the opposition of the governor of the Bank of Italy of the time. The period was characterized by two kinds of pressures. At the domestic level the end of the external support to the government by the Communist party had again produced an "incoherent" political structure which would have probably increased the cost of popularity. At the international level the firm

drive towards the creation of a "zone of monetary stability in Europe" was perceived as a dramatic change in the international environment in the sense of an increase in policy cooperation at least at the continental level. The Italian governement feared that had Italy chosen to stay out of the agreements it would have lost the opportunity to partecipate in the now restarting process of institution building (An additional reason was that the recourse to inflationary financing of public expenditure was gradually becoming less important, Giavazzi and Spaventa 1988). This choice had of course a cost in terms of the constraints that the economy would have to face in order to gain the necessary reputation to partecipate to the agreements. The opportunity of paying such a cost was the object of the debate which took place during the previous months to the inception of the exchange rate agreements.

The first consequence of joining the EMS was that the international environment slowly but firmly turned more restrictive. This was due to the fact that the lira could not devalue as freely as before vis-à-vis the continental currencies whose markets were by far the most relevant for Italian exports. The tightening of the international regime was gradual both because the lira had entered the agreements (in march 1979) at a relatively undervalued level (being driven there by an appropriate management), and because during the first two years of its experience the exchange rate regime proved to be more flexible than expected, resembling a crawling-peg rather than a fixed exchange rate

system.

EMS discipline made itself felt starting from 1982 when the expansionary policies followed by the new left-wing french government put the system under serious danger of collapse given the external constraint it was forcing on the French governemnet and given the refusal of Germany to pursue more expansionary policies (see Sachs and Wyplosz 1986, Petit 1989). After the 1982 and 1983 realignements the system underwent a major change in its management which made it both more robust and more flexible. The French government accepted the external discipline by a radical change in its policy stance. A similar although quieter change took place in Italy.

EMS membership marked a change in the policy stance of both the domestic level (Level II politics in the "undisciplined countries" i.e. France and Italy) and of the systemic level (level I politics). At the domestic level Italian monetary authorities used EMS partecipation to put pressure on the industrial system by letting the lira appreciate in real terms (CER-IRS 1986, CER 1988) while at the same time pursuing a reputation target vis-à-vis the European partners. The possibility of putting such a pressure on the system was possible exactly because a reputation constraint was brought into the picture (10). The target of such a pressure was a change in the policy of industrial adjustment. The new stance was to force an increase in the productivity of the industrial system and trying to reverse the course of increasing public

expenditure (and debt) which had been started in the previous period while, at the same time, trying to change its composition towards more industrial support oriented policies.

The systemic level deals with the policy of cooperation which developed within the EMS. While this topic goes beyond the purpose of this paper it is useful to stress this point a bit further. The EMS has turned out to be a succesful regime because it has satistied the conditions of "cooperation under anarchy" (Oye 1986b, Axelrod and Keohane 1986). This has progressively strenghtened its structure and increased its credibility. The EMS members have engaged in repeated interactions during their meetings in the occasion of realignements and, later on, in almost daily contacts among central bank officials after the strengthening of the monetary cooperation and intervention mechanisms which were, partially, formalized at the Nyborg meeting in 1987 (CER 1988). This has progressively lengthened the time horizon of the partecipants. The members have shown to be prepared to alter their preferences in order to stabilize the agreements. Perhaps the most obvious example is France's decision to change radically her policy stance at the beginning of 1983. Other support to this idea comes from the fact that EMS membership has been "used" by some countries, like Italy, to force an adjustment on the economy. The third condition for cooperation without hegemony is the minimization of the number of actors. In this respect one may note that, while the number of countries that have so

far taken part in the exchange rate agreements is relatively large, they can be grouped into a small number of different "attitudes" vis-à-vis the EMS. Roughly speaking one may distinguish between countries that are "loyal" to the "German rule" and countries that, like France and Italy, have been less disciplines in the first phase of the agreements. Over time these differences have, however, phaded out.

For all these reasons, and others that may be advanced, the EMS has proved to be a credible institution, the membership of which required costs to be paid or, in other words, that the opportunity of "cheating" or "free riding" was ruled out as long as there was an interest in the existence of the institution itself.

The strategy which was followed to sustain industrial adjustment in this phase was two-fold. On the one hand EMS partecipation dramatically changed industrial expectations. Firms were convinced both that the disinflation process was going to be carried through and that the exchange rate policy was to follow a completely different course with respect to the past. The business community perceived that the international environment was becoming increasingly restrictive. At the same time the government continued in its policy of industrial support through subsides favouring those firms which demonstrated to undertake a policy of increasing productivity through restructuring.

Results were encouraging both in aggregate and in structural terms. The rate of growth of output, which was of

4.6% in the period 1977-80, has fallen to 0.6% in 1981-82 as a consequence of international recession and recovered to 2.6% in the period 1983.86. Over the period 1980-86 all sectors of the italian industry underwent a major restructuring which in several cases significantly increased productivity (CER 1988).

This period can be summarized in terms of our framework as follows

The major change in level I politics introduces a reputation constraint, hence $R \geq R*$. Secondly a lower value of E, a more restrictive regime, lowers the R-function into R3R3, consequently X cannot exceed X4. At the same time the Y-function shifts leftwards and moves nearer to vertical axis due to lower of E (Y'_2 Y'_2). During the same period government employees increased by 400.000 out of 535.000 total new jobs (Giavazzi and Spaventa 1988) so that there is an increase in X due to popularity reasons. At the same time the government granted subsides to those firms planning to increase productivity by reorganization. As a consequence X increases both because of level IIA and because of level IIB pressures. More importantly the relative share of X_T (i.e. δ) increases. Therefore the P-function shifts into P_4P_4 and the Y-function shifts rightwards ($Y_3 Y_3$) due to the higher value of δ. The new function is now Y_3 Y_3 which gives a value Y_3 of maximum attainable output. The movement from Y_2 to Y_3 is the result of two effects. A negative effects which is the result of the increase in international restriction

and both the increase in X to X_4, which is the maximum attainable level for overall government expenditure given the reputation constraint, and the increase in δ, the higher share of X_t on X implying a more efficient use of X. This is clearly the case in which a win-set problem arises and it is successfully solved. The win set is X_4-X_5 and it is exploited in full. The output results are less satisfactory than those obtained in the previous period but nonetheless acceptable. They are the combination of a more restrictive international regime and a larger and better use of public expenditure in support of industrial policy.

1986-?: Reputation constraint and overall adjustment

The fact that output performance in the EMS period is lower than the one obtained in the previous period might lead to the question of why should Italy have joined the european exchange rate agreements. Some of the answers have been given above. Let us just stress here, once again, that the framework we are proposing does not take <u>directly</u> into account the effects of the international regime on business behaviour. The existence of a win-set, however, puts a pressure on the policy variable. Without a constraint on X imposed by reputation the share of public expenditure on GDP would have probably risen even further, possibly more because of pressures coming from level IIA politics than from level IIB politics. This implies that EMS partecipation was used to put a pressure on both the private sector, as it

is the case of the 1980-86 experience, and on the public sector. In addition since Italy has proved to be able to satisfy a reputation constraint it had acquired the right to partecipate actively into level I politics, i.e.; in the further evolution of the european regime (11).

The present period is characterized both by the attempt of the Italian policy makers to resist to the increase in public expenditure and their active partecipation in the process of european integration. In other words the present phase is the one in which the interaction between domestic and international politics is working at the highest level if compared to the periods discussed above. Since this period is currently under way it is not possible to discuss its final configuration but merely to describe some of its likely outcomes.

Two alternative, and extreme, scenarios may be considered. One is the breakdown of the cooperation framework which leads Italy to abandon level I politics. This would probably be the result of an unsustainable pressure from level II politics leading to an increase of X, whatever its cause. An alternative scenario is the following. The international constraint is even more binding, thus shifting the R-function in R_4R_4, and thus setting the higher limit for X down to X_6. Output performance is hindered by an even more restrictive international environment (Y_4Y_4 is closer to the vertical axis) but this effect is counterbalanced by a more efficient use of X. δ is higher, hence Y_4Y_4 is pushed rightwards thus

allowing a higher output with a lower amount of X. This in turn requires a lower level for the P-function (since $1-\delta$ has decreased) (see fig. 10).

This second case reflects the current italian dilemma. The Italian economy is now completing the process of capital liberalization which is putting a strong pressure on its financial markets and on public debt management. Once this process will be completed and the European single market will also be in force, Italy will be facing, as well as other european countries, full mobility of capital and goods, and (almost) fixed exchange rates. Its partecipation into European monetary agreements will thus require that monetary autonomy will be lost in order not to violate the "law of the inconsistent quartet" (Padoan-Schioppa 1987). At that stage the process of European integration and cooperation will have made considerable steps forwards. This will put, however, a strong pressure on domestic politics such as the one described in fig. 10. One may ask, therefore, how realistic this perspective is.

These two examples clearly depict two extreme cases. Indeed in the first case level II politics completely overwhelms level I politics while the opposite happens in the second case. The most likely scenario, and indeed the most desirable, is one in which both the positions of the R-function and of the P and Y-functions are the result of a negotiation process going on at two levels, leading to a situation which is intermediate between these two extreme examples. Italy would then not only accept the constraint of

European integration but actively partecipate in its shaping.

CONCLUSIONS

In this paper we have presented a framework which develops the idea that international cooperation is the result of the interaction between two levels of politics. In the first version of the model the problem is the following. At the international level governments maximize reputation subject to a popularity constraint while at the domestic level the government maximizes popularity given a reputation constraint. While this framework allows to determine a win set it leaves open the question of the policy that will be actually followed. The framework is therefore modified as follows. At the domestic level governments face a trade off between popularity and economic performance. The policy that is actually followed must satisfy both international (reputation) and domestic (popularity) constraints and the domestic target becomes output growth. While this is not necessarily always so we have argued that this is the case of the Italian example we have discussed in the second part of the paper.
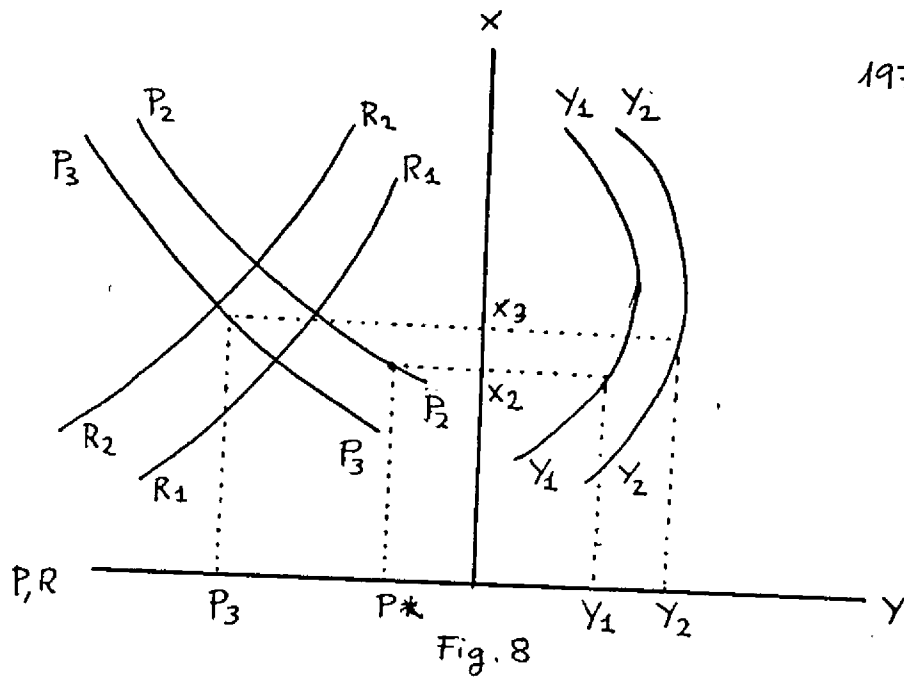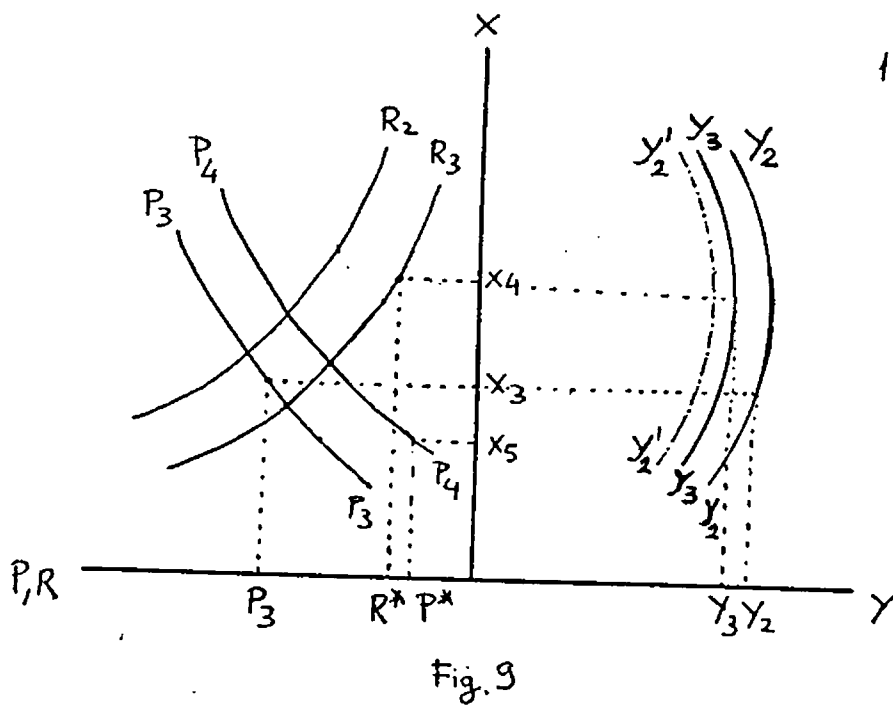
Fig. 1

Fig. 2

Fig. 3

Fig. 4

Fig. 5

Fig. 6

Fig. 7

1973-76

Fig. 8

1977-1980

Fig. 9
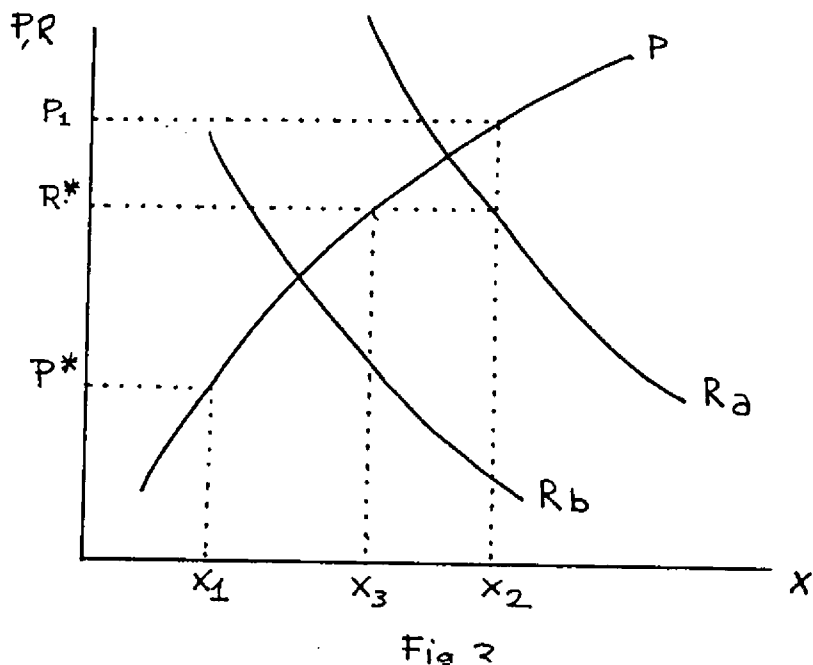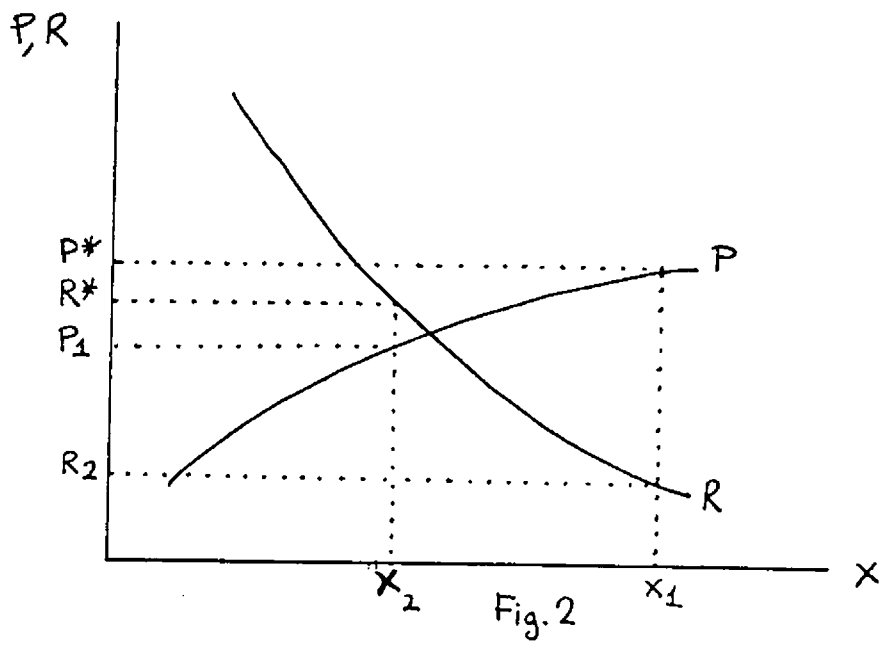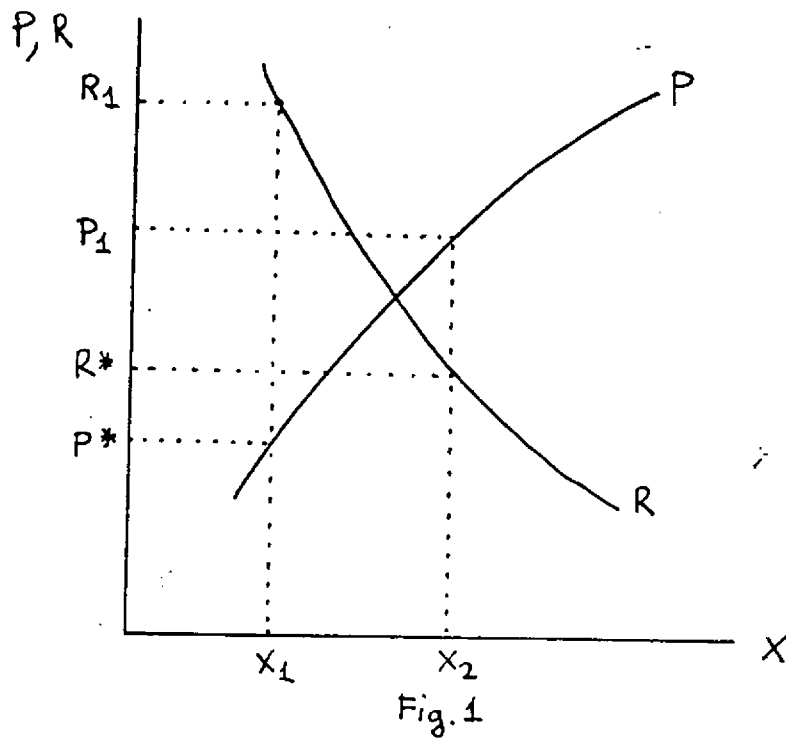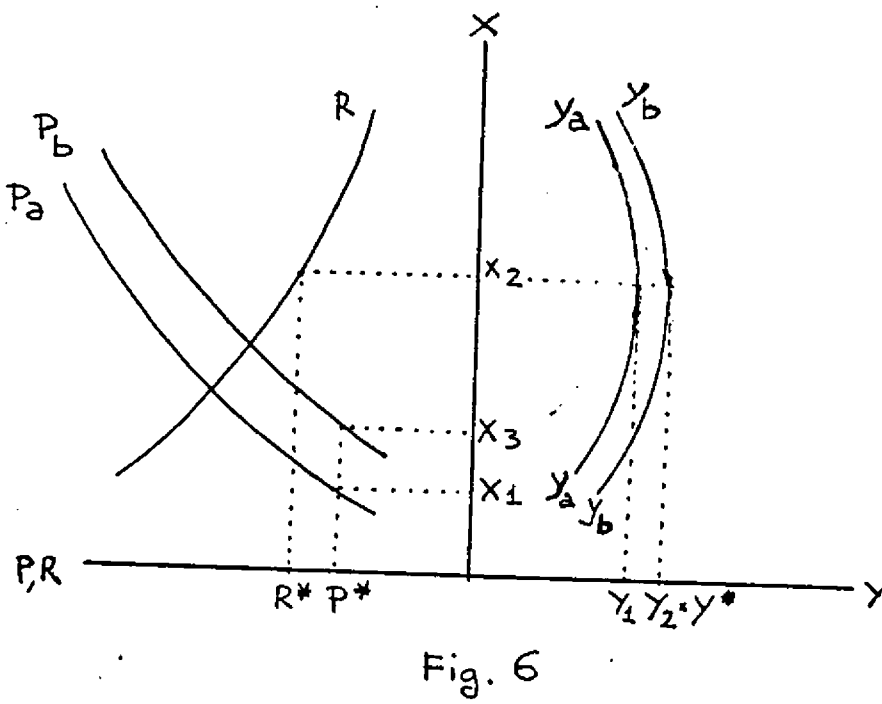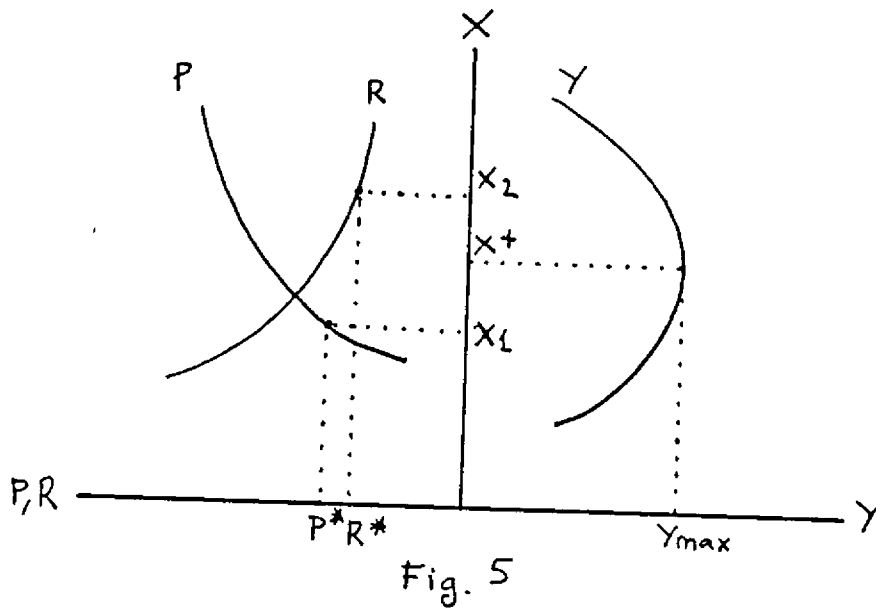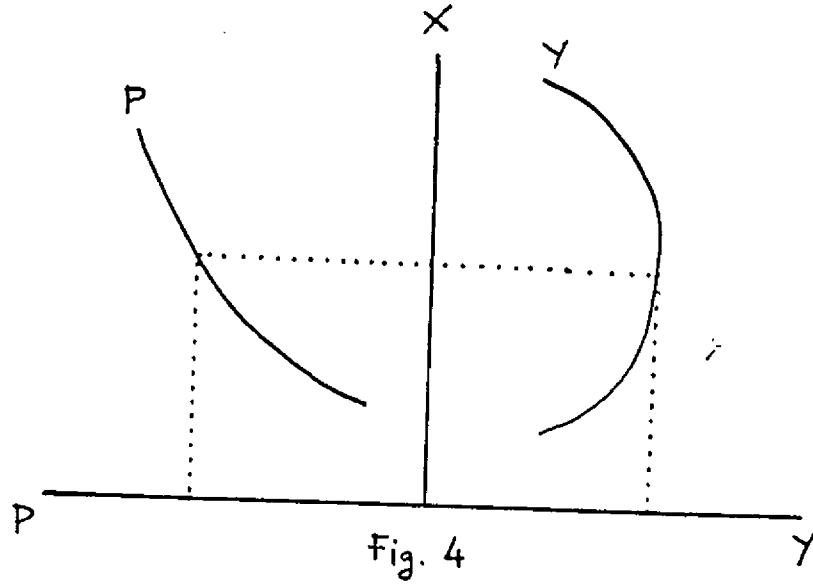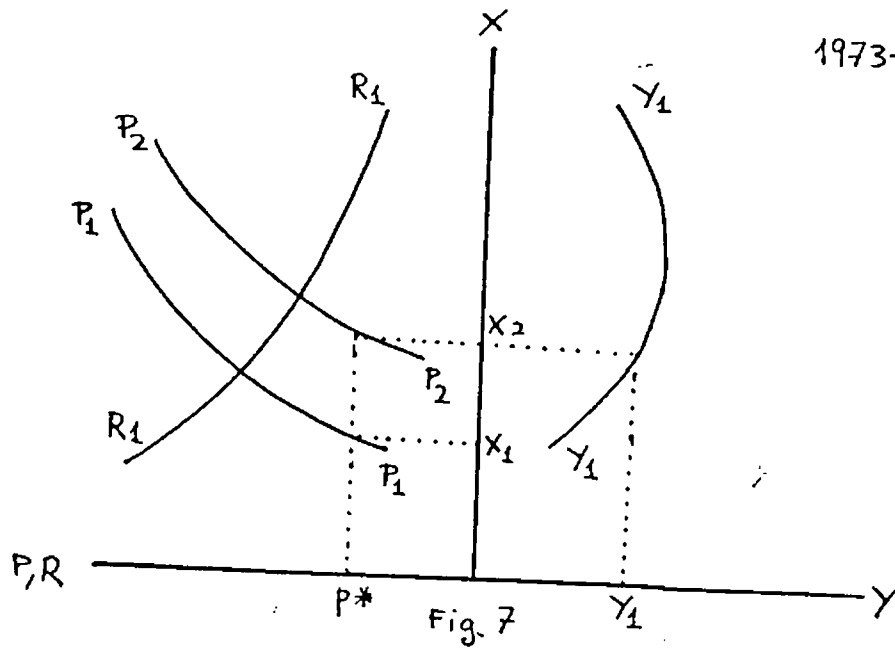
1980-1986

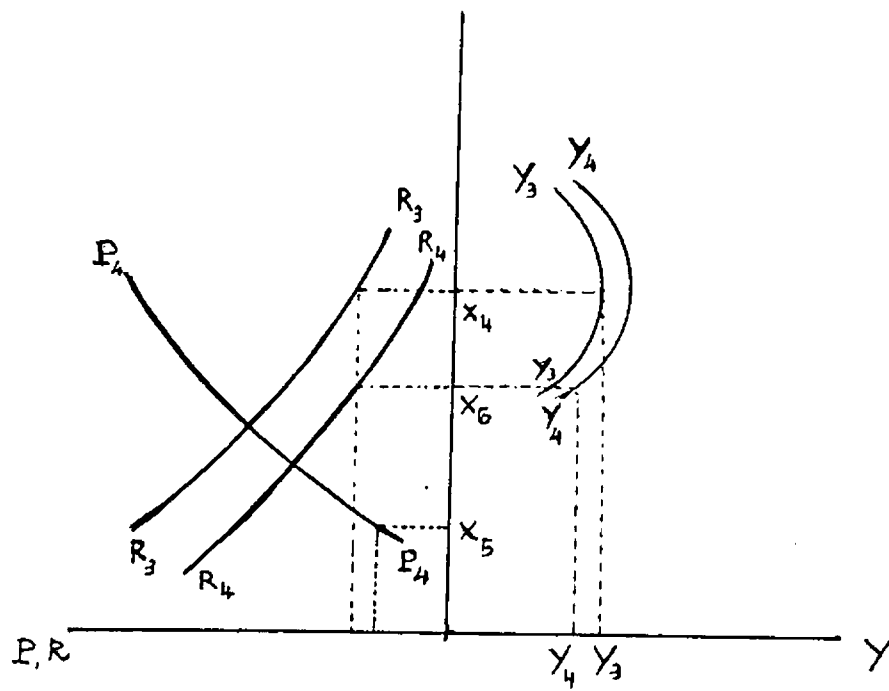Fig. 10

NOTES

(1) For a discussion of this well-known aspect see e.g. Alt, Chrystal 1983.

(2) See Guerrieri, Padoan 1989 for a discussion of the implications for the process of integration.

(3) This allows for the exploitment of an international election cycle see e.g. Thompson, Zuk 1983.

(4) This is one version of the "nominal anchor" problem.

(5) See Guerrieri, Padoan 1989 for a development of this point.

(6) A recent assessment is in Horne, Masson 1988.

(7) Arguments supporting the first view are in Tullio 1986. Arguments supporting the second view are in Ram 1986, Cameron 1978, Abramovitz 1986, Dauderstadt 1987.

(8) This part is based on Nardozzi 1980, Cipolletta 1986, Giavazzi, Spaventa 1988.

(9) See De Cecco 1989, Goodman 1989, Tsoukalis 1989 for the most recent assessments.

(10) See Giavazzi and Pagano 1988 for a theoretical analysis.

(11) This has produce, among other things, a more active Italian partecipation to the process of cooperation at more global levels such as G7 summits.

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