

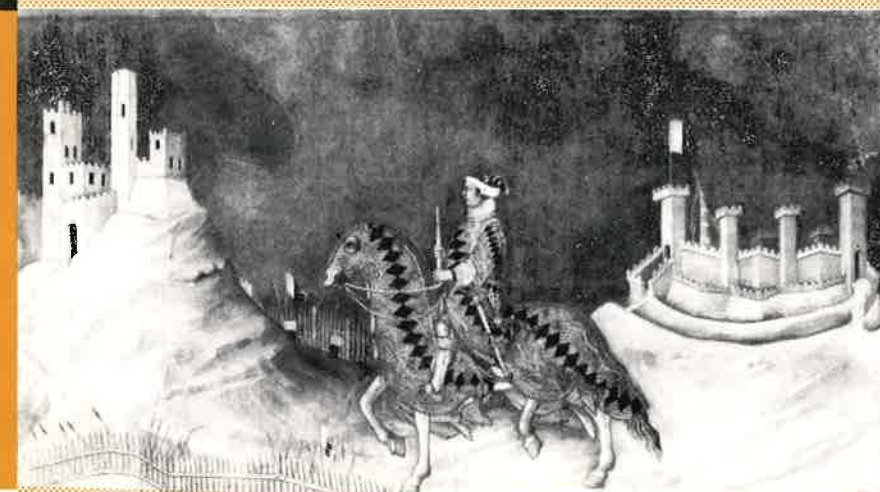
UNIVERSITÀ DEGLI STUDI DI SIENA



QUADERNI DEL DIPARTIMENTO
DI ECONOMIA POLITICA

Francesco Farina

**ITALY'S MONETARY POLICY INSIDE
THE EUROPEAN MONETARY SYSTEM**



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Francesco Farina

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Siena, giugno 1990

1. Introduction

The acceleration given by the European Community (EC) to its economic and monetary unification process calls forth a further change in monetary and foreign exchange policies. New "rules of the game" have been set up for the three phases which will lead to the establishment of a European Central Bank and to the introduction of a single currency. The implementation of these new rules, the first being the way in which the function so far performed by the Deutsche-mark (DM) as the nominal "anchor" of the exchange rate mechanism (ERM) of the European monetary system (EMS) will be taken over, will certainly affect the choice of targets and instruments by the Bank of Italy.

However, the move towards the European monetary unification (EMU) should not modify the general strategy, successfully followed by the Italian monetary authorities during the 1980s, to utilize the growing exchange rate stability brought about by the lira participation to the ERM to force a real adjustment in the economy. In fact, the 1980 switch to a tight monetary stance mainly originated from the objective to curb the inflation process which in the late 1970s - as will be argued in section two - had been worsening the performance of the Italian economy with respect to the other OECD countries.

The most difficult problem now facing the Bank of Italy is the need to reconcile the substantial degree of autonomy so far retained - in the inception phase of the EMS, through the combination of administrative controls and devaluations, and, in the "second phase", by maintaining a positive domestic-foreign interest rate differential (as described in section three and four,

respectively) - with the relinquishment of monetary independence required by the new obligations.

Insofar as the evaluation of the EMS presented in section five is agreed on, the benefits accrued to Italy from the relevant slowdown of inflation and the costs in terms of the rise in the unemployment level and in the interest payments on the public debt more or less balanced. Yet, as the final section of this paper maintains, the additional costs that the Italian economy has to pay because of the leap forward to the economic and monetary unification cannot be underrated. Structural changes such as the complete liberalization of capital markets introduced by Italy in May 1990 and the rise in competition triggered by the 1992 completion of the European market might worsen the conditions of the Italian balance of payments; and the further monetary tightening required by the convergence to a common inflation target and to irrevocably fixed exchange rates is likely to prevent the achievement of a more acceptable unemployment rate.

Besides, particularly in the case of an economy like Italy still characterized by regional and sectoral dualism, the commitment to increased policy coordination will impinge on the need to maintain the support to the backward sectors. The lost ability by the Bank of Italy to pursue its own monetary policy will also be followed by the obligation to orientate the overall policy towards the convergence to the best performers. Additional pressure will be put on the private sector to promote the needed reduction in costs of production, while the fiscal stance will be subordinated to the monetary targets, no longer just to cut off the money-financing of the public deficits but more and more to divert the budgetary policies from the traditional objective to sustain the less efficient section of the industrial system and the income levels of the less productive segments of the labour force.

2. Italian Economy's Divergence Path in the Late 1970s

In the second half of the 1970s, higher inflation rates triggered by the first oil shock caused the monetarist theory to gain considerable ground. Central Banks across the world began to believe that, contrary to the Keynesian model, the IS curve had to be considered less stable than the LM curve. Be that as it may, there is no doubt that by pegging the nominal interest rate despite higher inflation, monetary authorities had in fact forced the real interest rate to become smaller and smaller, so that the growth rate of the money supply had been left to rise, which in turn fueled inflation. Thus, the political and academic opinion turned to the conviction that monetary stability had to be ranked as the first objective if private and public sector balance sheets had to be re-equilibrated and the degree of uncertainty of economic decisions to be reduced. Accordingly, the monetarist rationale was pointed out according to which prices climbing along an almost vertical aggregate supply curve were the only durable outcome of "activist" policies. Monetary policies then began to switch from monitoring nominal interest rates to controlling the growth rate of the money supply.

Italy's economic trend of the second half of the 1970s appears to sharply diverge from this anti-inflationary turnabout. Here the political and intellectual opinion had been inclined to believe that welfare and redistribution goals should not be subordinated to the achievement of monetary stability. In the early 1970s, public expenses had increased at a permanent higher level because of welfare-oriented laws (dealing with pensions, housing, trade unions rights, etc.), and in 1975, only one year after the first oil shock, a large indexation of wages and salaries had been introduced. In the face of sharp competition triggered by soaring trade deficits across western non-oil-producing countries, the Italian industry chose to rely upon the devaluation of the currency, different forms of public transfers and the expansion of the small-size hidden sector, rather than to boost technological change and to promote the productive restructuring towards the vastly expanding markets for advanced goods. On its own side,

monetary authorities' strategy was reflecting this attitude, in that domestic monetary and foreign exchange policies were oriented to the nominal accommodation of the worsening wage rate and productivity per-hour differentials with respect to the major competing economies.

In the remainder of this section, I will discuss the poor performance of the "Domestic Total Credit" (hereafter, DTC), the intermediate target agreed on with the IMF by the Italian government since 1974, which proved itself unable to control the expansion of the money supply and the consequent rise of the inflation rate.

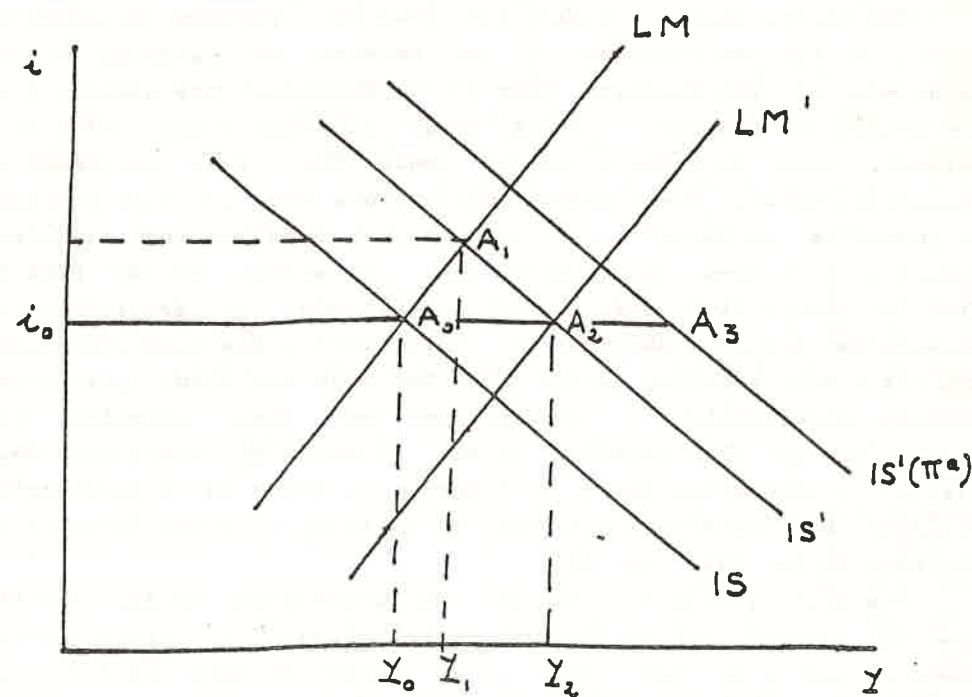
The divergence path of the Italian economy in the late 1970s can be thought of as the failure of the Bank of Italy's attempt to insulate the domestic economy from external shocks by choosing its own inflation rate in the flexible exchange rate regime. By fixing a "ceiling" in terms of DTC - public sector's total financing, plus the loans granted to the private sector by the commercial banks and by the Special Credit Institutions appointed to firms' investment financing (hereafter, SCI), plus bond purchases (see Hodgman-Resek, 1989, pp. 68-71) - the Italian monetary authorities intended to pursue a sustainable balance of payments final target. The TDC intermediate target, insofar as it was supposed to limit the domestic "absorption" by linking the demand for money stock to a tight evolution of the monetary aggregates, might appear to be inspired by the "Monetarist Approach to the Balance of Payments". Yet, the Bank of Italy has been presenting the choice of this instrument as derived from its own version of the "Portfolio Choice Model", expressly adapted to the traditional Italian financing model based on non-price credit rationing (the stock market financing is still nowadays of trifling importance to Italian firms). The lack of a direct control over the monetary base implicit in the TDC targeting would not have been remedied by stressing the indirect mechanism of substitution effects; quite the contrary, the regulation of aggregate demand and balance of payments' levels should have been mainly pursued by monitoring the

expansionary wealth effect on households' consumption demand due to the increased amount of government bonds issued to finance the budget deficit.

The theoretical rationale was thus put forward according to which, for the contribution of the balance of payments to the adjustment of the monetary base to be obtained, the stability of the demand for financial assets (high powered money, plus bank deposit, plus government bonds) would have been warranted by commercial banks. These credit institutions were in fact supposed to reshuffle in their portfolios the bank deposits and the excess supply of government bonds poured into the market by the Bank of Italy's restrictive open market operations, in order that the households' demand induced by the wealth effect had been sterilized and the credit accruing to the firms had been rationed. Due to the Italian peculiarity of interest-bearing bank deposits, the variations in the interest rates, if anything, would have been limited to commercial banks' willingness to react to a shortage of liquidity by increasing the rate of interest they pay on deposits (Caranza-Fazio, 1983, pp. 67-8).

The special role assigned to the commercial banks, for the desired smooth linkage between total financial assets and the demand level to be met, ended up in their enhanced oligopolistic position in the transmission of the liquidity from savers to both the private and the public sectors, with great detriment of the functioning of the financial market through efficient price signals. As an increasing amount of T-bills were issued in the market, for the interest rate to be kept constant a "portfolio constraint" aimed at enforcing the absorption of bonds by the commercial banks had to be introduced. The consequent fall in the real interest rate along with the upward trend of inflation brought about two unwelcome effects. The households' traditional restraint to buy government bonds was even more strengthened, because of the rise in liquidity preference. And the firms' demand for funds, which had been inflated by the soaring cost of imports and by the price-wage spiral, went up. In consequence, the outstanding credit

FIGURE 1



"ceilings" imposed to the commercial banks were not effective in restraining the working of the monetary multiplier. In fact, since the commercial banks increased the demand for Central Bank discounts and advances, and their liabilities with foreign financial institutions, the credit expansion was boosted. The ultimate reason was that the TDC target, being matched at different equally compatible proportions between financial assets and monetary base, was not providing a limit for the accommodation by the Bank of Italy of the augmented demand for monetary base, so that the acceleration in the growth rate of money supply ignited inflation to higher rates.

The inflationary escalation in the money supply growth can be sketched in graphical terms (see Figure 1) by considering the increase in aggregate demand provoked by the jump in the costs of production as a "goods market shock" which shifts the IS curve rightwards to IS' . Due to the policy of pegging the interest rate, the new IS-LM short-run equilibrium will be established at A_2 (instead of at A_1). For the LM curve to move down to LM' and intersect the IS' at A_2 , the monetary authorities have to let the money supply rise. But this monetary expansion calls forth an increase in price expectations (π^e), inasmuch as the firms' attempt to enlarge their profit margins has been anticipated. The IS curve shifts then rightwards again (to $IS(\pi^e)$) and the instability process will continue: in fact, for the new short-run equilibrium at A_3 to be reached, another increase in the money supply will be needed.

The Bank of Italy's foreign exchange policy had been oriented, after the crisis of the lira in January 1976, to manage the lira's exchange rates upwards with the U.S. dollar, to curb the imported inflation, and downwards with the DM, to boost exports. This strategy was in the short run successful in defending the competitiveness of the Italian manufactures and in sustaining the profit margins of the firms. Yet, the inflationary environment originated by the unsuccessful working of the monetary mechanism was throwing the economy into the vicious circle of price inflation

and currency depreciation, as the automatic transfer of price increases in higher nominal wages continuously annulled the real effects of the devaluation of the lira vis-à-vis the other European currencies. Even though no econometric estimate shows a clear causal relationship between the relative consumption prices (internal/foreign) and the exchange rate, a Granger-causality between the exchange rate and the price level due to expectations of future depreciations of the lira should at least have occurred.

It was then clear that the choice of a monetary mechanism based on the pegging of the nominal interest rate rendered extremely loose, despite the administrative controls, the monitoring of the growth rate of the monetary aggregates by means of the TDC intermediate target. Accordingly, the managed exchange rate policy which had been pursued after the lira had previously failed twice to take part in the "snake" (the first European initiative for an exchange rate coordination set up by the countries belonging to the so called "DM area") was jeopardized, since the real wage rigidity had been forcing the currency to bear the whole burden of the adjustment.

3. Reshaping the Monetary Mechanism at the Inception of the EMS

The switch to an anti-inflationary monetary stance announced by the Italian monetary authorities in June 1980 was presented as the necessity to "divorce" from the Treasury, that is to free the Bank of Italy from the requirement to provide unlimited financing of the public deficit. However, the monetary authorities' criticism of public deficits as the main source of instability for the Italian economy cannot be taken for granted.

Even though public expenditures had been expanded in the 1970s, the hidden taxation brought about by the inflation-induced increases of the income levels in nominal terms (the so called "fiscal drag") hugely augmented the government revenues; therefore, in the second half of the 1970s the public deficits did not exceed 10% of GNP. As for the financing of these deficits, despite the

automatic Central Bank credit extended to the Treasury (up to the limit of 14% of government expenditures) and the obligation of the Bank of Italy to act as the residual purchaser of government bonds, the Treasury's contribution to the monetary base formation was not rising, since the recourse to restrictive open market operations allowed the Bank of Italy to reduce its share of public debt to a low of 23.9% in 1979. The additional burden imposed on the bond financing was nonetheless affordable, once the shrinking effect on the Public Sector Borrowing Requirement (PSBR) of the negative real interest payments to bond-holders has been taken into account. Besides, not even a private sector "crowding out" effect could be claimed, since the cost of credit had been falling in real terms and the private firms' investment financing by the SCI had been producing a rationing effect on the credit to the public sector (due to substitution of the loans to the public sector with SCI bonds in the commercial banks' balance sheet).

Actually, the real problem was that both the monetary policy's accommodation of the profit margins' recovery and the fiscal policy's support to households income levels through public transfers were at odds with the trend towards a strengthened market efficiency that anti-inflationary policies were spreading from the U.S. and Germany to the other major Western economies. Therefore, the real adjustment of the Italian economy could no longer be postponed.

The accelerating impulse for a radical change in the monetary stance came from the two shocks that worsened an already unstable situation only a few months after the adherence to the EMS: the second oil shock (even worse than the first one) and the start of the appreciation trend of the U.S. dollar (which would last until 1985). The consequent rapid deterioration of the balance of payments (due to the soaring cost of raw material imports and to the tendency of the Italian firms to transfer more than one-half of the increases in import prices in the level of manufactures' prices) left no doubt that, given the conditions of the Italian

TABLE 1. ITALY: MONETARY BASE and M2A¹.
Annual and Quarterly² Per Cent Changes

	Nominal		Real ³				Nominal		Real	
	M.B.	M2A	M.B.	M2A			M.B.	M2A	M.B.	M2A
1979	13,8	20,6	- 3,5	3,5	1983	I	21,0	16,6	4,5	0,4
1980	13,9	12,7	-10,8	-11,7		II	18,0	16,1	3,3	1,4
1981	13,3	9,9	- 5,4	- 8,8		III	15,8	16,6	0,9	1,7
1982	13,4	16,9	- 2,3	1,2		IV	15,0	11,5	1,0	- 2,5
1983	15,0	11,5	1,0	- 2,5	1984	I	12,0	11,9	- 1,1	- 1,2
1984	14,3	11,2	6,1	3,0		II	12,1	11,3	- 1,4	- 2,2
1985	17,3	10,0	9,5	2,3		III	12,2	10,7	3,3	1,8
1986	7,1	8,1	0,2	1,2		IV	14,3	11,2	6,1	3,0
1987	10,0	6,8	4,5	1,1	1985	I	16,1	13,0	4,9	1,8
1988	8,5	4,4	2,5	- 1,6		II	16,9	13,2	6,3	2,6
1989	12,4	7,4	6,1	1,1		III	17,3	12,9	4,2	- 0,2
						IV	17,3	10,0	9,5	2,3
1979 I	13,4	20,7	- 1,8	5,6	1986	I	13,0	8,5	4,8	0,3
II	16,2	20,2	- 1,7	4,7		II	10,3	7,6	2,7	- 0,1
III	17,0	20,0	- 1,5	4,5		III	8,9	7,3	1,7	0,1
IV	13,8	20,6	- 3,5	3,5		IV	7,1	8,1	0,2	1,2
1980 I	16,4	17,4	- 4,5	- 3,5	1987	I	8,9	8,5	2,1	1,7
II	16,0	15,0	- 5,6	- 6,6		II	11,3	10,2	5,9	4,8
III	14,9	11,9	- 4,7	- 7,7		III	12,7	9,2	7,2	3,6
IV	13,6	12,7	-10,8	-11,7		IV	10,0	6,8	4,5	1,1
1981 I	16,0	12,6	- 0,9	- 4,3	1988	I	8,8	4,9	1,9	1,0
II	16,2	11,1	- 1,6	- 6,4		II	7,5	4,8	1,5	1,2
III	13,6	10,0	- 2,4	- 6,0		III	9,7	6,0	3,6	- 0,1
IV	13,3	9,9	- 5,4	- 8,8		IV	8,5	4,4	2,5	- 1,6
1982 I	10,5	8,7	- 7,3	- 9,1	1989	I	10,7	6,3	4,8	0,4
II	11,4	10,6	- 7,0	- 7,8		II	10,4	6,0	3,9	- 0,5
III	13,2	14,2	- 6,5	- 5,5		III	11,1	4,6	4,7	- 1,8
IV	13,4	16,9	- 2,3	1,2		IV	12,4	7,4	6,1	1,1

Notes:

1: The M2A definition has been introduced in 1983; previously, it coincided with the M2 definition.

2: Quarterly changes are referred to the previous years' quarter.

3: The real values have been calculated by the percentage change in the GDP deflator.

SOURCE: Bank of Italy.

economy, the depreciation of the domestic currency turned out fastly in a "J curve" effect.

Thus, the anti-inflationary strategy put forward by the Bank of Italy stems from long before the commitment to fulfil the obligations implicit in the ERM of the EMS, the reluctant approval of which resulted in the negotiation for the lira of the wider margin of $\pm 6\%$ (instead of the normal $\pm 2.25\%$) since the outset of the system. The preliminary condition to be met for the success of this strategy consisted in the enhancement of the monetary policy effectiveness by removing inefficiencies both in the financial and in the productive structures.

The first objective of the monetary authorities was to set in motion a process of commercial banks' disintermediation, through the creation of a large money market in which the monitoring of the interest rate fixed by demand and supply for funds would supersede the dominant role of commercial banks in the liquidity transmission mechanism. Their expansionary attitude towards the monetary multiplier would have been restrained by the loss of bank deposits provoked by a higher households' propensity to purchase government bonds, the increase of which as a share of the overall PSBR was equally necessary to curb the other domestic channel of monetary base expansion, the Treasury's autonomous creation.

This disintermediation process was immediately set in motion by the sharp monetary base restriction implemented from the second half of 1980 (see Table 1). In fact, the financial innovation introduced by the Bank of Italy with the creation of two types of T-bills - the short-term BOT (Ordinary Treasury Bill) in 1975, and the medium-term CCT (Treasury Credit Certificate) in 1977, the returns on which are indexed to the return on the BOT, plus a spread, so that capital loss expectations are minimized - was eventually able to foster the enlargement of the money market. Once the average nominal interest rate on the BOT was suddenly pushed up to 19.7% in 1981 (still in 1979 it was only 12.5%) causing the average real interest rate to become positive (in only eighteen months, from June 1980 to December 1981, it rose from-

4.6% to 3.6%), households started switching from bank deposits held as a "buffer" stock to the now remunerative T-bills (the degree of substitutability with bank deposits is fairly large, due to the high liquidity and low risk), so that their share of public debt soared from a low of 21.2% in 1989 to 38.3% in 1981. However, even though the intensification of the open market operations were successfully counteracting the autonomous Treasury's monetary base creation through its account at the Bank of Italy and the commercial banks' reliance on Bank of Italy's discounts and advances had been curbed by fixing the discount rate above the market rate (so that it turned out to be a "penalty rate"), the inflationary mechanism was still working (see Chart 1).

Indeed, the increased oil price and the U.S. dollar appreciation had been putting an additional burden on the manufacturing sector, whereas the wage rate indexation still triggered the price-wage spiral. Although the inflation rate had decreased from 13.0% in 1981 to 14.2% in 1983, the inflation differential with Germany, which was of 13.1 points in 1981, remained as large as 11 points, and even that with France, the other initially weak-currency and high-inflation country of the ERM, amounted to 5 points (see Table 2). In the face of the permanently sustained demand for funds by firms, the implementation of the administrative measures decided by the Interministerial Committee on Credit and Savings in December 1982 (the rise of the reserve requirement and its extension to a wider range of banking activities) was ineffective in weakening the ability of the commercial banks to expand loans to and beyond the monetary multiplier ceilings. In fact, the banking institutions were reacting to the disintermediation process in a number of ways: by obtaining liquidity from abroad; by offering new instruments bearing higher returns than the bank deposits (financial innovations such as certificates of deposit, bankers' acceptances, repurchasing agreements), by selling government bonds; and finally - but to a lesser extent, due to the non-price credit rationing-

TABLE 2

	GROSS PRODUCT (constant prices)			GROSS PRODUCT PER PERSON EMPLOYED			UNEMPLOYMENT RATE (Standardised)			CONSUMER PRICES			VOLUME OF EXPORTS			VOLUME OF IMPORTS		
	Index numbers: 1980=100			Index numbers: 1980=100			Index numbers: 1980=100			Index numbers: 1980=100			Index numbers: 1980=100			Index numbers: 1980=100		
	Fran- ce	Germa- ny	Italy	Fran- ce	Germa- ny	Italy	Fran- ce	Germa- ny	Italy	Fran- ce	Germa- ny	Italy	Fran- ce	Germa- ny	Italy	Fran- ce	Germa- ny	Italy
1979	98,4	98,6	95,9	98,1	99,7	96,6	5,9	3,2	7,6	87,9	94,9	82,5	97	104	108	94	98	97
1980	100,0	100,0	100,0	100,0	100,0	100,0	6,3	3,0	7,5	100,0	100,0	100,0	100	100	100	100	100	100
1981	101,2	100,0	101,0	101,6	100,6	100,7	7,4	4,4	8,3	113,1	106,3	117,8	104	107	105	96	95	89
1982	103,8	99,1	101,3	104,3	101,5	101,3	8,1	6,1	9,0	126,6	112,0	137,2	100	110	106	99	96	89
1983	104,5	100,9	102,4	105,8	105,1	102,2	8,3	8,0	9,8	138,6	115,7	157,3	104	109	109	98	100	89
1984	105,8	104,2	105,5	107,8	108,3	104,9	9,7	7,0	10,2	149,2	118,4	174,3	109	120	116	101	105	96
1985	107,8	106,3	108,3	110,1	109,6	107,2	10,2	7,2	10,1	157,9	121,0	190,4	112	128	124	106	110	110
1986	110,3	108,7	111,0	112,5	111,0	109,4	10,4	6,5	10,5	161,9	120,7	201,4	112	129	127	114	117	116
1987	112,5	110,6	114,3	114,4	112,0	112,8	10,5	6,3	11,2	167,2	121,0	211,0	117	132	129	124	122	127
1988	116,3	114,6	118,8	117,4	110,4	115,9	10,0	6,2	11,3	171,4	122,5	221,7	125	141	136	135	130	136
1989	120,3	119,1	122,1	119,2	114,0	115,9	9,6	5,5	10,9	177,7	126,1	236,3	136	153	148	145	140	147

SOURCE: MEI, OECD, IFS, UNMES.

by adjusting the interest paid on bank deposits to the variations of the market rates on T-bills.

On the other hand, for the reduction in the unit cost of production to take place, a longer period of time was needed by firms to achieve a faster productivity growth (through capital for labour substitution and workers' mobility) and to take back the real wage flexibility (through the relaxation of the wage indexation). Meanwhile, the weakness of the balance of payments was impinging upon the commitment to the exchange rate pegging. The lira's exchange rates had then to be renegotiated in the four revisions of the ERM parity grid implemented from 1979 to 1983 (see Table 3). Surely, according to the inflation differentials, the devaluations of the lira would have been even more frequent, if only the change of the monetary mechanism from administrative controls to the market forces would not have been slowed down (the "ceiling" on commercial banks' loans was maintained until 1983) and, most of all, the capital controls would not have discouraged speculative assaults against the currency.

The important role played by capital controls in retarding the upsurge of the realignments and in allowing the Bank of Italy to devalue the currency to a lesser extent than the inflation differentials would have required, is demonstrated by the deviations from the "covered" interest rate parity condition. The negative value, till 1983, of the difference between the interest differential¹ and the "forward discount"² (Giavazzi-Pagano, 1975) and the appearance of a positive offshore-inshore differential³ in the weeks preceding the three realignments in which the lira has been involved in the period 1980-83 (Giavazzi-Giovannini, 1983, pp. 172-9), cast light on the effectiveness of capital controls in allowing the decouplement of the Italian from foreign interest rates. These differentials prove that outflows aimed to exploit the outward arbitrage opportunities were impeded, inasmuch as the capital controls reduced the necessity for the domestic rates of return to soar, thus shielding the Italian interest rates from excessive volatility. Besides, since the external currency market

for the lira was too small to bear the whole burden of the exchange rate pressures by maintaining the offshore-inshore differential, an additional support to the lira in meeting the exchange rate tensions was provided by the Bank of Italy. Among realignments, the Italian monetary authorities often intervened intramarginally with DM held in the Euromarkets, so that Germany did not suffer any expansionary effect in its own money market. (Mastropasqua-Micossi-Rinaldi, 1988, pp. 269-74).

The slowdown of the devaluation process, however, although a useful substitute for the lack of the real wage downward adjustment, brought about a real appreciation of the lira, which squeezed firms' profit margins and put under pressure the competitiveness of the manufacturing sector. Yet, as the low unemployment cost of the deflation demonstrates (the rise of the unemployment rate measured as a percentage of the reduction obtained in the inflation differential with Germany amounted only to 1.96 in the period 1980-87) the profit cushion set up by firms during the previous years of accommodating monetary policy provided them with a sufficient amount of liquidity to face credit rationing and prevented unit costs of production still exceeding the slow productivity recovery from tipping the economy into a recession (Giavazzi-Spaventa, 1989, pp. 151-7). Eventually, the credibility of the anti-inflationary monetary stance was established and inflationary expectations started turning down as the two needed structural changes - in the financial and in the productive sector, respectively - took place nearly at the same time.

First, the discontinuity between the newly created money market and the credit market was brought to an end when the expansion of free reserves pursued by the commercial banks was at last crushed. Since a second intermediate target - M2A (the monetary aggregate closer to free reserves, as it includes the monetary base, bank deposits and the liquidity raised by banks through short term operations with the public) - was set in 1984, the monetary authorities have been able to take back a sufficient degree of control over the money supply growth (see Table 1). From

TABLE 3

	MONEY MARKET INTEREST RATES		INTEREST RATES DIFFERENTIALS	PER CENT CHANGES IN EXCHANGE RATES ⁽³⁾	UNCOVERED INTEREST DIFFERENTIAL ⁽⁴⁾
	ITALY ⁽¹⁾	GERMANY ⁽²⁾			
1980	15,9	9,5	6,4	6,7	+ 0,3
1981	19,8	12,1	7,7	10,8	+ 3,1
1982	19,3	8,9	10,4	6,7	- 3,7
1983	17,7	5,8	11,9	3,8	- 8,1
1984	15,2	5,9	9,3	5,4	- 3,9
1985	13,7	5,4	8,3	5,6	- 2,7
1986	11,4	4,6	6,8	5,1	- 1,7
1987	10,7	4,0	6,7	2,8	- 3,9
1988	11,0	4,2	6,8	- 1,6	- 8,4
1989	12,5	7,6	4,9		

Notes: (1) BOT interest rate; (2) interbank rate; (3) Per cent change in the exchange rate for the next year compared to the current year's value (4) Per cent change in exchange rates minus the interest rate differential.

SOURCE: Bank of Italy; Bundesbank

then on, they have been continuously controlling the LBN ("Net Bank Liquidity", the free reserves net of the amount drained by the Bank of Italy) by absorbing the excess liquidity through the OPCT (pronti contro termine operations, that is temporary sales to the banks of government bonds at the market interest rate on the T-bills), so that the commercial banks' liquidity has been stabilized at a constant level.

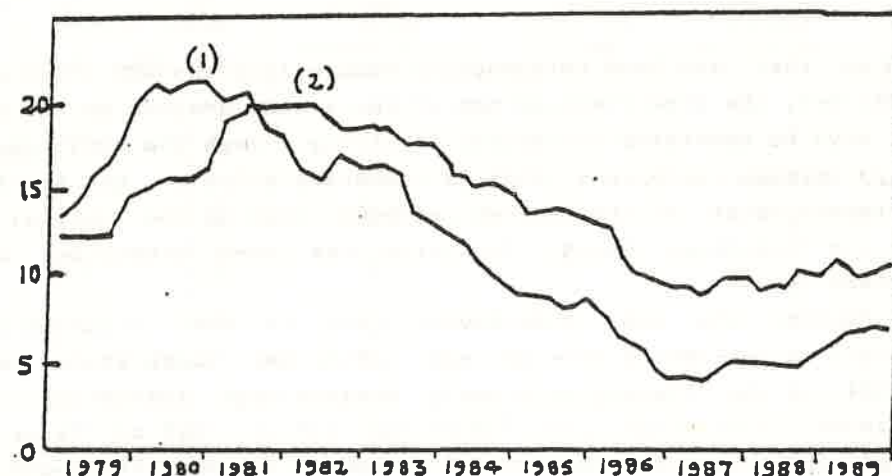
Second, the most significant fall in the inflation rate occurred in the period 1984-86, just after the tough stance taken in 1984 by the Italian government towards wage indexation. The growth of CPI decreased from 14% at the end of 1983 to 5% at the end of 1986; as well, the rate of change of the cost of labour per unit of production went down from 17.8 in the period 1981-83 to a low of 6.4 in the period 1984-88. The smaller fall registered in the cost of labour per man (from 17.6 to 9.2) indicates that the rationalization in the use of the labour force has played an important role: in fact, the rate of change of the productivity of labour, which had been negative in the first period (-0.1), shows up a positive value (+2.6) in the second one.

4. Bank of Italy's Interest Rate and Foreign Exchange Policy in the Second Phase of the EMS

Throughout the 1980s, the exchange rate of the lira appears to have overshoot its long-run equilibrium expressed by the "purchasing power parity" (hereafter, PPP). In fact, the rate of depreciation of the Italian currency with respect to the nominal "anchor" of the EMS, the DM, had continuously come short of the nominal interest differential (see Table 3); moreover, the positive mean value observed for Italy of the real interest differential - the difference between the Italian and the Eurodollar interest rates, less the difference between the Italian and the foreign inflation rates - has been mainly determined by the negative difference between the expected depreciation of the lira and the inflation rate (Frankel-Mac Arthur, 1988, p. 1111).⁴ On the theoretical

CHART 1

ITALY: Inflation Rate (1); BOT Interest Rate (2)



Source: Bank of Italy

TABLE 4

	Dates of realignments											
	24/9 1979	30/11 1979	22/3 1981	5/10 1981	22/2 1982	14/6 1982	21/3 1983	21/7 1985	7/4 1986	4/8 1986	12/1 1987	
Belgian franc	0.0	0.0	0.0	0.0	-8.5	0.0	+1.5	+2.0	+1.0	0.0	+2.0	
Danish kroner	-2.9	-4.8	0.0	0.0	-3.0	0.0	+2.5	+2.0	+1.0	0.0	0.0	
German mark	+2.0	0.0	0.0	+5.5	0.0	+4.25	+5.5	+2.0	+3.0	0.0	+3.0	
French franc	0.0	0.0	0.0	-3.0	0.0	-5.75	-2.5	+2.0	-3.0	0.0	0.0	
Irish punt	0.0	0.0	0.0	0.0	0.0	0.0	-3.5	+2.0	0.0	-8.0	0.0	
Italian lira	0.0	0.0	-6.0	-3.0	0.0	-2.75	-2.5	-6.0	0.0	0.0	0.0	
Dutch guilder	0.0	0.0	0.0	+5.5	0.0	+4.25	+3.5	+2.0	+3.0	0.0	+3.0	

Source: EC

ground, the persistence beyond the short-run of the overvaluation of the lira with respect to the "fundamentals" has to be interpreted as a lasting deviation from the PPP due to the lack of goods market integration (in other words, to the prices' stickiness). What is left to be understood, however, are the factors which have allowed the lira - in the "second phase" of the EMS, from 1975 to 1983 - to go along with its real appreciation, mainly built up during the inception phase of the EMS. Leaving out the two realignments of April 1986 and January 1987 (see Table 4), in which the DM was revaluated vis-à-vis the other ERM currencies (these revisions were partly due to the tensions transmitted inside the ERM parity grid by the U.S. dollar devaluation trend), the Italian currency has in fact gained a growing stability, even ascending in some periods in the upper side of its bilateral band.

In this section, we will maintain that the ability of the Italian monetary authorities to make limited recourse to parity revisions to cope with the remaining inflation differentials has mainly relied upon high interest rates (even though the almost continuous trade deficits have also required the periodical restoration of current account controls).⁵

The trend path followed in the 1980s by the Italian short-term interest rate, the so-called key-rate in BOT, can be split in three periods (see Table 3 and Chart 1): in 1980-83, the sharp rise due to the U-turn in the money supply control caused the Italian rates to join the German financial markets in the upward trend of the returns aimed at matching the soaring U.S. interest rates (the monetary tightening pursued by the Federal Reserve augmented the prime rate - in nominal and real terms, respectively - from 12.7 and 6.0 in 1979 to 18.8 and 10.1 in 1981); afterwards, the BOT kept rising in real terms till 1985, as its nominal value only partially registered the faster fall of the Italian inflation rate; finally, in 1986-89, the BOT rate started leading in the international money markets, until it has become, in the first half of 1990, the highest among the ERM countries both in nominal and real terms (and

second only to the British short-term rate, as far as the whole EMS is considered).

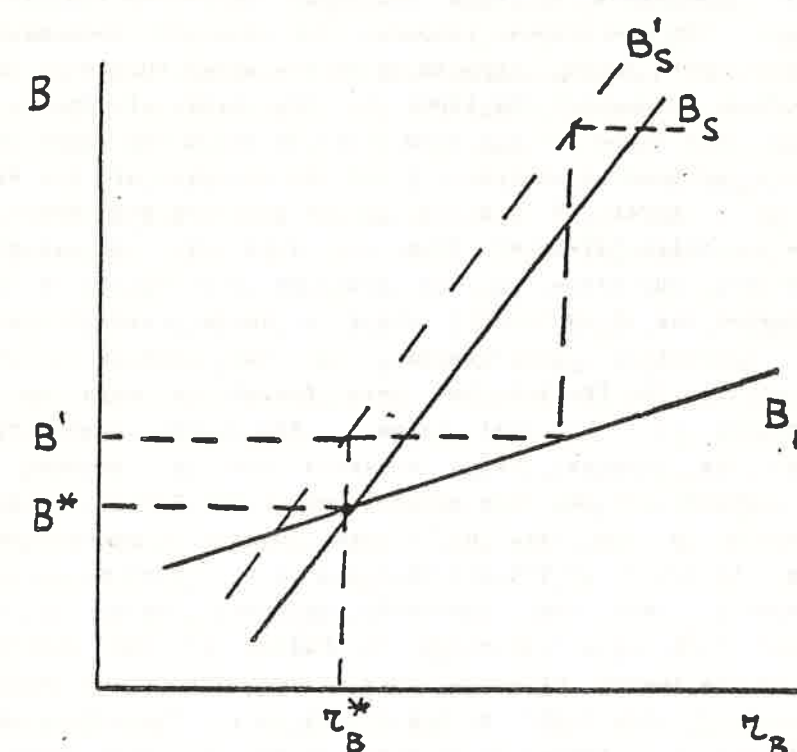
To explain this upward trend, two interpretations have been put forward: the first traces the progressive rise of the Italian interest rates to the huge accumulation of public debt; the second is based on the validity of the equilibrium condition between the domestic nominal interest rate and the foreign interest rate plus the expected change in the exchange rate - the "interest parity condition" (hereafter, IPC) - in that it asserts that the Italian rates are exogenously determined by the foreign financial markets.

As for the first interpretation, the followers of the "New Classical Approach" to the "sustainability" of high public debt have pointed out that, in order for the Italian wealth-owners to be convinced to accept in their portfolio an increasing amount of government bonds, a high "premium" against the risk of a possible debt's monetization (or even of its consolidation) has to be granted by the monetary authorities (Masera, 1987). Yet, even neglecting the circumstance that the "Sargent-Wallace condition" for the "sustainability" breakdown does not seem to be sufficiently fulfilled in the Italian case, this interpretation fails to take into account that the rise of a "risk premium" is not a sufficient motivation to explain the spread between the T-bills and the bank deposit rates which opened up since 1981. However small the interest elasticity of the demand for government bonds might have been, this differential, as large as the range from 4 to 7 points, which from then characterizes the Italian money market is at odds with the near perfect substitutability between these financial assets (Farina, 1990).

As for the second interpretation (at first put forward by Micossi-Padoa Schioppa, 1984), the view that in a "small open economy" like Italy the rate of interest is necessarily given from abroad is dismissed by the non-zero value of the IPC for most of the 1980s.

The alternative view will thus be put forward according to which the Italian high interest rates originated from the monetary

FIGURE 2



authorities' commitment to curb inflation and defend the lira's exchange rate. The continuous recourse to relevant open market sales of government bonds, through which the money supply control has been pursued throughout the 1980s by the Bank of Italy, is probably the main cause of the high level at which the short-term interest rate has been maintained. Since the presence of the Bank of Italy as a buyer of T-bills in the auctions has continued despite the so-called "divorce" from the Treasury, the negative balance between purchases in the auctions and sales in the secondary market has often brought about a large restriction in portfolios' liquidity; consequently, at the opening of the successive auction the Treasury has been forced to push up the whole structure of interest rates. The uneven upward trend followed by the interest rates suggests that a process of "financial instability" was then established in the T-bills market. As the increase in the rate of return implied a proportional increase in the amount of T-bills that has to be issued to service the outstanding (and the currently created) debt, in the bond/interest rate plan (sketched in Figure 2) the interest elasticity of the supply of bonds (B_s) turned out to be smaller than the interest elasticity of the demand (B_d). Therefore, each restrictive impulse triggered by an open market operation ends up in a multiple increase in the interest rate needed for the automatically augmented supply of bonds to be matched by the demand for bonds. In Figure 2, the upward shift of the supply curve to B'_s caused by an open market restrictive operation determines - at the equilibrium interest rate r^* - the augmented supply of bonds B'_s . But this larger amount of T-bills poured into the market could be matched by an equal demand only at a higher interest rate, thus automatically raising the supply of bonds.

Indeed, the endogenous determination of the T-bills rates by the open market operations has provided the monetary authorities with the instrument to manoeuvre the domestic and the foreign flows of the monetary base creation towards the fulfillment of the final targets of the monetary stability and of the balance of payments.

Until 1983, this instrument was mainly utilized to further the commercial banks' distintermediation. As we have seen in the third section, contrary to the interpretation in terms of the exogenous determination of the Italian interest rates, the negative value observed in the "covered" interest differential demonstrates that the capital controls were allowing the decoupling of the Italian from the foreign interest rates. Yet, this indicator turns out to be positive in the overall period 1982-87, thus suggesting that - probably starting from 1984-85 - potential arbitrage opportunities switched towards inward capital movements. One tentative explanation maintains that higher domestic rates might have been necessary to compensate foreign private investors for the risk of existing or future controls on capital outflows (Frankel-Mac Arthur, 1988, p. 1096). But this hypothesis overlooks the circumstance that the most important controls in operation until 1987 were meant to affect the commercial banks' tendency to obtain loans from abroad in the attempt to overcome the "ceiling" on the "Net Bank Liquidity" imposed by the Bank of Italy. In fact, the administrative control of the PNEAC (the Net Foreign Position of Commercial Banks) was reintroduced in 1986 and 1987 for short periods of time, and then replaced - due to capital movements' liberalization process - by the extension of the reserve requirement to the commercial banks' fund collecting in the foreign money markets.

Therefore, the view of the endogenous interest rate determination by the monetary stance gives rise to the following explanation. In the first half of the 1980s, the key-rate on T-bills reascending to positive values in real terms stimulated the households portfolios' reshuffling from bank deposits to government bonds. The consequent enlargement of the money market permitted the sharp reduction in the money financing of the public deficits and eased the introduction of the intermediate target M2A aimed at controlling the commercial banks' free reserves.

As for the second half of the decade, it can be argued that the final targets have been increasingly pursued by the Bank of

Italy retaining autonomy in the determination of the rate of interest. In Table 3, the "uncovered" interest differential between Italy and Germany (the interest differential less the subsequent rate of change of the lira-DM exchange rate) has been calculated. The sluggish percent responsiveness in the next year of the exchange rate to the average interest differential of the previous year has maintained a large positive "uncovered" differential beginning from 1982 (see Table 3).

Since the dismantling of capital controls has been accelerated after 1985, reference to restrictions to capital movements can no longer be made. Moreover, the assumption of a "forward discount" constantly larger than the expected depreciation of the lira, due to a "currency risk premium" originated by the lack of credibility of the anti-inflationary stance (as it has been claimed, among others, by Artis-Taylor, 1989, p. 203) cannot provide a satisfying explanation. True, the weakness of the trade account has perpetuated the imperfect substitutability between the lira and the DM despite the growing financial markets' interdependence. In consequence, when tensions arose inside the ERM parity grid, the uncertainty about the sustainability of the lira's exchange rates, once capital controls were progressively dismantled, suddenly went up again. However, credit facilities - like the VSTF (Very Short-Term Financing Facility), the instrument introduced by the Committee of Governors in 1987 to provide liquidity for intra-marginal interventions - have been of no relevance to the Bank of Italy's foreign exchange manoeuvre. Indeed, after the Bank of Italy's successful defence of the currency against the speculative attacks of August 1987 (following the abolition of the controls on export credits), the lira has performed as one of the strongest currencies into the EMS.

Therefore, it can be argued that only a small part of the "uncovered" interest differential between the lira and the DM has to be attributed to a "currency risk premium". More important, the rational for its existence seems to be found - more than in the lack of confidence in the Italian currency - in the Bank of Italy's

strategy of monitoring the money supply growth inside a range target, so that the tightness of the monetary policy was probably not fully anticipated and the endogenously determined interest rates proved difficult to predict.

The remaining part of "uncovered" interest differential can instead be directly explained by the monetary mechanism employed by the Bank of Italy. In 1985-89, by continuing the upward manipulation of the rate of interest through open market operations, the monetary authorities have achieved the goal of attracting more and more capital inflows (see Table 5), which helped to compensate the trade deficits periodically created by the loss of competitiveness of the Italian exports due to the real appreciation of the lira.

The artificial maintenance of the wide "wedge" between the Italian and the foreign interest rates has changed the balance between banking and non-banking capital movements. Since 1987, as Table 5 shows, not only the credit obtained by commercial banks in the international financial markets (Banking Capitals) but more and more the arrival of foreign private investments - loans to Italian private and public-owned companies and, more recently, investments in financial assets (mainly, purchases of government bonds) - have triggered the continuous increase of the external channel of monetary base creation (see Table 6).

The amount of capital inflows has often been larger than the gap to be filled in the trade account. The monetary authorities have usually complied with the commitment implicit in the ERM to absorb the excess supply of foreign currencies, to the extent that in some periods the appreciation of the lira has been impeded by sustaining the DM with the consequent accumulation of the base-currency of the EMS in the international reserves of the Bank of Italy. At the same time, they have sterilized the additional creation of monetary base by proportionally draining from the domestic channels, so that the money supply growth were rigorously controlled and the domestic-foreign interest differential were not affected. However, in order to signal the strength of the Italian

TABLE 5

ITALY: CAPITAL MOVEMENTS (Balance)
(billions of liras)

	Banking Capitals	Direct Investments	Investment in financial assets	Private Loans	Public Loans	Other non-ban- king Ca- pitals	Total
1980	6.932	- 145	- 793	2.050	3.081	-1.691	9.434
1981	-1.521	- 310	- 460	6.440	5.045	510	9.704
1982	-3.062	- 567	- 509	4.705	3.204	-1.899	1.872
1983	4.996	-1.418	353	411	2.789	- 522	6.609
1984	5.138	-1.199	173	-2.055	4.465	-1.321	5.201
1985	-5.299	-1.430	717	351	4.392	2.162	893
1986	6.454	-3.987	-1.555	109	2.733	-1.515	2.239
1987	5.573	2.341	-9.618	5.169	5.788	2.850	12.103
1988	10.224	1.729	430	6.045	2.869	340	21.637
1989	14.979	63	4.750	16.842	1.303	-2.620	35.317

SOURCE: Bank of Italy

TABLE 6

ITALY: MONETARY BASE CREATION
(Variations; billions of liras)

	Foreign	Treasury			Advances to the Commercial Banks	Other factors	Total
		PSBR	Non-money financing	Total			
1980	708	37.018	27.278	9.740	-2.576	-3	7.869
1981	25	53.293	39.060	14.233	119	-5.738	8.639
1982	- 5.647	72.799	60.123	12.676	638	2.669	10.336
1983	8.840	88.260	83.746	4.514	-3	-747	12.604
1984	5.141	95.695	85.668	10.027	-218	-1.103	13.847
1985	-13.677	122.613	95.094	27.519	5.880	-646	19.076
1986	3.543	110.159	99.165	10.994	-4.334	-1.003	9.200
1987	6.756	114.250	105.078	9.172	-729	-1.253	13.946
1988	10.947	125.643	122.895	2.748	-30	-708	12.957
1989	14.971	133.798	127.416	6.382	1.203	-2.019	20.537

SOURCE: Bank of Italy

currency and smooth the transition to the complete deregulation of the capital market, the Bank of Italy has sometimes avoided accommodating the excess demand for liras, thus letting the currency appreciate in the upper side of its bilateral band (as long as the competitiveness of the Italian exports were not exceedingly deteriorated). The alternation of these two manouvres - the sterilization of excessive increases in the monetary base caused by the capital inflows, and the non-accommodation of excess demand for liras - have permitted the monetary authorities to limit the growth of M2A within the programmed range target (6 - 9 per cent), also making recourse to negative per cent variations in real terms as occurred in all quarters of 1988 and in two quarters of 1989 (see Table 1).

5. The Impact of the EMS on Italy's Macroeconomic Performance

After the stagnation suffered in the inception phase of the EMS (1979-84), Italy's GNP growth recovered during the "second phase" at annual rates above 3% in real terms; meanwhile, the inflation rate kept falling, oscillating between 5% and 6% in the last years with a differential with Germany and France scarcely exceeding 3 points (see Chart 2). Yet, the trend of a number of important variables is still worrying. Whereas the productivity growth has smoothly improved, the renewed acceleration in the productive investment growth rate has not proved sufficient to absorb at least part of the high level to which the unemployment rate climbed since 1982-83.

As for the trade account, the recent improvement in the Italian share of world trade cannot be taken as a long-run trend. Italy's high propensity to import, in the presence of a recovering domestic demand, has prevented the favorable circumstances arisen on the price side in 1985-86 - such as the U.S. dollar devaluation trend and the oil counter-shock - from slowing down the expansion of the value of imports. On the other hand, exports started rising again only in 1988, with increases limited to the traditional

consumption goods (the penetration of which in the OECD markets is probably doomed to be hampered by the LDC soaring competition), whereas the ability of the Italian "science based" sectors to withstand the non-price competition that takes place in the "high-tech" goods markets has widened (the "high-tech" goods/overall manufactured goods ratio of the Italian exports is presently one of the lowest in Europe at 7.8%).

Besides, the autonomy retained by the Bank of Italy in manipulating the interest rate, while motivated by the goals to sustain the currency and the balance of payments, was related to so stringent a monetary range target that the subsequent T-bills rate increases caused the debt service to reach three-quarters of the overall public deficit. Thus, the public debt now amounts almost to the 100% of the GNP and the ratio Public Deficit/GNP still exceeds 10%, despite repeated cuts in public expenditures.

The evidence about the Italian economy is therefore mixed: Italy's performance is slightly better than the French one as far as the GNP growth rate is concerned, but is much less satisfying with regard to the unemployment rate and the Public Debt/GNP ratio, because of the larger convergence of the French economy to Germany's figures (see Table 2).

It is hard to disentangle the direct influence of the EMS on the Italian macroeconomic trend of the 1980s, even more difficult to assess how much of the lower inflation, GNP recovery and exchange rate stability may be considered as benefits accruing by means of the EMS, and how much of the rise in the unemployment rate and of the exploding "secondary" deficit are costs to be attributed to it. To answer these questions, the issue of the "nature" of the agreement has to be tackled, since Italy represents, along with France, one of the two initially high-inflation and weak-currency large countries of the ERM of the EMS, interplaying with the centre country of the system and the small economies belonging to the "DM area".

The EMS has been alternatively evaluated, by means of game theory applications, as a case of exchange rate cooperation or as a

case of "monetary discipline" (that is, the choice of trading away monetary sovereignty to the Bundesbank, to take advantage of its unquestioned anti-inflationary reputation). Whatever model - of cooperation or of bargaining - is chosen, game theory seems unable to outline a comprehensive vision of the EMS, as its applications are not sufficiently flexible to accommodate the structural dynamics and the changing features experienced by the system. During the decade of functioning, the EMS has in fact evolved from the attempt to set up a coordinated response of the European currencies to the U.S. dollar fluctuations (which fits with the "cooperation" view) to a bargaining mechanism ending up in a growing monetary stability through the convergence of the ERM non-German countries to the best performer, Germany (thus, if this outcome were the only element to be taken into account, the "monetary discipline" view would appear the appropriate characterization).

Actually, this last interpretation seems to go too far, in that it claims that Italy's (and France's) monetary stability is the direct result of the two feed-back effects provided by the participation to the ERM of the EMS: the adjustment mechanism embodied in the rules of the game; the reversal of inflation expectations triggered by the "pre-commitment" to the German monetary stance.

As for the first, the Bank of Italy's reliance in the first phase of the EMS on devaluations and internal (credit market) as well as external (capital market) controls shows that no binding regulations (like the policy of coordination which previously shaped the functioning of the "snake") were imposed on the high-inflation countries; as for the second, the commitment to keep the lira fixed to the DM, as the nominal "anchor" of the system, should not have given the Bank of Italy a greater credibility than the monetary authorities got in 1980 after the announcement to stand firm in their monetary stance aimed at curbing the domestic channels of money supply creation. From a different perspective, the same conclusion will be drawn by arguing that the exchange rate

pegging is not a superior anti-inflationary strategy with respect to the monetary targeting (Giavazzi-Giovannini, 1989, pp. 101-4).

It can thus be reaffirmed that the Bank of Italy's anti-inflationary strategy was successful because the monetary authorities put the real wage rigidity under the pressure of the deterioration of the competitiveness caused by delayed and less than PPP-restoring devaluations, and struggled to regain the control over the monetary multiplier. In fact, the reversal of price expectations and the trend towards monetary stability started since two major changes - the revision of the wage indexation and the recovered effectiveness of the monetary policy - demonstrated that the monetary authorities were finally able to force the productive and the financial systems to deflate the economy.

Thus, the real question to be answered consists in the evaluation of the EMS impact on the adjustment strategy decided by the Italian monetary authorities. In other terms, costs such as the slower growth and the rise in the interest rates to a detrimental level may have been provoked by the "asymmetric" functioning of the EMS calling forth an implementation of the monetary tightening sharper than that autonomously planned by the Bank of Italy.

As is well known, the "divergency indicator" designated to single out the divergent currency on which to impose the burden of the adjustment has never been utilized and Germany has never intervened at the margin to defend the parity grid of the system (even though, in case of tensions between two currencies, both the Central Banks should have carried out marginal interventions in the currency at the opposite bilateral limit). In consequence, in all the realignments except the 1987 one, the other currencies have been required to devalue vis-à-vis the DM. The co-ordination mechanism turned then out so "asymmetric" that the obligations of the EMS drifted towards the need to keep pace with Germany. Whereas the "monetary discipline" view is not suited to tackle this issue, because it doesn't provide a reason for Germany's dominant role, for the EMS impact on Italy's unemployment and interest rates

to be separated out Germany's national interests have to be briefly examined.

Actually, just opposite to the "monetary discipline" view, Germany seems to gain from the EMS even more than the other countries. Germany's export-led growth has been boosted by the DM real devaluation, following Italy's and France's tendency not to devalue in nominal terms as much as their inflation differentials would have required. The consequent trade unbalances with the other EMS countries and the high interest rates produced by the monetary stance allowed its highly integrated corporate and banking system to benefit from growing capital inflows, and the Bundesbank to politically manage - by virtue of the foreign reserves' accumulation - the consolidation of the role of the DM as the core-currency of the rising European "monetary area".

The independence retained by Germany in dictating the monetary stance for the whole EMS has been questioned on the grounds that the restrictive monetary policy enables Germany to sustain a non-inflationary growth through trade surpluses and capital drains at the expense of the growth rates of the other EMS countries (De Cecco, 1989, pp. 92-6). From this, the evaluation of the EMS as a case of "oligopolistic interdependence" (Guerrieri-Padoan, 1989, p. 12), in that the hegemonic status of Germany is not supported either by a demand-pull function (like that the U.S.A. performed by means of their structural deficit in the Bretton Woods system) or by a financial role (Germany's "universal" banks and institutional intermediaries are far from being financial centres generating liquidity for the other EMS countries).

From this viewpoint, however valuable, does not follow that the performance of the Italian economy has been worsened by the German strategy to strengthen its leadership in the EMS. As for the trade account, it is true that the Italian trade imbalances with Germany turned out to be sustainable also by means of the external circumstances that helped the rearrangement of the trade account. The rise in the U.S. growth rate and the U.S. dollar appreciation until 1985 were of great importance especially to

Italian exports: Italy, among the ERM countries, has in fact the highest expenditure elasticities and is the only economy with a larger export responsiveness to changes in price competitiveness with the non-ERM OECD countries than with the ERM ones (Vona-Bini Smaghi, 1988, p. 151). Yet, during the inception phase of the EMS, a faster GNP growth would have certainly been incompatible with the goals to put an end to wage stickiness and to counteract the deterioration of the terms of trade; and it remains doubtful that, in the "second phase", the Bank of Italy would have welcomed a larger demand for Italian exports once in 1986-87 the impact on imports of the domestic demand recovery suddenly blocked the decline in the inflation rate.

As for the exchange rate misalignments leading to durable deviations from the PPP, it is worth emphasizing that during the first difficult years the Italian monetary authorities decided not to opt out but instead to resist the devaluation pressures by procrastinating the internal and the external controls, and that subsequently they engaged in the policy to artificially maintain the positive large "wedge" between domestic and foreign interest rates (despite the shrinking inflation differentials and the growing lira's exchange rate stability). These choices suggest that the real appreciation of the lira along with the real depreciation of the DM (and of the Dutch guilder and the Belgian franc) was part of the Bank of Italy's overall strategy more than the unavoidable outcome of a "deflationary bias" transmitted to the EMS by the German monetary stance.

Therefore, however the sluggish German demand growth has impinged upon the Italian trade balance (which deteriorates, following a 1% reduction in the level of German domestic aggregate demand, as much as if a 6% devaluation of the lira would have occurred; Bini Smaghi-Vona, 1988, p. 307), and however unequally distributed the burden of the adjustment have been in occasion of the realignments (with the consequent overall loss of competitiveness amounting to 12% with respect to Germany), the existence of an additional cost inflicted by the EMS participation

to the Italian deflationary process seems to be excluded. The Bank of Italy has in fact firmly believed that a currency overvalued in real terms and the maintenance of large domestic-foreign interest differentials were the conditions required for a sustainable balance of payments and a stable - even though slower - growth; while higher employment and welfare levels could not have lasted beyond the very short-run, since an inflationary environment and a run on the currency would have soon followed.

Instead, looking at the evolution of the EMS towards an area of monetary stability and of virtually fixed exchange rates (and at the insulation provided against the tensions between the DM and the other ERM countries inherent to the U.S. dollar fluctuations), Italy as well as all the other ERM countries have probably benefited from having their monetary policies framed inside the agreement. In the absence of the EMS, a disruptive competition would have probably arisen among the European countries, each of them simultaneously trying to impose its own monetary tightening at the expense of the others. It is not surprising that a non-cooperative game between Germany and a weak-currency country like Italy or France ends up in a competitive deflation, with losses in output much larger than in the case of cooperative agreement or of bargaining with Germany dictating the monetary policy (Collins, 1988, pp. 119-23; the inefficiency of a non-cooperative free-floating among the European currencies has been also demonstrated by Begg-Wyplosz, 1987, pp. 201-31).

The "asymmetric" functioning of the ERM of the EMS then appears the obvious outcome of a sort of positive-sum bargaining game between unequal players. The strengthening of its oligopolistic position inside Europe pursued by Germany has certainly been facilitated by the rise in exports due to Italy's and France's strategy to peg their exchange rates to the DM. But this advantage was to a large extent the by-product of the inescapable necessity for these weaker large countries to curb the internal sources of inflation through a real appreciation. As previously argued, the lessened growth of the ERM countries in the

1980s was not the cost imposed by the dominant economy's monetary and fiscal stance but mainly the consequence of their own choice to work monetary stability as the first priority. Once Italy (and later France) decided to undertake a tough disinflationary process in order to keep pace with the faster rise of market efficiency in the 1980s, the "asymmetric" functioning of the EMS proved to be functional to this objective, beginning with the much lower degree of uncertainty provided by the exchange rate stability which in turn helped the achievement of monetary stability. Besides, the risk taken by the centre-country of the EMS because of the autonomous choice of instruments and targets by the other participants cannot be overlooked. In fact, the comparison between a game in which Italy commits its money supply to fixing the exchange rate with Germany and a game in which Italy takes the exchange rate as an instrument with no commitment to any exchange rate target, shows that in the second case an anti-inflationary money supply targeting pursued by Germany results to be completely undermined (Canzonieri-Henderson, 1988, pp. 115-21).

From this viewpoint, it can be better evaluated why the "redundancy problem" typical of this as well as of every "fixed" exchange rate regime (all but one country must peg their exchange rates to the ECU) have been solved by singling out the DM as the core-currency. For the function of "nominal anchor" to be performed, the privilege has been granted to the DM nominally not to move its ECU parity in the occasion of realignments, and the faculty to the Bundesbank not to let its monetary stance to be affected by the expansionary effects following its interventions in sustaining the weak currencies or the other countries' increasing use of the DM for reserve holdings and interventions. The leadership obtained inside the EMS has then allowed the German monetary authority to continuously intervene in U.S. dollars in order to defend the DM parity, while intramarginal interventions in liras or in other ERM currencies have been rarely carried on, and always promptly sterilized by open market operations (Russo-Tullio, 1988, pp. 310-7).

If it is agreed that this "asymmetric" functioning of the EMS has not been considered by the Italian monetary authorities as a constraint to their monetary manoeuvre but the counterpart of the pegging of the exchange rate to the DM, the following conclusion is reached. The most relevant support that the EMS "framework" has provided to Italy's disinflationary process consisted in the "public good" of the monetary stability, more than in the "import" by the Bank of Italy of the Bundesbank's reputation.

6. Italy's Monetary Policy and the European Economic and Monetary Unification

As seen in section four, the management of money supply and foreign exchange by the Bank of Italy during the last years of the past decade has been well-suited to cope with the remaining divergences of the Italian economy. Indeed, the stability showed by the lira in the first half of 1990, despite the currency joining in January the narrow bilateral band and the capital markets have been finally liberalized in May, indicates that the transition to full-fledged competition has neither affected exchange rate expectations, nor has it put additional pressure on the balance of payments. The larger influences that capital movements will then be allowed to exert could instead impose more constraints on the Bank of Italy's manoeuvre during Phase One of the EMU, starting July 1, 1990. The main objective of the first step towards monetary integration is to implement policy coordination. The harmonization of national economic policies is supposed to promote the stabilization process which should lead to irrevocably fixed exchange rates at the end of Phase Two, thus smoothing the path to the introduction of the common currency later on in Phase Three.

Yet, the view that policy coordination cannot be considered a sufficient condition for fixed exchange rates and full capital mobility to coexist has gained growing acceptance following the experience of the EMS decade (De Grauwe, 1989, p. 199-200). Sudden transfers of speculation capitals across financial markets,

triggered by external shocks to the EMS and lasting inflation differentials, might in fact provoke an upward trend in interest rates if Central Banks would try to attract capitals by opening interest differentials, in the attempt to defend their currencies' exchange rates. For instability processes of this kind to be impeded, policy coordination is expected to establish and preserve the IPC.

Actually, the tendency of the Italian firms to augment the foreign contribution to the monetary base creation by financing abroad their investment projects (to take advantage of the lower interest rates) and the recent abolition of residual restrictions limiting foreign operations by private individuals already persuaded the Bank of Italy to reduce the manipulation of interest rates. But the agreed commitment to allow capital movements, since Phase One, to perform the role of re-equilibrating interest rates across the European financial markets will deprive the Italian monetary authorities of the instrument of sterilization of capital inflows, which has so far permitted the maintenance of the positive domestic-foreign interest differential. The whole burden of the adjustment should then be borne by the trade account, so that the full convergence of the Italian inflation rate will become the inescapable condition for the targets of a sustainable balance of payments and of a stable currency to be fulfilled.

While it is clear that policy coordination will narrow the scope for the national monetary manoeuvres, in particular in the case of Italy that has so far made the most of the residual autonomy retained in the management of money supply and foreign exchange, it is less clear how the convergence process could be followed by single countries without the fixing of common targets by a Central authority.

Therefore, the commitment to an "anchor" for inflation and exchange rates is still needed in the inception phases of the EMU, and policy coordination has instead to be thought of as a set of coherent adjustment policies aimed at backing and giving credibility to this commitment. Phase One of the EMU will then

naturally call forth the implementation of a common monetary policy, which is likely to set as a target the lowest common inflation rate and to dictate a monetary rule for each Central Bank (the more restrictive the higher is the country's inflation rate). This need for a rapid transfer to a central authority of the role played by Germany to provide the EMS with an anti-inflationary monetary stance is confirmed by the decision to move the first step on the path towards the creation of a single Central Bank (the so-called "Eurofed"): the establishment of the European System of Central banks (ESCB), in the Council of which all the Governors will seat, in order to determine more compulsory monetary and fiscal rules and to insert these obligations in the new Treaty of the EC.

There is then no doubt that Phase One of the EMU is doomed to maintain the "asymmetric" functioning of the EMS, insofar as the common monetary policy will take over the Bundesbank's rigorous stance and will be oriented to force the convergence to the best performer.

Thus being the theoretical and institutional framework of the EMU process so being, the firm conviction held by the Italian monetary authorities that the high level of the PSBR might destabilize Italy's convergence process has to be supported. As for the expansionary impact of the public deficit on the monetary base, although the "seignorage" imposed on the private sector has been reduced by the anti-inflationary stance followed throughout the 1980s, the abolition of the Treasury's automatic money-financing proposed by the Italian monetary authorities is legitimate. Instead, the view maintained by the Bank of Italy that the only viable measure to deal with the huge "secondary" deficit caused by the policy of high interest rates consists in the strategy to bring the primary deficit back to a surplus should be evaluated taking also into account the long term policy objective of the re-equilibration of the regional and welfare disparities.

True, arguments proving that the interest payments on the public debt can hardly be reduced are easy to put forward. Although

the availability of credit facilities (at least till the Central Banks' reserves will be put together on the way to the creation of the "Eurofed") has been conceived as an alternative to increases in the interest rates to cope with periods of weakness of the currencies, a larger volatility of the Italian short-term rates is likely to be expected once the IPC will be established in the European markets as a medium term equilibrium level. In fact, the Bank of Italy's design to lengthen the average life of the public debt has been set just for the goal of removing the obstacle to the short-term manoeuvres of the interest rates represented by the massive amount of T-bills floating in the market. But the accomplishment of this objective might take time, considering that the advantage of declining inflation expectations will be annulled by the high level to which the monetary tightening and the economic integration of the two Germany is likely to maintain the interest rates in the European financial markets. Therefore, the secondary deficit is supposed to be a potential source of financial instability, insofar as the management of the stock of public debt and of the new issues could undermine the implementation of quick responses of the Italian rates to sudden speculative transfers of short-term capital. The planned budgetary surplus will provide little relief to this problem, at least in the short-run.

For this problem to be dealt with, reference can be made to the important function of smoothing the working of the financial markets performed by the institutional intermediaries in most of the EMS countries. A similar role could be played in Italy by the commercial banks, in the case their participation to the subscription of government bonds were newly promoted by the monetary authorities.

This correction of the monetary mechanism could take place in favourable circumstances. In fact, the integration process among the EMS capital markets calls forth the downward adjustment to the European standards of the reserve requirement imposed on the banks and of the taxation on bank deposits, that is expected to enhance the competitiveness of the Italian banking sector. Consequently,

the positive differential between the T-bills rate and the bank deposit rate which has characterised the Italian financial market in the 1980s should widen, as the bank deposit rate is likely to decrease. The monetary authorities could then more widely manage this differential in order to stimulate the commercial banks' purchases of government bonds.

The rise in the share of public debt in the portfolios of these institutions should facilitate the interest rate policy of the Bank of Italy, with regard both to the need to restrain further increases not called for by the European markets and to reduce the possibility of growing financial instability. On the one side, a larger recourse to the OPCT of sales of government bonds to the commercial banks would avoid the tensions on the interest rates instead generated by the open market operations (Farina, 1990) and make more efficient the drain of excess free reserves aimed at the restriction of the money supply growth (the monetary authorities also have to take into account that the adjustment to the European discipline of the banking sector will weaken their control over the commercial banks' activity). On the other side, an increased presence of the commercial banks in the market for government bonds would give more flexibility to the monetary authorities' manoeuvre by reducing the fear of causing confusion in the financial market. To the extent that the direct sale of the T-bills to the commercial banks will be a substitute for a temporary slowdown of the households' demand for bonds due to pessimistic expectations about the inflation or the exchange rate, the Bank of Italy will be in a position to promptly undertake short-term variations in the interest rates to offset the impact of speculative capital movements on the lira's parities.

Therefore, the financial instability inherent to a high public debt should not be overrated. Moreover, the unfortunate circumstance that three-quarters of the Italian public deficit is now represented by the service of the debt does not support the view that a high public debt has disruptive effects on the anti-inflationary monetary stance. The large interest payments accruing

to the Italian households cannot in fact be considered as a source of inflation: the propensity to save is still one of the highest in the world and the government bonds/households' total wealth ratio is as high as 30 per cent (and steadily increasing).

The real issue underlying the planned drift to a budget surplus is the application to the coordination problem of the long-standing argument against public expenditures as a cause of inefficient resource allocation.

The point has been made in the debate around the EMU that, in more integrated goods and capital markets, excessive public deficits will fastly transmit destabilizing impulses across the European economies. In consequence, the tight monetary stance that will supersede the process of monetary unification would be jeopardized and the efforts to achieve convergence among the EMS countries' economic performances would be undermined. Besides, on the theoretical grounds, the potential instability inherent to policy coordination has been analyzed with reference to the case of two countries each trying, despite a common Central Bank dictating the monetary policy, to utilize an expansionary fiscal policy to achieve a higher relative wealth level (Casella-Feinstein, 1989, pp. 144-7).

Be that as it may, the dismissal of any role for "activist" policies will render more difficult the preservation of the redistributive functions of public intervention both at the national and at the EC levels. Insofar as policy coordination is concerned, emphasis is rarely put on the re-equilibration of regional and welfare disparities (Padoa-Schioppa, 1987, p. 26).

The Bank of Italy's position endorsing cuts in public expenditures is then certainly well grounded as for the necessity to abolish the inefficiencies widely spread in the public sector, but might underestimate the ambiguous effects that the completion of the European market (for goods, persons, services and capitals) will produce since 1993 on the Italian economy. In the long run, Italy should certainly benefit from the reduction in production unit costs which will derive from the full abolition of tariff

barriers and frontier controls, because of the consequent boost to Community trade, productive rationalization and scale economies (Padoa-Schioppa, 1987, pp. 196-9).

In the short run, however, sharper competition might emphasize the productivity gap of a large section of the Italian industrial system, thus leading to cuts in employment and larger trade imbalances with the major EC countries. In fact, the EC Commission estimates that the 1992 impact will amount in the medium term to an increase of the Community GDP between 3.2 and 5.7% and to a reduction in the price level of 2%, but a loss of employment is also expected at least in the short-run (Emerson, 1988, p. 212). It is easy to predict that the combination of the reduction in public expenditures and the leap in efficiency necessitated by diminishing prices will widen the differentials in productive capacity between the North and the South of Italy and worsen the unemployment rate, which in the South of Italy has already reached the level of 20%. By consequence, public intervention oriented to sustain the strengthening of the small-size industrial sector (some sections of which might be pushed out of the market by the increased competition) and to support the income levels of the weaker part of the labour force should be as of now considered along with the improvement of the public budget. As things are, the issue of the lack of an "engine of growth" that since the outset characterizes the EMS will become of greater importance to Italy as long as the deflationary monetary and fiscal stance will render the demand level to be mainly supported by exports.

The chances for Italy of an export-led growth depend on the U.S. dollar - EMS currencies exchange rate fluctuations and on the economic policies that will be adopted in the U.S. and in Germany, the two traditional candidates for the role of "demand-pull" economy.

The recent evolution of the international monetary system leads to believe that the EMU will not be formed inside a worldwide monetary union. While the benefits stemming from fixed exchange rates (6) should favour the leap from the EMS to the EMU, floating

exchange rates are likely to continue to regulate the relationship among the U.S. dollar area, the Yen area and the emerging European monetary area.

As for the instability transmitted inside the ERM parity grid by external shocks like the U.S. dollar exchange rates, the more the integration process of the financial markets will improve the still imperfect substitutability among the EMS currencies, the less the impact of the U.S. dollar fluctuations on the DM and the other currencies will be unequally distributed. In this respect, an important role is likely to be played by the ECU (the European currency unit), which has recently evolved from the mere role of basket of the EMS currencies to a new financial instrument increasingly utilized in the private markets, because of its properties to reduce the costs of transaction and to warrant a defence against national currencies' exchange rate fluctuations and deviations from the PPP. If the ESCB will succeed in promoting the ECU (for instance, through the integration between the private and the official markets for the ECU) (Allen, 1989, pp. 28-31), capital mobility and interdependence among the European financial markets could be accelerated. As the fixed exchange rates should then be perceived as irrevocable by the financial institutions, the credibility problem incurred by any new currency might be solved and the ECU will eventually be recognized as a full-fledged European money and acquire the role of reserve currency, thus breaking the European dependence on the U.S. dollar.

As for the trade flows, deflation and lower interest rates in the U.S. (due to the need to boost exports and reduce the public deficit) is likely to correspond to a mix of faster growth and high interest rates in Europe, as a result of the rise in Germany's productive investments and public expenditures for the reconstruction of the East-Germany economy along with the rigorous anti-inflationary monetary policy by which the EMS countries will protect the path towards the EMU.

Therefore, the role of the U.S. economy as an "engine of growth" for the EC countries should further decline, while the

European economic and monetary integration should speed up even more the expansionary trend of the intra-EC trade. The main questions concerning the Italian economy are then whether Germany will release excess demand and inflationary pressures through a reduction in its current account surplus and to what extent the Italian export manufactures will be capable of exploiting the reversal of the European trade imbalances and benefit from the expected German boom.

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Endnotes

1. The differential between the domestic and the foreign interest rates.
2. The forward premium (negative or positive) is the best estimate of the expected change in the exchange rate, because of the obvious difficulty in obtaining observed expectations of the spot rate that will prevail at the time that a forward contract matures.
3. The return on a deposit issued in the Euromarket less the return on a deposit in the domestic market.
4. The definition of the real interest differential adopted by Frankel and Mac Arthur, is the following:

$$r-r^* = (i-i^*-fd) + (fd-\Delta s^e) + (\Delta s^e - \Pi + \Pi^*);$$

where r is the net interest rate, i is the nominal interest rate, Π is the expected inflation, fd is the "forward discount", Δs^e is the expected rate of depreciation of the domestic currency and asterisks represent foreign variables. The expected rate of change of the real exchange (or, expected depreciation) is given by the difference between exchange depreciation and inflation, that is the last term of the equation.

5. The Italian authorities have alternatively or jointly resorted to the following administration measures: a tax on the purchase of foreign exchange, the regulation of settlement period for export receipts and import payments, and the requirement for importers to make prior non-interest-bearing deposits at the Bank of Italy as a stipulated percentage of the foreign exchange needed for import payments.

6. According to Kenen (1989), a fixed exchange rate regime should be preferred "partly because of the familiar complaint against floating exchange rates, that changes in nominal exchange rates resulting from asset-market shocks and shifts in expectations interact with sticky prices to change real exchange rates, and partly because of the tendency for floating rates to destabilize domestic price levels by changing the home-currency prices of imported goods (Ibidem, p. 85).

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