Disinflation and Re-inflation in Italy and the Implications for Transition to Monetary Union *

1. Introduction

This paper discusses in some detail inflation developments in the Italian economy with a view to throwing more light on the disinflation of the first half of the eighties and the reasons for the re-emergence of inflation in the second half of the decade. This discussion is relevant for the ongoing debate on the nature and duration of transition (Phase Two) in the process towards monetary union in Europe.

The paper is organized as follows. Section 2 recalls some relevant aspects of the debate on transition; Section 3 discusses Italy's disinflation experience in the early EMS years and the role of expectations in the process; Section 4 analyzes the recovery of inflation in 1987-90 and its causes. The main findings and the implications for the debate on transition are summarized in the concluding section.

2. "Monetarists" and "economists" in the debate on transition to monetary union

From its very beginning in the fifties to present days European integration has proceeded through a succession of sudden acceler-

ations – often leading to the creation of new institutions or informal, but strongly binding, arrangements (among these, the EMS) – and periods of consolidation, during which member countries were learning to live with the new rules and constraints and adapted to them. The continuous tension between political-institutional change and economic adaptation has also corresponded, intellectually, to the dialectic contraposition between those always advocating further institutional "jumps" and those insisting that certain prerequisites of economic convergence and "cohesion" were to be realized first.

From the late sixties, a great deal of proposals and initiatives to foster integration have concentrated in the exchange-rate and monetary field, since European countries felt a need to shield themselves from the instability stemming from US policies and the dollar by creating in Europe a zone of monetary stability. Those advocating rapid progress in the integration process were accordingly labelled "monetarists", since their advice ultimately boils down to the proposition that exchange rates should be fixed, monetary policies placed on a path consistent with this requirement, and the rest would follow.

The opponents of this view, in turn labelled "economists", have been pointing to the risks and potential costs of moving too rapidly due to the presence of nominal rigidities, market imperfections of various type, and structural and institutional differences that could make exchange rate fixity – or monetary union – simply not viable.

The neo-neo-classical theories have added new flavours to this debate. With rational agents and well-functioning markets, the rate of inflation is determined by private agents perception of (future) government policies; a credible commitment to adopt the low-inflation country's monetary policy, through self-imposed exchange rate constraints, is a way to buy "cheaply", with no output loss, credibility and macroeconomic convergence. Gradualism is the curse of credibility: therefore one should go immediately all the way to irrevocable exchange-rate fixity. The latter, in turn, will only exist when exchange rates are abolished, which is a feature of fully-fledged monetary union with only one money and one monetary authority.

Some real world developments seem to add strength to this view. The first is the very success of the EMS in its early years: the system not only survived a major oil shock shortly after its inception and a major dollar appreciation in the ensuing years, but somehow

seems to have been instrumental in bringing about a remarkable decline and convergence in inflation rates in member countries. Survival of the system meant, of course, that these countries considered the costs of participation in the system tolerable or anyway smaller than the corresponding benefits.

A second reason possibly supporting the neo-neo-classical argument is the liberalization of capital transactions in France and Italy, completed in 1990. The spectre that comes to mind is the breakdown of Bretton Woods: when policies became divergent, fixed rates could no longer be reconciled with free capital, and eventually the former were allowed to give way. The EMS, in reality, so far has managed to maintain a sufficient degree of monetary policy coordination, so that capital mobility has worked to strengthen the cohesion of the system. But convergence has been less satisfactory in other areas of policy, notably fiscal policies, and large public debts, relative to GDP, have emerged in countries such as Belgium, Ireland, the Netherlands, and Italy. Thus, some fear that divergent fiscal policies could eventually drive monetary policies apart, either because of an eventual monetization of the debt, or because the domestic costs of sticking to tight monetary policy may sooner or later tilt the monetary course in a direction inconsistent with exchange rate commitments. With free capital, the perception of these possibilities by private markets could bring forward to the present the collapse of the EMS exchange rate arrangements. These considerations, of course, can lead to the conclusion that it is urgent to lock exchange rates and monetary policies to the DM before expectations run out of hand, but can also lead to the opposite conclusion that the risks for "virtuous" countries are too high and delay is preferable.

The "economists", on their part, while not rejecting altogether the argument in favour of speeding up transition, have been pointing to the legal and institutional complexities of monetary union. Setting up a European Central Banks System – such as that advocated in the Delors Report and outlined in the Governors' project presented to the Intergovernmental Conference of the EEC – will take time; it will also require important institutional changes in member countries, notably those where central banks remain appendices of the Treasury. Even more difficult will be to create the new European money. There is really no agreement yet either on the objective – what the common money should be (although the recent ECOFIN Council of October

1990 came out for the first time with a mild statement in favour of the ECU) – or on the path to get there.[1]

Another important result that has been emerging from a large body of research, is that the neo-neo-classical parable finds little support in the data. In the eighties EMS countries have assigned high priority, among policy objectives, to reducing inflation; therefore, it does not come as a surprise that non-structural time-series analysis finds evidence of structural breaks in prices and wages relative to the previous decade (*e.g.* Artis 1990, Barrel, Darby and Donaldson 1990). It is no surprise, either, that one finds a stronger correlation between prices and wages in, say, France, Italy or Ireland and those in Germany (as in Kremers 1989 and Artis 1990) since after all the policy approach to disinflation in these countries has involved pegging the exchange rate to the DM.

What is more difficult is to relate these results to a change in expectations stemming from the establishment of the EMS, and to show that this change in expectations was the driving force, or at least a main force, behind disinflation.[2]

In this regard the evidence on unemployment-inflation trade-offs is not encouraging. "Natural" rates of unemployment, or NAIRUs, if anything seem to have increased in ERM countries;[3] "short" term Phillips curves have remained stubbornly negatively sloped for long,

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[1] The ECU still lacks the critical mass of transactions and the official support by European authorities, that are needed to make it acceptable to the public at large. The DM does not represent a politically acceptable alternative. More broadly, money cannot be created overnight by decree; indeed this is an area where customs and habits can represent a powerful impediment to rapid progress (PADOA-SCHIOPPA 1990). It also happens, that there is no such thing as a neutral monetary reform. The analogy with De Gaulle's change of units can be very misleading here, where what is involved is recalculating all debt and credit relations – notably those with long maturity – that were contracted on the basis of different interest rates for the different currencies: such a decision may well entail fixing by decree potentially large redistributions of wealth between debtors and creditors.

[2] *Cf.* the discussion in ARTIS (1990) and BARRELL (1990). What is disturbing is that there is really no evidence of "jumps" in expectations or inflationary processes right after the EMS was set up. If the theory has to be rescued, one is forced to argue that initially the system must have lacked the credibility required for the credibility bonus to materialize: and indeed it is now commonplace among scholars of the EMS to maintain that credibility was only established much later, in practice after prices and wages had started to decelerate. The only problem with this approach is that empirically slow learning processes for expectations are hard to distinguish from standard, pre-neo-neo-classical, lagged responses to restrictive monetary policies.

[3] But ROBERTSON and SYMONS (1990) are able to show that it wasn't all the EMS' fault.

with signs of inward shifting only emerging in recent years, and not everywhere (De Grauwe 1989). Moreover, the comparison of growth and employment performances of ERM and non-ERM countries during disinflation shows the latter countries coming out better with very few exceptions (De Grauwe 1989, Dornbusch 1990). More recently, significant changes in real exchange rate and external competitive positions have confirmed the presence of long-lasting nominal rigidities and price-cost divergences that are arousing once again expectations of realignments.[4]

The foregoing discussion shows the complexity of the issues involved in any decision on the nature and duration of the transition phase in EMU. There are legal-institutional problems that cannot be short-cut. The evidence of persistent nominal and (may be) real rigidities calls the attention not only to the potential costs and risks, but also to the practical obstacles involved in rapid ("immediate") transition to irrevocable exchange rate fixity and full monetary union.

On the other hand, Dornbusch (1990) rightly stresses that the system seems now to have entered a "state of limbo"; there is heated debate on momentous decisions relating to a distant future, but convergence and macro-policy issues seem to have lost their compass, while monetary discipline, if anything, seems to have weakened after capital transactions were liberalized (Bini Smaghi and Micossi 1989). Meanwhile, the risk that policy conflicts may open breaches in the system increases, as underlying divergences and imbalances take their toll in terms of unemployment and "displaced" export and import flows.

We will examine in the ensuing sections how available evidence on the Italian economy fits into this picture, and hence can influence the policy debate and the decisions to be taken in the near future on the nature and duration of transition.

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[4] The same story of insufficient credibility (GIOVANNINI 1990) or incomplete adjustment (DORNBUSCH 1989 and 1990) seems to be told by interest rates data; indeed, after declining rapidly around the middle of the decade, interest-differentials of ERM countries *vis-à-vis* Germany have remained high and *ex post* return-differentials *vis-à-vis* the DM have sistematically exceeded maximum permitted changes in exchange rates within the band, indicating the presence of risk or credibility premia of some type on virtually all the participating currencies (GIOVANNINI 1990).

3. Disinflation in the Italian economy

In 1980, after the second oil shock, the rate of inflation was above 20%, some 16 points higher than in Germany; by the end of 1986 it had come down to below 6% (Table 1).

TABLE 1

REAL GROWTH, PRICES, WAGES AND PRODUCTIVITY
(yearly percentage changes)

	1980	1981-85	1986	1987-89	1990[1]
GDP real growth rates	4.2	1.6	2.5	3.5	2.1
GDP deflator	20.0	14.1	7.7	6.1	6.7
Consumer prices total	21.2	13.6	5.9	5.3	6.5
services	20.6	15.6	8.9	6.5	7.3
goods	21.4	12.9	4.5	4.8	6.0
Producer prices	n.a.	11.4	0.2	4.1	4.1
Export prices	20.8	12.5	−4.6	4.1	2.1
Compensation per worker					
total	21.9	15.2	6.4	8.7	8.3
manufacturing: nominal	19.3	16.0	6.4	8.1	7.1
real[2]	−1.6	2.1	0.5	2.7	0.7
market services	21.9	14.2	6.1	8.0	7.4
non-market services	26.8	14.9	6.3	10.4	10.4
Labour cost per employee					
total	21.4	15.2	7.5	9.0	8.3
manufacturing: nominal	17.6	16.3	6.8	9.2	7.0
real[3]	n.a.	4.4	6.6	4.9	3.1
market services	23.0	13.7	6.6	8.5	7.4
non-market services	26.2	15.3	8.9	9.6	10.7
Productivity					
total	1.8	1.1	1.6	3.0	1.7
manufacturing	4.0	4.5	2.8	4.7	1.3
market services	0.2	−1.2	0.8	2.2	2.0
non-market services	0.3	−0.4	0.5	−0.2	0.2
Unit labour cost					
total	19.3	13.9	5.8	5.8	6.5
manufacturing	13.1	11.3	3.9	4.3	5.6
market services	22.7	15.1	5.8	6.2	5.3
non-market services	25.8	15.8	8.4	9.8	10.5

[1] Partially estimated.
[2] Deflated by consumer prices.
[3] Deflated by producer prices.
Source: our estimates based on ISTAT data.

The initial impulse to disinflation came from very severe monetary and exchange rate policies. Interest rates on government paper went up from 12-13% in late 1978 to 20-21% at the end of 1981, those on bank loans to 22-24%. Between 1979 and 1982 the lira appreciated in real terms by 7% (Visco 1990).

Firms in the manufacturing sector reacted by seeking productivity increases through labour shedding; 1 million workers were displaced from industry between 1980 and 1985, with labour productivity increases totalling almost 25% (Table 1). Economy wide productivity, however, only went up by about 5%, owing to the decline observed for services and construction, that were not involved in the restructuring process and also saw an increase in the number of jobs (+ 1,700,000) that more than compensated the reduction in industry. Some one third of this increased employment was in the public sector.

The restructuring of industry was supported by government subsidies for investment, and by unemployment compensation mechanisms (Cassa Integrazione Guadagni, or CIG) that preserved almost entirely displaced workers' wages, but also worked to reduce the impact of unemployment on the labour market. Nominal wages and labour costs per worker decelerated considerably, but still showed nominal increases well above those of competitors (Table 2); over 1981-85 real wage increases averaged 2.1% per year (Table 1), albeit there was a slowdown in 1984-85. However, firms were still enjoying the benefits of the reduction of social security contributions (equivalent to some 4% of the wage bill; *cf*. Micossi and Traù 1989 and Giavazzi and Spaventa 1989) introduced in the late seventies.

Meanwhile, the public sector deficit was increasing rapidly, to a peak of 12.6% of GDP in 1985, owing to the various measures decided in support of industry and the unemployed, to generous improvements in the pension system and, more broadly, to an acceleration in all components of current spending that was incompletely offset by rising revenues: between 1980 and 1985 total public sector spending, as a ratio to GDP, went up by some 9.1 percentage points, largely as a result of increased "primary" (*i.e.* non-interest) spending (Chart 1).[5]

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[5] It should be noted that the acceleration in spending was concentrated in personnel, personal transfers to households, and measures to support households' income, notably in the South while the share of spending designed to support investment was actually declining, despite the financing provided to industry (on this *cf*. SARCINELLI 1989).

CHART 1

PUBLIC SECTOR EXPENDITURES AND REVENUES
(% of GDP)
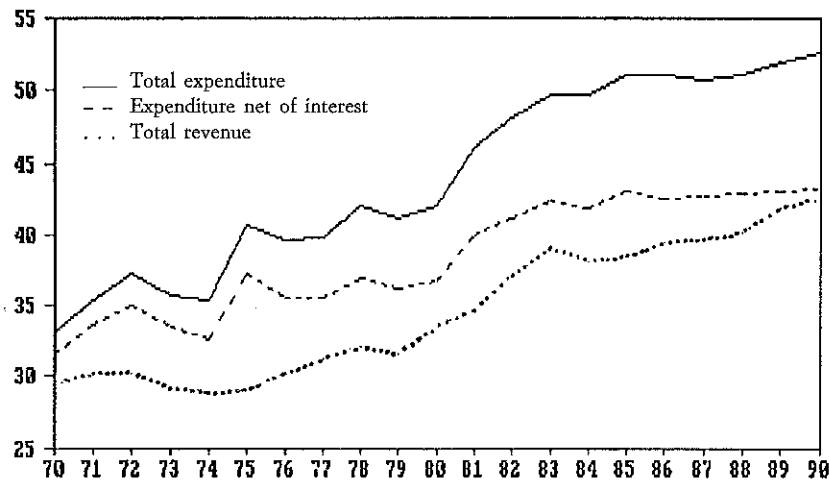
PUBLIC SECTOR BORROWING REQUIREMENTS
(% of GDP)
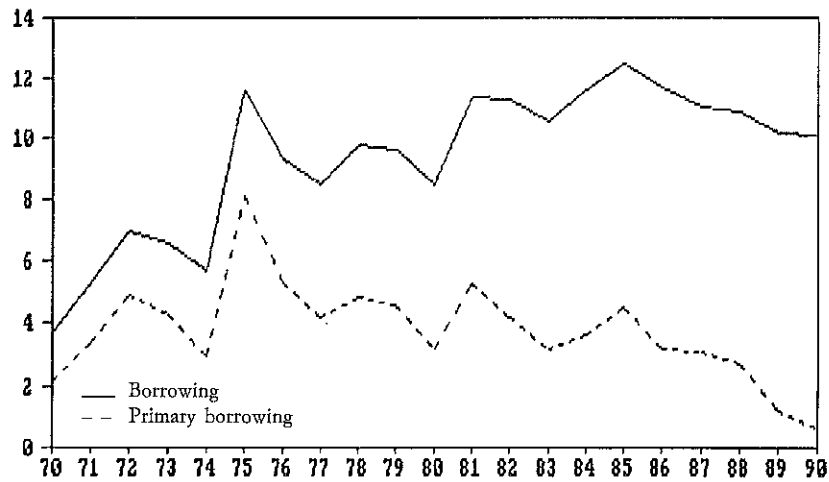
Source: ISTAT.

TABLE 2

NOMINAL LABOUR COST AND LABOUR PRODUCT IN MANUFACTURING: ITALY VERSUS MAIN EEC COUNTRIES

	1980 (level)	1981-85	1986	1987-89	1990[1]	1990[1] (level)
			(yearly % changes)		
Labour cost per employee[2]						
Italy	12,007	16.3	6.8	9.2	7.0	37,953
Germany	18,050	11.8	9.1	6.0	7.3	44,079
France	18,613	12.1	6.5	4.7	7.2	43,139
United Kingdom	12,464	14.5	−4.7	9.1	4.2	31,533
Average labour product[3]						
Italy	18,070	16.4	8.3	9.1	6.8	58,018
Germany	25,284	13.0	10.6	6.1	8.1	66,642
France	25,889	12.6	10.8	7.1	6.1	67,901
United Kingdom	15,053	16.6	−2.1	10.5	3.0	44,273
Labour cost differential						
Italy-Germany		4.0	−2.1	3.0	−0.3	29.4[4]
Italy-France		3.7	0.3	4.3	−0.2	36.3[4]
Italy-United Kingdom		1.6	12.1	0.1	2.7	24.9[4]
Labour product differential						
Italy-Germany		3.0	−2.1	2.8	−1.2	21.8[4]
Italy-France		3.4	−2.3	1.9	0.7	22.4[4]
Italy-United Kingdom		−0.2	10.6	−1.3	3.7	9.2[4]

[1] Estimates.
[2] Thousand lire, current exchange rates.
[3] Thousand lire, current exchange rates; product measured at market prices.
[4] Cumulative percentage change over the period 1980-90.

Source: our estimates based on ISTAT and OECD data.

1984-86 saw an attempt to strengthen disinflation through income policies and some correction of fiscal imbalances. Wage indexation was effectively reduced to under 50% (with the 1986 reform; cf. Visco 1990); in 1984 the government forced the unions to accept "predeterminated" cost of living adjustments based on planned rather than actual price developments. By the end of 1984 the rate of inflation and unit labour cost increases were down to around 8%.

After increasing rapidly up to 1985, public spending was (more or less) stabilized as a share of GDP, and the deficit started to come down slowly. In that year the dollar began to depreciate and in 1986 the price of oil fell sharply, leading to a terms-of-trade gain close to 16% (Table 4) and pushing domestic inflation (for a short while) below 5%.

Chart 2 summarizes the *ex post* output-inflation trade-off during disinflation, and compares it with that observed in Germany, France and the UK. In the eighties the curve for Italy is stubbornly negatively sloped even beyond 1986, despite a strong recovery of output. The years 1984-85 stand out as a period of improved trade-off, but afterwards the slope of the curve and the implicit "sacrifice ratio" go back to earlier values; in 1988-89 a (moderate) recovery in inflation is associated with increased unemployment. As can be seen, this experience is quite different from that of the UK (at that time a non-ERM member), where after 1983 the curve shifts "inwards" and a moderate recovery of inflation goes hand-in-hand with a marked recovery of employment.[6] In Germany the reduction of inflation was quite "expensive" in terms of unemployment until 1983; subsequently, however, a rapid increase in employment seemed to add very little to inflation (Germany too, of course, enjoyed the benefits of low dollar and oil-price). As for France, the disinflation effort really started only after March 1983: after that point the Phillips curve's slope continued to increase until 1987 and then, while inflation stabilized between 3 and 4%, unemployment started to decline.

Chart 3 decomposes Italy's inflation (CPI) path in the 1980s into a domestic and an external component, both in levels and first differences, by means of simulations of the Confindustria yearly model of the Italian economy that replicate the experiments in Gressani, Guiso and Visco (1987) and extend the exercise to the second half of the eighties, for later use. Visual inspection confirms that until 1985 the deceleration of inflation was largely due to the domestic component,[7] with the strongest contributions in 1981 (a year of recession and sharply restrictive policies, during which moreover the impact effect of the 1979 oil-price increase had started to subside) and 1984 (the year of the "forced" reduction in wage increases). So, disinflation was indeed the result of domestic policies, and the foreign sector came to help when most of the job was done.

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[6] Italy looks better, in terms of overall sacrifice ratios, only if the calculations are restricted to the period up to 1985-86 (as in GIAVAZZI and SPAVENTA 1989), but performs worse if the period of observation is lengthened. Of course, with lags of uncertain length in the reaction of economic systems to policy changes, the choice of the relevant observation period is somewhat arbitrary.

[7] Calculated as the difference from historical path of (CPI) inflation generated in a simulation in which foreign variables are stabilized to their 1979 levels. For a discussion of the methodological issues involved see GRESSANI, GUISO and VISCO (1987).

We still cannot tell whether there was some contribution of private agents' expectations in accelerating disinflation or making it less "expensive" in terms of unemployment. The behaviour of our "ex post" Phillips curve and the story that has been told in fact could raise doubts since there was on the whole little wage flexibility and public protection shielded the labour market from feeling much of the brunt of labour displaced from industry.

Evidence of instability in the time-series autoregressive process of CPI inflation and wages, that could be interpreted as expectations induced, is presented in Giavazzi and Giovannini (1988) and Artis (1990); the latter author also finds an increased relevance of German inflation in the prediction of inflation in Italy. This evidence, as was noted above, is far from conclusive because of its "indirect" nature (the results are consistent with a shift in expectations but could well be determined by other reasons) and, in the case of Giavazzi and Giovannini, because the hypothesis of structural instability is not confirmed by statistical tests. Barrell, Darby and Donaldson (1990) present results from estimation of a structural model of price and wage determination that confirm a (statistically significant) stronger negative effect of unemployment on wage determination in the eighties (the long-run effect is 25% higher in the eighties than in the seventies). However, one should keep in mind that in the seventies it was virtually forbidden to dismiss workers while this was made possible by the CIG in the early eighties, so that this evidence is hardly surprising.

The role of expectations in disinflation, on the other hand, is belittled by direct analysis of survey data on inflation expectations[8] performed, on the basis of previous work by Visco (1984a and 1984b) and by Gressani, Guiso and Visco (1987). Visco (1984a) had shown that the generating process of these price expectations (for wholesale and consumer prices), while being consistent with the requirement of efficient use of information and absence of bias, basically is an adaptive error-learning model combined with regressive (return-to-normality) elements. Estimation of wage equations that included inflation expectations, in Visco (1984b), also showed that any effect of expectations on nominal wages is short-lived; catching-up for past anticipation errors plays a crucial role in ensuring neutrality and

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[8] The survey on inflation is that produced by ISCO-*Mondo Economico* since 1952.
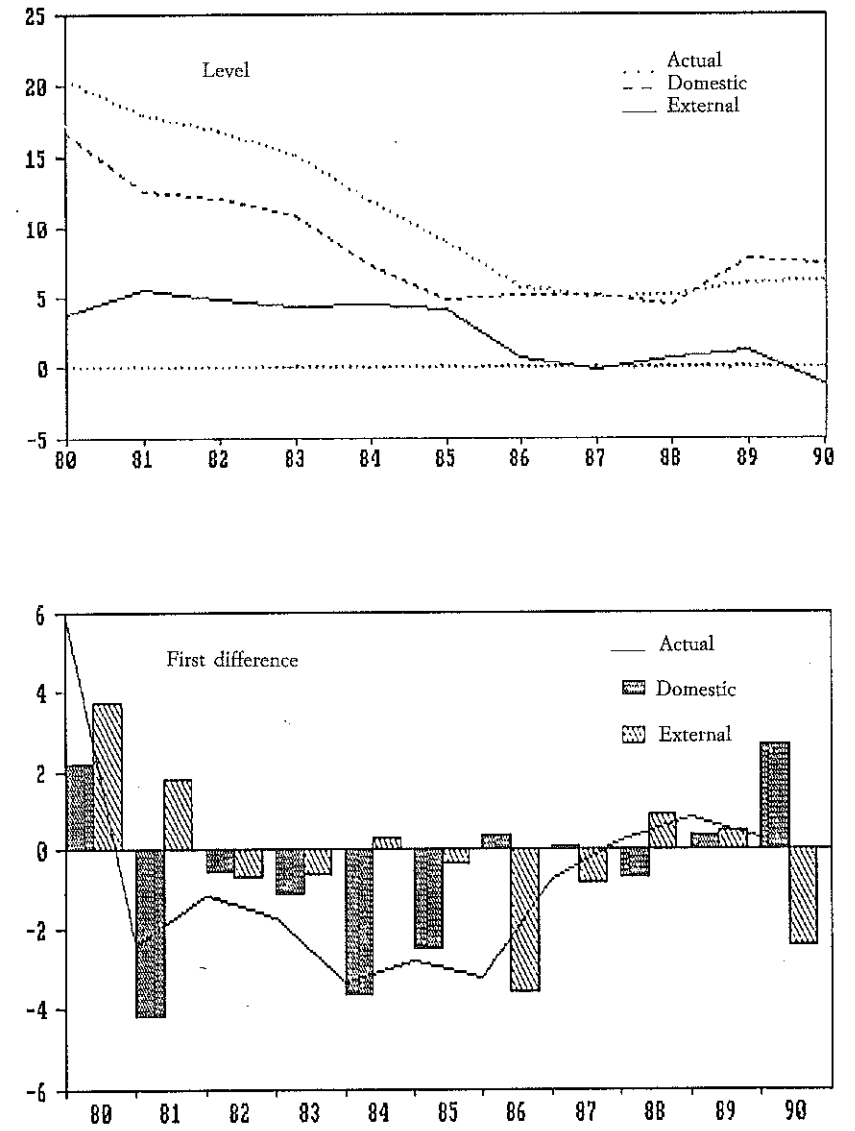
CHART 2

INFLATION AND UNEMPLOYMENT RATES 1970-1990
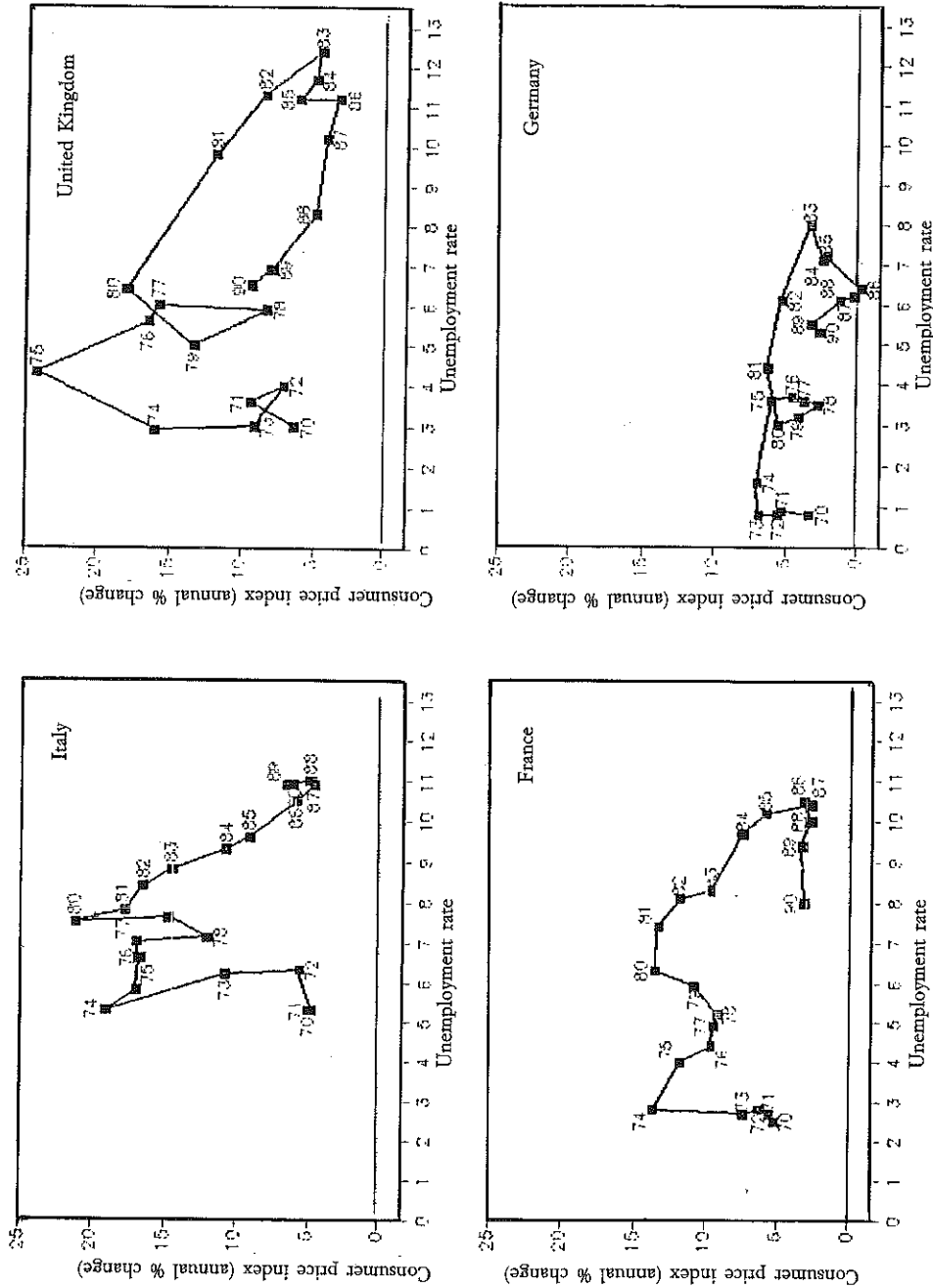
Source: OECD.

CHART 3

INFLATION RATE (CPI) AND ITS DOMESTIC
AND EXTERNAL DETERMINANTS

Source: ISTAT and our estimates from Confindustria's econometric model.

absence of inflation unemployment trade-offs in the long-run.[9] The implication of these results is that what matters most in wage determination is lagged actual inflation.

We present in table 3 the estimates of the Visco equation for wages over the sample periods beginning in 1970 and ending in 1982-IQ, 1984-IIQ and 1989-IVQ. As can be seen, we find some decline, over time, in the impact of unemployment on wage changes; to an extent this reflects recourse to the CIG being concentrated in the early years of the decade and then subsiding. It entails that along the Phillips curve the wage-moderating effect of unemployment declines for higher unemployment (the issue will be discussed again in Section 3b). Indeed, in the second part of the decade unemployment stabilized around a rather high level and seemed "disconnected" from output growth. Barrell, Darby and Donaldson (1990) confirm that in Italy cyclical changes in activity lead increasingly, over time, to changes in working hours rather than in the number of jobs.

The decline in the coefficient of the error catching-up term $(1 - \eta_{t-1}) (\dot{p}_{t-2} - \dot{p}^e_{t-2})$ is specular to the increase in the expectation term coefficient: this is probably mainly due to the reduction in instability of the inflation process (less errors were made). But basically the equation is rather robust. Chow and F forecasting stability tests performed with rolling regressions from 1980 to 1989 only display (mild) instability (well below a 5% significance threshold) around 1981-82, which can be attributed to the unemployment coefficient. Altogether, the Visco equation performs remarkably well through the decade, and its basic "learning-adaptive" features are maintained.

The simulations in Gressani, Guiso and Visco (1987) were carried out with the Banca d'Italia model (Banca d'Italia 1986), that includes the Visco equations for price expectations and wages. The study reports that significant expectation errors (overestimates) for prices were only observed in 1984-86; this is also the only period when wage increases actually fell in some quarters below consumer price increases. The authors identify the predetermination of *scala mobile* adjustments as the probable cause of those "errors"; the impact

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[9] The estimated equation is
$$\dot{w} = f(u_{t-1}) + \beta_1 \eta_t \dot{p}_{t-1} + \beta_2 (1 - \eta_t)_{t-2} \dot{p}^e_{t-1} + \beta_3 (1 - \eta_{t-1}) (\dot{p}_{t-2} - {}_{t-3} \dot{p}^e_{t-2})$$
where u is the log of unemployment, $\dot{w}$ and $\dot{p}$ are rates of wage and price change and η is the actual degree of indexation. Detailed discussion of this model is in BANCA D'ITALIA (1986).

TABLE 3

WAGE EQUATION IN THE MANUFACTURING SECTOR

$\dot{w}_t = a_0 + a_1 \log(u_{t-1}) + a_2 \eta_t \dot{p}_{t-1} + a_3 (1-\eta_{t-1}) \dot{p}^e_{t-1} + a_4 (1-\eta_{t-1}) (\dot{p}_{t-2} - \dot{p}^e_{t-2})$		
	Sample period		
	1970.3-1982.1	1970.3-1984.2	1970.3-1989.4
Constant	6.75	5.09	4.77
	(1.94)	(2.78)	(3.77)
$\log(u_{t-1})$	−2.68	−1.81	−1.60
	(1.51)	(2.11)	(3.32)
$\eta_t \dot{p}_{t-1}$	0.93	0.84	0.81
	(4.50)	(1.97)	(7.46)
$(1-\eta_{t-1}) \dot{p}^e_{t-1}$	0.49	0.74	0.73
	(0.90)	(1.70)	(1.95)
$(1-\eta_{t-1}) (\dot{p}_{t-2} - \dot{p}^e_{t-2})$	1.52	1.33	1.27
	(2.10)	(1.97)	(2.27)
R^2	0.72	0.69	0.75
Standard error	1.24	1.20	1.07
DW	1.80	1.79	1.90

Legenda: $\dot{w}_t$ = wage change in the manufacturing sector; u_t = unemployment rate (net of "Cassa Integrazione Guadagni"); η_t = wage elasticity to "scala mobile"; p_t = consumer prices inflation; p^e_t = expected consumer prices inflation; t-statistics in parenthesis.

on inflation of that politically-forced change is quantified in about 0.5% in 1984 and about 1% in 1985.

In sum, one is left even more doubtful of any expectation effect in disinflation, although it is not possible to determine whether this reflects a non-neo-neo-classical world or weak credibility of government policies.[10] Be that as it may, in practice one observes tough monetary management, enforced through a non-accommodating exchange rate policy, slow but eventually powerful effects on wage and price dynamics that were associated with substantial unemployment, and really little evidence of any credibility "bonus" changing wage-price-employment relationships in a favourable direction. Fiscal policy was used to compensate those hit by the consequences of monetary restraint, and remained expansionary up to the mid-eighties, which is *prima facie* the reason why growth fell less than in other countries. Thus, to an important extent the cost of adjustment was borne by, and effectively hidden into, public finances; the government debt increased from 58% of GDP in 1980 to 81% in 1985 (Sarcinelli 1990).

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[10] The latter view is taken by GIOVANNINI (1990).

4. 1987-90: the return of inflationary pressures

In 1987-89 growth picked up to a buoyant 3.5% rate but the decline in inflation first came to a halt and then was reversed; in 1990 the rate of consumer price increase was 6.5%, 1% higher than the average for 1987-89 (Table 1).

The apparent immediate source of this return of inflation is the acceleration in wages in 1987-89: compensation per worker in manufacturing went up by 8.1%, 2.7% in real terms. Even higher was the increase in non-market services (public sector) wages (10.4%, 4.8% in real terms), bringing the economy's average up to 8.7% (3.2% in real terms). Higher still was the increase in labour cost per worker, notably in manufacturing, due to the phasing out of social security contribution exemptions that had been granted in the late seventies (cf. Table 5, social security contribution rate falling on firms).

Two factors contributed to hide for some time the price pressures that were building up. First, developments in international prices and the exchange rate of the dollar remained fairly favourable; after the large bonus of 1986, smaller but still appreciable gains were made in the ensuing three years (0.8% per year; cf. Table 4). As a result, in 1987-1989 the foreign component on the whole added very little to price changes (Chart 3). Second, the acceleration of activity brought about large gains in productivity (3% per year for the total economy, 4.7% for manufacturing) that kept the increase in labour cost per unit of output below 6% for the total economy and just above 4% in manufacturing (Table 1).

Thus, the full blow of rising domestic costs was only felt in 1990, when industrial production peaked and then actually started to decline, and GDP growth fell to around 2%. Inflation would have been even higher were it not for a new sizeable external bonus stemming from renewed depreciation of the dollar (Chart 3 and Table 4).

These developments seem to require some explanation since in 1987-90 there was apparently little change in monetary-exchange rate policy and fiscal policy turned more restrictive. To this end a closer look at certain structural features and developments in the Italian economy is in order.

TABLE 4

ITALY'S BALANCE OF PAYMENTS AND EXCHANGE RATES
(average yearly percentage changes in selected periods)

	1980	1981-85	1986	1987-89	1990[1]
Export					
Quantity	−7.8	4.4	1.9	5.5	3.5
Prices	20.8	12.6	−4.6	4.1	2.1
Import					
Quantity	2.8	2.1	4.5	8.5	4.5
Prices	28.9	12.8	−17.7	3.3	−0.7
Trade balance (as % of GDP)	−3.7	−1.7	0.7	−0.1	0.0
Current balance (as % of GDP)	−2.2	−1.0	0.4	−0.7	−1.5
Net capital flows (as % of GDP)	2.4	0.8	0.2	2.1	2.3
Reserve changes (as % of GDP)[2]	−0.2	0.3	−0.6	−1.4	−1.2
Terms of trade	−6.3	−0.2	15.9	0.8	2.8
Real exchange rate change vis-à-vis European countries	n.a.	0.9	0.4	0.4	2.4
Real exchange rate change vis-à-vis industrial countries	n.a.	−0.5	3.6	0.7	5.3
Degree of openness (as % of GDP)[3]	39.3	38.9	32.8	32.7	32.7
Degree of openness net of fuels and agricultural products (as % of GDP)[3]	29.7	29.5	27.9	28.7	28.8
Apparent import elasticity to domestic demand[4]	0.4	1.5	1.7	2.1	1.7

[1] Estimates.
[2] A negative sign indicates reserve increase.
[3] Import plus export as % of GDP.
[4] Imports of goods and services.
Source: our estimates based on ISTAT and Bank of Italy data.

(a) Developments in Italy's economic structure

The eighties saw a reduction in the share of manufacturing from 34% to 26% of total value added, and from 28% to 23% of total employment. The corresponding shares of services (market and non-market) rose by some 10 percentage points, to 64% for value added and to 60% for employment. The concentration in services is even more marked in the South, where non-market services (public sector) alone represent 20% of value added and employment, the total share

of services in value added is 70%, and the share of manufacturing is 13% (Svimez 1990).
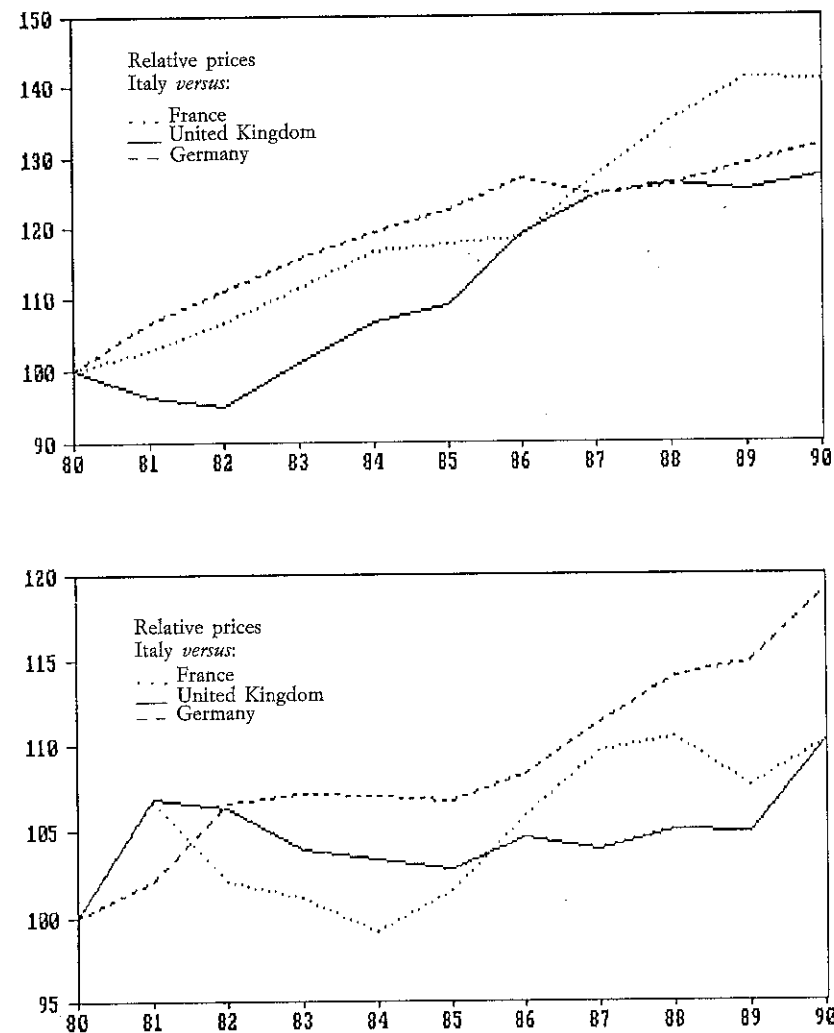
This changed composition is important in understanding the recovery of inflation for two reasons. First, the service sector is characterized, as was mentioned, by systematically lower productivity increases. Second, it is also characterized by higher price and wage increases (*cf*. Table 1). Of course, to an extent higher price increases in the service sector are observed in all industrial countries since in general sectoral wage differentials are narrower than productivity differentials. But in Italy the phenomenon is more pronounced: Chart 4 shows that the *relative* increase in service prices is much higher than in Germany or France, and indeed this is true also relative to most other OECD industrial countries; furthermore the gap in relative prices tends to widen overtime, which could indicate a rising degree of monopoly in the service sector. In fact, in the late eighties rising deflators for services mainly reflected strong wage pressures in the public sector[11] and rising margins in market services, where wages followed more or less the pattern of manufacturing.

During the eighties the GDP share of public spending rose by 11 percentage points, which already identifies Italy as an anomaly among industrial countries (Chart 1 and Table 6; *cf*. Sarcinelli 1990, Oxley *et al*. 1990); out of the total increase, 7 points can be imputed to "primary" spending, mostly concentrated in welfare (3.8 points) and government consumption (2.4 points, mostly for personnel pay); the share of investment outlays continued to shrink through the decade (see also Sarcinelli 1989).

The adverse effects of the expansion of the public sector and public intervention (transfers, subsidies and incentives of various sort) are particularly evident in the South. On the basis of regional trade balances, it can be gauged that through the seventies and eighties net transfers to the South from the rest of the country averaged between one fourth and one third of the region's product (Svimez 1990). In the past twenty years the ratio between government spending and revenues has steadily remained around 1.5 in the South, as against 0.8-0.9 in the rest of the country. Setting the economy-wide ratio of

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[11] ASAP (1990) documents the anomalous relative wage structure that has resulted from these developments, showing that Italy is the only major industrial country where, rather than going down to reflect relative scarcity, in the second half of the eighties wages in the public sector have gained ground relative to manufacturing.

CHART 4

RELATIVE PRICES AND WAGES OF SERVICES: ITALY
VERSUS MAIN EEC COUNTRIES*
(1980 = 100)

Relative prices
Italy *versus*:
. . . France
___ United Kingdom
− − Germany

Relative prices
Italy *versus*:
. . . France
___ United Kingdom
− − Germany

* For each country we calculated the relative price or wage ratio of services *versus* the producer price and wage index for the manufacturing sector (1980=100); the lines in the graph represent the ratio between Italy's and each foreign country's relative price or wage indices. For the United Kingdom for services we used the nationalized industries retail price index.
Sources: OECD, IMF.

public spending to GDP equal to 100, the average ratio for the eight Southern regions is 138, with Calabria and Basilicata as high as 155 (Wolleb and Wolleb 1990). Wolleb and Wolleb (1990) have also estimated that (in 1985) personal transfers from the Center North to the South entailed a 14% reduction in the interregional per-capita-income gap.

Incentives provided for investment have also been substantial, with capital contributions averaging 34% of total investment outlays in 1978-89 (Svimez 1990), and a relative user-cost-of-capital advantage estimated between 30 and 50% *vis-à-vis* the rest of the country (*cf.* Siracusano and Tresoldi 1990). These incentives are reflected in investment-capital-output ratios substantially higher in the South than in the rest of the country (Galli and Onado 1990).

Yet, there is clear evidence that since the seventies the income and productivity gaps first stabilized and then started to widen again; the opinion is now widely shared that the incentives to the productive sector basically compensate for (*i.e.* finance) productivity differentials, rather than creating a favourable cost differential instrumental to higher accumulation.[12]

As to the effects of personal transfers on working and consumption patterns, it is sufficient to recall that per capita income in the South is now estimated around 55% of that in the Centre-North, but relative consumption is as high as 82%. Wages, are almost as high as in the North (Bodo and Sestito 1989), and unemployment is above 20% (50% among the youths) and still increasing; and yet there is virtually no migration out of the area, and little evidence of any downward pressure on "official" labour market wages. Wolleb and Wolleb (1990) show that in fact a large share of welfare transfers to the South is in the nature of straight income support regardless of age or actual inability. It can be seen in chart 5 that unemployment and the rate of personal transfers (relative to disposable income) were steadily rising together; in certain periods it may even look as if subsidies were "leading" unemployment.

In sum, large transfers subsidized the employed and the unemployed alike to remain in their low productivity situations and allowed them to maintain consumption standards not different from

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[12] With labour productivity gaps of the order of 30%, wage levels are virtually equal in the Centre-North and the South (BODO and SESTITO 1989); the difference is made up through a "permanent" reduction in social security contributions ("fiscalizzazione") that roughly compensates the difference in unit labour cost.

those of the rest of the country. The existence of a large government-supported economy effectively "crowded out" the market economy, that could not afford those wages and working standards, and fuelled the expansion of the service sector, directly and indirectly. As the income and productivity gap with the rest of the country widened, pressure increased for even more transfers, subsidies and protections.

(b) *Wages and labour market*

Several features of the labour market are relevant in understanding persistent real wage resistance and unemployment in the eighties and the acceleration of wages towards the end of the decade.

In their study on unemployment in Italy, Bodo and Visco (1987) concluded that the observed increase in unemployment was not due

CHART 5

WELFARE SPENDING AND RATE OF UNEMPLOYMENT IN THE SOUTH

—— Rate of unemployment (right scale)
- - Welfare spending* (left scale)
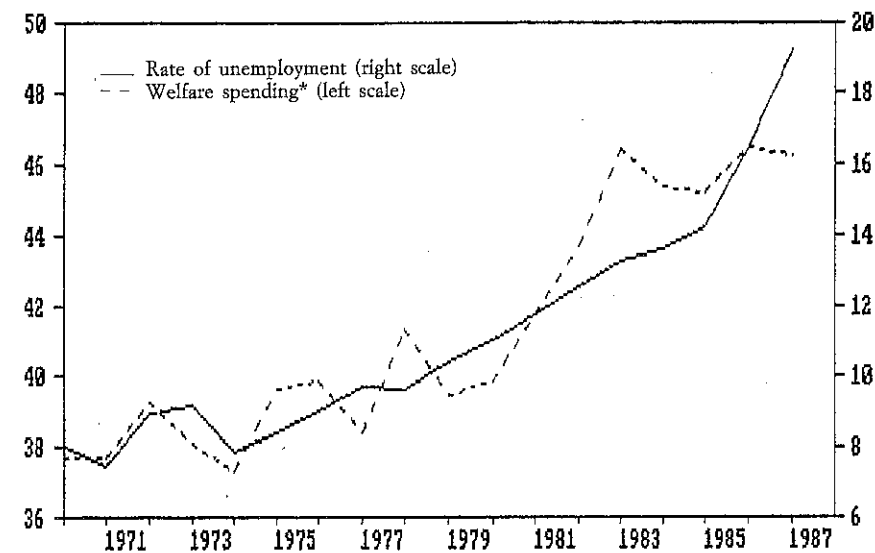
* Pension, health and other assistance; percentage ratio to dependent labour disposable income.
Source: Svimez.

to an increase in the NAIRU but, in the main, to the fall in aggregate demand growth below that of potential output, on the one hand, and to an increase in the supply of labour resulting from demographic factors and increased participation rates on the other. They had also detected a significant negative effect of unemployment on real wages, but strong non-linearity of their Phillips curve entailed that this effect was declining for higher unemployment (it will be recalled that this is a property of the wage equation presented in Table 3). They had concluded that there was no evidence that unemployment was path-dependent (hysteresis), but at the same time stressed the role of labour market rigidities and constraints that effectively work to insulate largely "insiders'" wage dynamics from any excess supply pressure of unemployed "outsiders".[13]

Subsequent results by Bodo and Sestito (1989) qualify further this conclusion. On the basis of estimates disaggregated by region, these authors are able to show, on the one hand that the rate of increase of wages in manufacturing is a function of unemployment in the Centre-North; on the other hand, that wages in the South are basically determined by wages in the rest of the country through national contracts and the influence, in closing wage differentials, of the public administration. Unemployment in the South is largely determined by demographic factors and participation rates, and plays little role in determining wage growth (except that in the small and shrinking private manufacturing sector); its main effect, as we saw, is that of raising public transfers to the area.

It is easy to see how these features of the labour market may have combined perversely in bringing about the acceleration of wages that has been observed in 1987-89. The rapid increase in industrial production and productivity led to near-full employment conditions very early in the Centre-North (where rates of unemployment are estimated between 5 and 6%) and to the pro-cyclical acceleration in wages that one would expect in these circumstances. Wages in the South kept pace, but industrial output and productivity did not, with the result that the cost differential with the rest of the country actually increased, and the (already small and weak) manufacturing sector in that region shrank even further. Thus, economy-wide labour

cost absorbed an increasing share of productivity increases and ultimately outpaced them.[14]

These developments leave Italy in a position of worsened disadvantage, after ten years in the EMS. Going back to table 2, we can see that Italy did experience sizeable gains in productivity relative to the major EEC partners, but that labour cost differentials were even higher; the *level* of labour cost per unit of output, relative to our major competitors, is now higher than it was in 1980.[15] These calculations point to some potential difficulties created by labour-market integration. Increasingly, in Italy German wage *levels* are taken as reference-target by unions in setting their contract platforms; labour productivity, however, still is some 13% lower than that in Germany. In most other European countries the government managed to enforce guidelines for wage *increases* equal to those prevailing in Germany, so that higher productivity growth was largely devoted to reducing productivity differentials; this has not happened for Italy.

(c) *Public finances, labour cost and inflation*

Public finances have affected the recovery of inflation in the late eighties in two ways. On the one hand, as has been discussed, there has been an increase in the overall share of resources appropriated and distributed by the public sector, leading to lower efficiency and higher rigidity in the economy. On the other hand, there has been a sizeable increase in the tax-contributory pressure, which directly raised costs and prices in the economy.

In order to highlight some direct effects on firms' costs, table 5 shows total labour cost and its main components as a ratio to net

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[13] For a detailed analysis of these rigidities and constraints and a comparison with other European countries' labour markets, see CENTRO STUDI CONFINDUSTRIA (1990).

[14] For the whole economy, productivity increases exceeded labour cost increases slightly in 1981-85 (0.1% per year), sizeably in 1986 (1.5%). In 1987-89 the balance turned negative (−0.2% per year), and the same happened also in 1990 (−0.2%). As was mentioned, during this period labour cost rose more than wages due to the progressive elimination of social security contribution exemptions, as part of the efforts by the government to reduce its deficit.

[15] Consistent with this finding, ASAP (1990) presents calculation showing that for the EEC as a whole the wage-gap (real labour cost divided by productivity) went down by some 7 per cent during the last decade, with a reduction of 9-10 percentage points in Germany, France, and Belgium, and higher reductions in Ireland and Portugal (17-18%), Spain and the Netherlands (13%). Italy, with a reduction of 1.6%, is the second worst performer after Greece (with the UK as a close third).

compensation received by a manufacturing worker, for Italy and a number of other industrial countries, in 1979 and in 1989. Italy's anomalous position is quite evident: in 1989 labour cost was more than twice net pay, with direct taxation explaining some 26 (percentage) points of the difference and social security contributions – largely borne by firms – explaining the rest.

Italy's ratio of labour cost to net pay (205%) compares with values of around 190% for France, 182% for Germany, 150% or less for the UK, US and Japan (127%).

During the eighties this ratio increased in virtually all countries considered but Italy had the second highest increase (together with Germany, 22 percentage points) after Denmark. Of the total increase in labour cost during the decade, less than half (48.2%) can be imputed to workers' net pay, while 18.9% was due to higher direct taxation and contributions paid by workers, and 32.9% to the higher contributions paid by firms.

In his study on taxation and real wages, Tullio (1986) showed that the degree of forward tax-shifting on wages and prices is high

TABLE 5

TAX AND SOCIAL CONTRIBUTION WEDGE BETWEEN LABOUR COST AND DIRECT COMPENSATION FOR AN UNMARRIED WORKER
(net compensation of a worker in manufacturing = 100)

		Italy	France	Germany	UK
1. Gross compensation	1979	125	125	146	142
	1989	138	132	155	139
	change	13	7	9	−3
2. Social contribution charged to workers	1979	11	15	23	9
	1989	12	23	27	13
	change	1	8	4	4
3. Income tax	1979	14	10	23	33
	1989	26	9	28	26
	change	12	−1	5	−7
4. Net compensation (1-2-3)	1979	100	100	100	100
	1989	100	100	100	100
5. Social security contribution rate falling on firms	1979	58	47	23	14
	1989	67	59	27	14
	change	9	12	4	0
6. Labour cost (1+5)	1979	183	172	169	156
	1989	205	191	182	153
	change	22	19	13	−3

Source: CENTRO STUDI CONFINDUSTRIA (1990).

(between 50 and 80%) in most industrial countries, with Italy showing one of the highest coefficients: there is little question that the growing tax-contributory burden must have been a major factor in driving up wage and price inflation.

As for the broader role of tax increases the second half of the decade has been characterized by attempts by the government to reduce, and indeed eliminate, the primary (net of interest payment) deficit and to stabilize the growth of public debt as a ratio to GDP, since this was rapidly approaching a value of unity. Chart 1 and table 6 show that indeed some results were achieved in reducing the primary deficit, but that the rising interest burden almost entirely offsets these gains, so that the total financing requirements only came down marginally, as a ratio to GDP, and public debt growth remained rapid. At the end of 1990 it has surpassed the value of GDP.

TABLE 6

CHANGES IN GOVERNMENT FINANCIAL POSITION AND MAIN DETERMINANTS IN MAJOR EEC COUNTRIES
(in percentage of GDP)

		Italy	France[a]	Germany[a]	UK[a]
Government debt	1980	58.5	37.3	32.5	54.6
	1989	98.4	46.9	43.1	38.6
	change	39.9	9.6	10.6	16.0
Net borrowing	1980	9.6	0.8	2.6	3.2
	1989	10.2	1.5	−0.2	−0.9
	change	0.6	0.7	−2.8	−4.1
Current revenues	1980	31.5	42.7	44.4	38.0
	1989	41.7	46.5	44.6	39.1
	change	10.2	3.8	0.2	1.1
Total spending	1980	41.2	45.0	47.6	42.7
	1989	52.3	49.6	44.8	39.5
	change	11.1	4.6	−2.8	−3.2
Spending net of interest	1980	36.2	43.6	45.9	38.3
	1989	43.2	46.9	42.2	35.8
	change	7.0	3.3	−3.7	−2.5
Government consumption	1980	14.4	17.6	19.6	19.7
	1989	16.8	18.3	18.6	19.6
	change	2.4	0.7	−1.0	−0.1
Social security and pers. tranfers	1980	14.8	20.4	19.8	12.9
	1989	18.6	23.5	18.0	13.2
	change	3.8	3.0	−0.8	0.3

[a] OECD estimates.
Source: OECD and, for Italy, National Accounts.

These developments have been the result of total revenue increases of some 5 percentage points of GDP in the second half of the eighties, that followed similar increases in the first half. Tariffs and indirect tax increases, on their part, contributed directly and indirectly to inflation quite strongly: we have calculated that they have had an average impact on consumer prices of over one percentage point per year since 1987 (Table 7). The total effect is clearly higher if one takes into account second-round effects and the forward shifting of direct-tax increases.

TABLE 7

IMPACT ON PRICES OF INDIRECT TAXED AND PUBLIC TARIFFS
(percentage changes)

	1987	1988	1989	1990*
Contributions to CPI increases				
- Public tariffs	0.3	0.5	0.6	0.6
- Indirect taxes	0.5	0.6	0.7	0.5
- Total	0.8	1.1	1.3	1.1
Tariff increases	3.5	4.7	6.0	6.3
CPI increases	4.7	5.0	6.3	6.4

* Average of first eleven months over same period of previous year.

Altogether, after raising the tax-contributory pressure by 10.2 points of GDP, and thus reaching the European average (Sarcinelli 1990), Italy finds itself with about the same public deficit, as a ratio to GDP, that it had at the beginning of the decade (having, of course, reversed some of the increases that took place in between), and a much higher (almost doubled) debt to GDP ratio. Giovannini and Spaventa (1990) rightly point out that the margins for any further tax increases may be negligible.[16]

What has been said also shows that the repeated overruns in interest payments in the late eighties cannot be considered independent of what was happening to non-interest spending and tax-contributory pressure. We have seen already that high wage increases,

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[16] Unequal income distribution, narrow tax base, high evasion and "oppressive" taxation of those who pay taxes, and inefficient tax administration structure are the reasons that lead to this conclusion.

low productivity and "defensive" interventions, that retarded adjustment and factor mobility on the one hand and taxes and tariffs on the other, were placing growing pressure on prices. These adverse effects on prices, in turn, can be considered together with the growing weight of government paper in private portfolios, a main reason for interest rates failing to come down.

(d) Monetary and exchange rate policy

As can be seen in chart 6, during the first half of the eighties for most of the time exchange rate changes were smaller than changes in price differentials and thus placed considerable pressure on Italy's producers' prices. This pressure became less intense from 1985 to 1988, picking up again only in 1989 and especially in 1990 (cf. also Table 4: in 1990 the lira appreciated in real terms by 5.3% vis-à-vis industrial countries and 2.4% vis-à-vis the EEC). The period 1987-89 also saw an acceleration in money and monetary base growth, without any adverse implication on the lira position in the EMS band; in fact this was a period of large reserve accumulation (continuing in 1990).

It has been argued in Bini Smaghi and Micossi (1989) that the easing of monetary policy was largely due on the one hand to the relaxation of monetary policy in Germany in 1987-89, on the other to the favourable impact on exchange rate expectations of the elimination of foreign exchange controls in Italy (Micossi and Rossi 1989), that led to large capital inflows.[17]

Be that as it may, the fact is that the acceleration of activity and cost pressures also coincided with weakened monetary-exchange rate discipline. Many, including Bini Smaghi and Micossi (1990), have argued that to an important extent this was caused by a "systemic" change in the functioning of the EMS exchange rate arrangements: with free capital the asymmetric model of monetary coordination of the early EMS years, that was based on the nth-country role of Germany, is evolving into a more symmetric model in which aggregate monetary growth may be gradually losing its German anchor.

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[17] Indeed, it is easy to verify that more rapid monetary expansion can be attributed, in the main, to the foreign component of monetary base and money supply; capital inflows became very large after the lira renounced the 6% margins, in January 1990, and completed (the following May) the removal of foreign exchange controls.

CHART 6

CONSUMER AND PRODUCER PRICE DIFFERENTIALS
AND LIRA EXCHANGE RATE

(% rates of change)

Italy *versus* Germany

Italy *versus* France
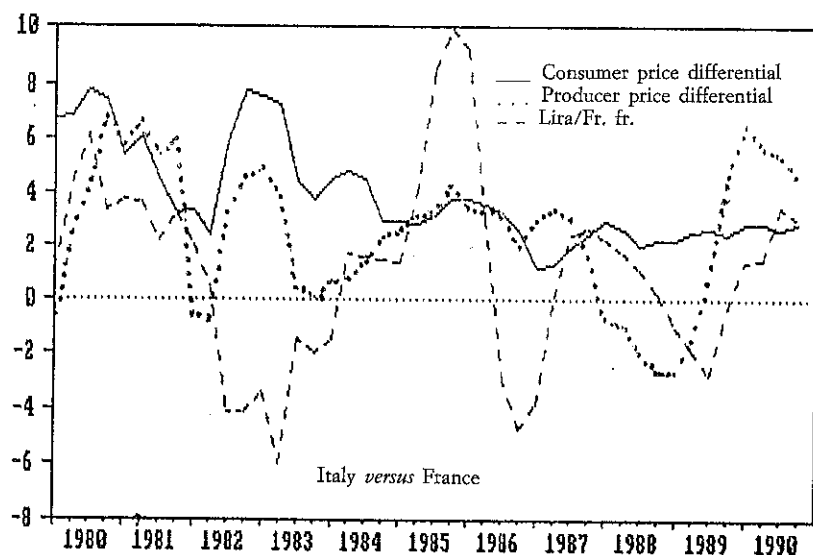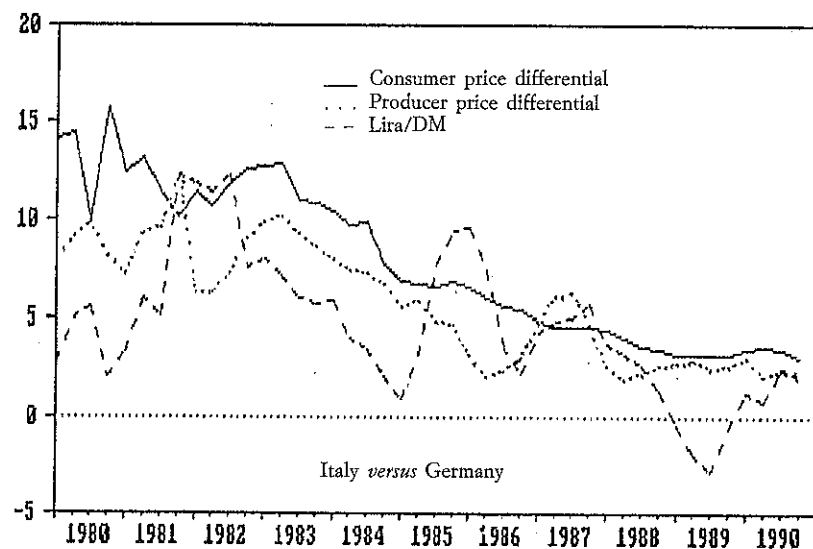
Source: Bank of Italy, ISTAT.

The real shock that has hit the German economy in 1990, with unification and the sharp acceleration in public spending, may for some time attenuate the problem (by generating expectations of an *una tantum* appreciation of the DM). But in the long-run, as financial market integration proceeds and people learn to exploit the opportunities for interest rate arbitrage, it is doubtful that higher inflation countries can maintain interest rate differentials consistent with prevailing differentials in inflation rates.

This consideration has played a major part in the decision to move as rapidly as possible to a single central bank and a centralized monetary policy. The process to get there, however, will take time; the possibility of weaker monetary control during transition obviously requires that other policy tools – fiscal and income policies, and other supply-side policies – take up a greater share in ensuring macroeconomic convergence.

5. Conclusions

The foregoing analysis has shown that disinflation in Italy was mainly brought about by tight monetary-exchange rate policy, that forced very strong adjustment in the manufacturing sector; there is little evidence that announcements and expectations contributed significantly to the process, and the inflation unemployment trade-off may have been worsened.

Indeed, to an important extent the costs of adjustments were initially hidden in the public sector accounts; when this was no longer possible, in the second half of the decade, and it was necessary to raise taxes, some of the initial inflation benefits had in a way to be "paid back".

Furthermore, the analysis of the return of inflation has shown that during the decade, partly as a direct consequence of "defensive" policies designed to reduce the social costs of adjustment, the economy, notably the labour market, became more rigid; extensive protection and guarantees became over time a source of wage pressures that further fuelled the recovery of inflation.

Meanwhile, the margins for maneuver have diminished both for monetary and for fiscal policy. Monetary control has become less firm

and monetary conditions have eased as a result of systemic changes in the ERM (free capital). There is little room left in the public budget for "defensive" support of sectors and regions. There is even smaller room for further increases in taxation, given the heavy burdens already placed on the shrinking part of the economy that is exposed to international competition.

The implications for the transition to monetary union seem rather straightforward. On the one hand, an acceleration in the centralization at European level of monetary policy, that will bring with itself complete fixity of exchange rates, is needed, more than anything else for systemic reasons (monetary control is weaking and free capital can lead to increased strains in the exchange rate mechanism). However, the contribution that can be expected from monetary policy in bringing again under control inflationary pressures is scanty; even if it were possible to tighten monetary policy, this could progressively suffocate the part of the economy that responds to market incentives.

Policies that address directly the causes of re-emerging inflation in the protected sectors and that start dismantling the barriers that have shielded them from any pressure to adjust are urgently needed. To this end, the first and most important requirement is to start dismantling an excessively large public sector and to reverse the increase in the share of public spending in GDP that took place in the eighties. Complementary to this is the definition of tight standards for income policy, that the government must be able to apply first of all to its employees.

Against this background, it would still appear useful to commit as firmly as possible to a pre-announced path leading to full and irrevocable exchange rate fixity; this path, however, can only be defined on the basis of realistic consideration of the feasible pace of institutional changes that are required by monetary union. Announcing the progressive steps towards full exchange rate fixity could play a role in forcing weak political institutions and governments to confront the constraints of European integration and finally launch the adjustment policies in the public and, more broadly, the extensive protected sectors of the economy, that so far have been eluded.

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