



Munich Personal RePEc Archive

# **Wage formation in the Italian private sector after the 1992-93 income policy agreements**

Piero, Casadio

Bank of Italy - Research Department

January 2003

Online at <https://mpra.ub.uni-muenchen.de/29396/>

MPRA Paper No. 29396, posted 11 Mar 2011 19:46 UTC

in: G. Fagan, F.P. Mongelli and J. Morgan (2003) *New Features of Wage Determination and Institutions in Europe*, London: Edward Elgar Publishing Ltd.

## **6. WAGE FORMATION IN THE ITALIAN PRIVATE SECTOR AFTER THE 1992-93 INCOME POLICY AGREEMENTS**

Piero Casadio\*

January 2003

### **Abstract**

The effects of the 1992-93 Income Policy Agreements on wages and wage differentials are analysed. In the last decade, both the aggregate real wages and their differentials among individual remained constant. Thanks to the effectiveness of the new Government target inflation, the national contracts embodied a substantial wage moderation, driving the inflation expectations. At the opposite, the firm-level contracts coverage only slightly increased, insufficiently distributing the productivity growth. The cooperative framework favoured the diffusion of organisational change, temporary contracts and flexibility. The income policy was crucial to introduce the wage moderation, favouring the employment growth and helping the fiscal adjustment. Currently such positive results are at risk.

Keywords: Wage determination, Inflation, Income Policy, Performance-related Pay.

JEL-Code: J31, J51, J53.

---

\* Bank of Italy, Research Department. The views expressed here are personal and do not necessarily reflect those of the Bank of Italy. For helpful comments I thank A. Brandolini, P. Cipollone, L. D'Aurizio, M. Magnani, F. Mongelli, J. Morgan, P. Pini, R. Torrini, the participants to the ECB workshop on 'Wage Formation in Europe' in Frankfurt, December 2001, and the participants in the Italian Labour Economists' Annual Conference in Salerno, September 2002. Special thanks to F. Giorgi and R. Nizzi for research assistance.

## **Introduction and Main Conclusions**

This chapter analyses the effects of a decade of incomes policy on wage formation in Italy. The wage bargaining structure (henceforth BS) stemming from the 1992-93 Income Policy Agreements is widely seen as having been crucial in bringing about wage moderation by linking wages to the government's target inflation. This has also been viewed as instrumental for the major fiscal adjustment in the 1990s and thereby supportive of Italian participation in the European single currency. This cooperative bargaining structure, that has been called *Concertazione* between social partners has, *inter alia*, supported the adoption of performance-related wage premia at the firm level, temporary contracts and flexible working time arrangements. Nevertheless, the compressed wage differentials between skills and regions have remained unchanged.

Since 1992-93 the main sectoral national contracts (SNCs) have precluded any price-wage spiral by aiming at increasingly lower inflation targets and eschewing the previous policy of automatic indexation for price increases. The coverage of firm-level contracts (FLCs) has increased only slightly. In the year 2000 more than half of the workers in firms with above ten employees were still excluded from such contracts. Inside the covered segment there has been a widespread adoption of performance-related wage premia, which are generally used more regularly than other forms of premia, but nevertheless remain relatively small in relation to the productivity trend. Only some elements of wage flexibility and differentiation have been introduced at the company level.

The chapter is organized as follows. The next section provides an overview of the long-run developments in wages and wage dispersion in Italy. In the third section, the recent

evolution of wage bargaining institutions is considered. The fourth section discusses the role of the inflation target used in the wage agreements in inducing and maintaining wage moderation. The coverage and adoption of firm-level contracts and the use of performance-related wage premia and their effects on wage differentials are considered in the fifth section. Finally, the increasing relevance of individual wage-setting at the firm-level and some open questions are assessed.

### **The Long-Run Evolution of Wages, Productivity and Wage Differentials in Italy**

Econometric evaluations of the recent Italian income policies have typically concentrated on the period following the 30 per cent devaluation of the Italian lira. During 1993 the inflation rate remained around 4 per cent, despite a direct impact on domestic inflation from the devaluation of at least three percentage points<sup>1</sup>. Surprisingly, many formal investigations failed to identify any regime change relating to the Income Policy Agreements as a source of moderation in wages, inflationary expectations and firms' mark-ups<sup>2</sup>. In particular, it was difficult to immediately disentangle the role of the income policies, because of the contemporaneous severe domestic recession and the introduction of a large restrictive fiscal package. Without any wage indexation Italian firms became more cautious in raising their profit margins after the devaluation and the need to secure price stability became more

---

<sup>1</sup> A few weeks before the devaluation, under the hypothesis of a 10 per cent depreciation of the Italian lira, the Bank of Italy econometric model simulated a 4 per cent consumer price increase in a year and a 7 per cent increase in three years (Siviero and Terlizzese, 1997). Because of the recent elimination of the wage indexation, the Phillips curve was no longer a valid forecasting tool. Using some *ad hoc* link with the value-added deflator or the input-output tables framework, there was a consensus about a considerably reduced impact elasticity, around 0.1, with a medium-run elasticity largely uncertain, around 0.5 (Fabiani et al., 1997).

<sup>2</sup> See Nicoletti Altamari (1997) and Siviero and Terlizzese (1997).

widely accepted by all social partners<sup>3</sup>. Only since 1996 has it become possible to identify econometrically the results of the new patterns of wage bargaining. In particular, by means of counterfactual simulations Fabiani et al. (1997) showed that, without the income policy, Italy might have experienced a 2-3 per cent higher inflation in 1996. To have maintained the 1993-98 disinflationary path solely by means of monetary policy would have required a major slowdown in activity which would have, in turn, seriously undermined the fiscal adjustment. In a longer-run perspective it is reasonable to argue that joining the single currency would have been far more difficult without the 1992-93 Income Policy Agreements.

In the private sector, per capita real wages have remained broadly constant over the last decade, closing the gap with the productivity trend which emerged due to the higher wage growth of the 1970s and the 1980s (Figure 6.1). The same pattern emerged in all the main economic sectors, pointing to a high degree of coordination. Since 1995 a moderate recovery in real wages has been accompanied by an increase in employment. The labour share of value added has decreased since 1992 in all the main sectors<sup>4</sup>. The dispersion of individual real incomes, net of taxation, declined continuously until 1991 (Figure 6.2). Then, between 1991 and 1993 the dispersion index jumped up by about 25 per cent, due also to the more than 1.5 million newly unemployed, caused by the Italian recession. These were generally median wage earners, mature unskilled workers with a high tenure. In 1993 some of them probably enlarged the lower quantiles of the distribution, receiving some

---

<sup>3</sup> See Gavosto, Sabbatini and Sestito (1994) for the firms' price policy, Dell'Aringa (1994) for the strongest anti-inflationary environment and Onofri (1997) for the major effects of the fiscal package.

<sup>4</sup> In private services the 1990s' reduction followed that of the previous decade and was amplified by technological change and privatizations. In industry the labour share was still high in 1991-92 and started declining only after the Income Policy Agreements.

unemployment benefits. The relatively higher wage dispersion in the following years may largely reflect changes in the composition of the employment. The bulk of the additional two million jobs created since 1995 are accounted for by young part-time or temporary workers, which enlarged the gap between the total dispersion index and the full-time and full-year one (Figure 6.2). Moreover, total dispersion can be decomposed into a ‘between sector’ part – which slightly declined in the 1990s – and in a ‘within sector’ part, which slightly increased. Total dispersion remained fairly constant if one imposes a fixed employment composition by contractual category of the 1990.

In the following section we seek to assess the main effects on wage dispersion and differentials of the different wage components: national contracts minima, premia set in a firm-level contract and premia unilaterally decided by the firm.

## **The Institutional Framework Evolution**

### *The Heritage from the 1970s and 1980s*

During the 1970s high inflation and faster labour cost growth undermined the international competitiveness of the Italian economy, which was periodically but temporarily restored by exchange rate devaluations. In the second half of the 1980s the Banca d’Italia’s adoption of a tighter monetary policy inside the Exchange Rate Mechanism of the European Monetary System was explicitly designed to curb inflation and wage dynamics. The resulting increase in goods market discipline due to international competition supported,

*inter alia*, wage moderation in manufacturing while private services remained a source of inflationary pressure<sup>5</sup>.

The wage bargaining structure was based primarily on national contracts, with company-level agreements playing a supplementary role. Without any specialization, all issues were covered at each bargaining level. This introduced an inflationary bias, as wage behaviour was the cumulative outcome of cost-of-living adjustments – the so-called *Scala Mobile* – and pay increases set at the company level. The indexation induced substantial real wage resistance, with respect to terms of trade and oil shocks as well as to changes in indirect taxation<sup>6</sup>. Over time, indexation strongly reduced wage differentials, both regional and skill differentials, causing severe distortions<sup>7</sup>. Firm-level individual and unilateral wage increases were used in order to reduce such distortions. Little room remained for negotiated collective wage incentives and profit-sharing schemes. The government did not play a consistent role over this period, neither in defining a general macroeconomic framework, nor did it regulate public sector earnings coherently. Overall, the Italian wage bargaining structure was characterized by an intermediate degree of centralization and a small degree of

---

<sup>5</sup> Compared to Germany and France, the output price dynamics in the service sector remained remarkably high and productivity stagnant (see Visco, 1994).

<sup>6</sup> Automatic wage increases due to indexation were quarterly before 1986 and then half-yearly until the 1992 abolition. The degree of coverage of the *Scala Mobile* –ratio of the percentage changes of the indexed components of wages to the rate of change of the cost-of-living index– was very high. In manufacturing the coverage was about 60 per cent at the beginning of the 1970s. It was elevated to above 90 per cent in the centralized 1975 agreement, when any differentiation by skill or contractual category in the indexed increases was eliminated. The degree of coverage gradually declined towards 80 per cent in the following decade. As a paradox, in that period the degree of coverage for the lower categories of blue-collar workers was slightly above 100 per cent. In 1986, after some centralized income policy episodes, the indexation mechanism was reformed. The automatic wage increases became semi-annual and the degree of coverage fell to 50-60 per cent. See Visco (1995), Bank of Italy (1986) and Manacorda (2002) for more details.

<sup>7</sup> The trade union organizations too have always favoured little differentiation of wage increases, both across sectors and qualifications. The regional wage differentials are analysed in Manacorda (2002) and Brandolini, Cipollone and Sestito (2001).

coordination among sector national contracts renewals prevailed<sup>8</sup>. Many of these problems have been addressed in the last decade.

### *The Wage Bargaining Structure Designed in 1992-93*

At the beginning of the 1990s after a prolonged expansion the Italian economy slowed down. At the end of 1991 the former indexation mechanism was frozen under a growing perception of an impending crisis due to losses in competitiveness and the poor state of the public finances. Indexation was abolished with the July 1992 partial agreement in combination with a substantial short-term wage freeze<sup>9</sup>. In September 1992, together with the crises of the European Monetary System, the Italian lira was devaluated by about 30 per cent over a short period of time. The sustainability of public debt was in doubt and an emergency fiscal package was imposed.

At this point the social partners recognized the macroeconomic need for wage moderation and set about sterilizing the major terms-of-trade shock. Some other microeconomic longer run targets were: 1) increasing wage flexibility with respect to the economic performance of the firms; 2) reducing wage compression; 3) sustaining employment by means of more flexible working contracts.

The July 1993 agreements between social partners set up a hierarchy of specialized bargaining levels, with the national contracts devoted to maintaining the purchasing power of wages while firm-level contracts were devoted to the distribution of productivity gains.

---

<sup>8</sup> According to Calmfors and Driffil (1988), such a combination had adverse effects. A more centralized structure could neutralize the negative externalities of a rapid wage increase. On the other hand a more decentralized structure could benefit from the discipline induced by competition in the goods market.

<sup>9</sup> Waiting for a full reform, any firm-level wage increase was suspended until the end of 1993, compensated by a one-off undifferentiated payment equal to 0.7 per cent of the average wages in January 1993.

National contracts were set for four years for their non-wage components and two years for wages. The new instrument of the government's target inflation was introduced to lead inflation expectations down and facilitate coordination among social partners. The new wage increases granted in SNCs were forward looking, reflecting the government's target inflation set for the two years ahead. As a safety net, an ex post compensation should be provided for the difference between the actual and the target rates of inflation in the two preceding years. Such a difference should be adjusted to eliminate the effects of changes in the terms of trade due, for example, to a devaluation. The lack of a clear formulation about the compensation for past non-targeted inflation remained a source of conflict. In addition, nothing was specified in the agreement about tax variations<sup>10</sup>.

In practice, the SNCs specified the money amount of the increases in contractual base pay for each level of employment. Increases are generally divided into two equal instalments<sup>11</sup>. In industry, base pay incorporates the former cost-of-living adjustment and corresponds to around 80 per cent of total pay. In the market services sector the proportion was even higher. Incentives for the speedy renewal of national contracts were provided for in the 1993 agreements<sup>12</sup>. The wage part of the Italian bargaining structure always regulated

---

<sup>10</sup> Indirect taxes, like VAT, are often excluded by the core inflation indicators. We should assume it was excluded even from the definition of target inflation. How to consider changes in the tax wedge and the social contributions was not specified. The question is relevant, because all the social partners often asked for a reduction of the tax wedge and because the degree of real wage resistance affects the outcomes of wage bargaining.

<sup>11</sup> In general, the first instalment is paid immediately at the renewal, and the second one 12 months later. The contractual earnings indicator is typically stair-shaped. Most settlements provide for a one-off payment compensating for the months of delay not fully covered by the contract. The median delay in the private sector during the 1990s was about four months.

<sup>12</sup> In the period between the expiry of a contract and its renewal, employees receive an automatic wage increase equal to one-third of the official target inflation rate after three months and half that rate after other three months.

the standard or contractual monthly bill, with only a loose determination of the hourly wage and no real link with hourly productivity<sup>13</sup>.

The hierarchically subordinated<sup>14</sup> firm-level contracts, which should have a four-year duration, provided for their expiry to be staggered with respect to the related SNC. The firm-level contracts should grant flexible wage increases, linked to the economic performance of the firm, and thus should be productivity-stimulating and non-inflationary by nature. In particular, such flexible wage premia are not to be subsequently transformed into a fixed component of earnings, as was the case in the past.

#### *Opening Clauses and Wages below the Contractual Minimum*

In Italy contractual wages are normally used as the benchmark in case of legal disputes, providing a natural minimum wage that is differentiated by sector and category of worker. The two lowest categories serve as entry level for young people and apprentices<sup>15</sup>, especially in small enterprises and less developed areas. The cost of labour can fall below the contractual minimum: (1) because of the territorial pacts and the area contracts<sup>16</sup>; (2) due to

---

<sup>13</sup> The SNCs set the standard weekly working hours, about 38-39 hours, corresponding to the standard monthly wage bill. Without any major change in those weekly hours, the actual number of hours worked per year changed markedly in the last three decades (see Casadio and D'Aurizio, 2001).

<sup>14</sup> The national contracts can set ceilings for company-level pay increases and provide for their suspension in given periods.

<sup>15</sup> The new apprenticeships introduced in 1996 allow newly hired young workers to be paid an initial wage equal to 80 per cent of the contractual minimum wage for the lowest category, rising gradually to 100 per cent over the three- to four-year duration of the contract.

<sup>16</sup> In the last five years so-called territorial pacts and area contracts have been introduced (see Bank of Italy, 2002). Both these instruments permit the non-application of minimum contractual wages in backward areas subject to authorizations negotiated between trade unions, employers and local authorities. Some incentives are provided for the northern firms to open new plants in the south.

relief of social contribution or the concession of tax credits for employees<sup>17</sup>; and (3) by the work provided by self-employed workers, on the basis of contingent contracts which are similar to those of salaried workers, apart from the reduced fiscal contributions and the absence of firing costs<sup>18</sup>.

Furthermore, wages below the contractual minimum levels are frequently paid in the underground economy which, according to some recent estimates, might account for about 15 per cent of Italian GDP. Underground employment, expressed in full-time equivalent units, was about three millions and a half million in 2001, about a million and a half of which estimated to be irregular full-time employees, not covered by any national contract<sup>19</sup>.

### **National-Level Contractual Wages and the Effectiveness of Target Inflation**

On the basis of the available econometric and institutional evidence, the government's inflation target proved to be very effective in reducing inflation expectations and in fostering coordination of the different sectors' contractual wages.

On the econometric side, using the quarterly model of the Bank of Italy, only shortly after the 1995-96 strong recovery in production was it possible to identify the main features of the new wage determination regime. Between 1970 and 1991 a standard Phillips curve

---

<sup>17</sup> The tax credit introduced at the end of the year 2000 is the most important active labour market policy applied in Italy because of the large size of the relief and its nation-wide applicability. The measure, supporting the creation of permanent jobs, seems to be quite effective but provides a low level of selectivity; see Bank of Italy (2002) and Cipollone and Guelfi (2003) for more details.

<sup>18</sup> According to the Labour Force Survey, the share of self-employed workers is above 25 per cent in Italy (about six million) compared to less than 10 per cent in the other main European countries. Even excluding the employers and a large part of family workers, to account for the Italian small firms' structure probably about two and a half million Italian workers would have been classified as employees in other countries or under different regulations (see Torrini, 2003).

was estimated for the pre-income policy regime<sup>20</sup>. Thus a systematic pattern in forecasting errors emerged, with an overestimation of the wage dynamics between 1992 and 1995, corrected by a small underestimation in 1996. The catching up of wages with respect to the target inflation raised to a year and a half. The main changes in the wage formation were: a small reduction in the NAIRU and a decrease in the speed of adjustment of wages to the previous-quarter inflation. Hence, a new wage determination regime was now identified, because since 1993 the nominal wage dynamics was driven by the target inflation rather than actual inflation.

Target inflation persistently underestimated actual inflation. Between 1992 and 2002 the cumulative forecasting error, a year ahead, was -8.7 percentage points (126.0 versus 134.7, Table 6.1) and it was -10.2 two years ahead<sup>21</sup>. Due to the ex-post compensation mechanism, the cumulative increase in the private sector per capita contractual wages was five points above the target inflation (Table 6.1). The remaining 3.6 points' distance from the actual inflation could be fully attributed to terms-of-trade shocks. Therefore, the Income Policy Agreements were formally respected. However, this experience illustrates that even constant contractual real wages make a negative contribution to the total wage bill. In fact, in the private sector such a contribution was cumulatively 6.3 percentage points below inflation

---

<sup>19</sup> Such an amount is obtained excluding the approximately 600 000 irregular self-employed, and excluding occasional jobs and multiple irregular activity added to a regular job.

<sup>20</sup> See Fabiani et al. (1997). The average private sector wage growth was regressed on the consumption inflation rate and on both actual and expected inflation, with an homogeneity restriction. In the estimation the following were included: the unemployment rate, capacity utilization, hours of strike, the replacement ratio and the unemployment rate differential between the north and the south. In such a formulation there is no response of wage growth to the productivity gains, which should have been a logical long-run assumption, because any tendency towards the long-run equilibrium was not yet visible (see Figure 6.1). In the estimates it was mainly the unemployment rate in the north that influenced the wage dynamics.

<sup>21</sup> As a comparison, in the same period the Consensus Survey forecasts cumulatively overestimated the actual Italian inflation respectively by 1.2 and 3.2 percentage points, one year ahead and two years ahead.

(128.4 versus 134.7, Table 6.1). Overall, the reduced protection operated by the SNCs left to the firm-level negotiations the task of coping with the productivity trend and the above-mentioned inflation differential.

On the institutional side we can explain the small and temporary deviations of contractual earnings from the target inflation (Figure 6.3), by means of the ex-post real losses compensation<sup>22</sup>. Four periods can be identified. First, in 1992-94 the suspension of the former wage bargaining structure<sup>23</sup> sharply reduced the rate of growth of private per capita wages from above 9 per cent to below 2 per cent. Second, in 1995-96 the first new regime national contracts were applied. The acceleration of the contractual earnings indicator above the target inflation embodied the full credibility of such a target. Only a partial ex post compensation for the 1992-94 real losses (two percentage points) was added to the cumulative target inflation for 1995-96 (4.5 per cent)<sup>24</sup>. The third period, 1997-98, started out with a considerable potential for conflicts, because during the 1995-96 period the actual inflation rate had exceeded the target inflation one by about four percentage points. Some trade unions attempted, unsuccessfully, to introduce a new form of automatic wage indexation. The following helped in solving these tensions: (a) the diffusion in 1995-96 of firm-level contracts with flexible wage premia (see next paragraph) and (b) the target inflation for 1996-97 set at a level about a percentage point higher than the actual inflation.

---

<sup>22</sup> For more details see Istat (2002), CNEL (1997, 2000).

<sup>23</sup> At the end of 1991 the former indexation mechanism was frozen and in July 1992 abolished. Waiting for a full reform of the BS, any firm-level wage increase was suspended until the end of 1993 and compensated by a one-off undifferentiated payment amounting to 0.7 per cent of the average total wages in January 1993.

<sup>24</sup> In November 1994 and in January 1995 the two most important SNCs were renewed: the wholesale and retail trade one (eight months' delay) and the metalworking SNC (six months' delay). Both the contracts added to the cumulative target inflation an extra payment (less than 2 per cent), as a partial compensation for the previous year's real losses and for the delay. Many other SNCs were then renewed quickly and without strikes.

Finally, since 1999 the wage bargaining structure was increasingly questioned by social partners. However, two opposite requests to reduce/increase the relevance of wages set at the national level neutralized each other, and the debate gradually shifted to reforming employment protection legislation.

The two-year length of wage settlements under national contracts is unusual. In the past, it was thought that annual renewals might generate too much conflict in the Italian system. In addition, agreeing two years of increases in advance introduces considerable nominal inertia. This no doubt worked in favour of wage moderation up to 1995, but it then set workers to recoup several years of decline in real wage at one fell swoop with the contract renewals of 1997. Again, when the oil price substantially increased in the year 2000, the biannual length turned out to be quite useful. The nominal wage inertia prevented the temporary upward pressure from imported prices from being embodied in the medium-run firms' costs.

### **Firm-Level Contracts and Performance-Related Wage Bonuses**

To summarize, in Italy at the end of the 1980s: (i) a very small fraction of workers were covered by firm-level contracts, concentrated in large industrial firms; (ii) often in non-covered firms, small payments, additional to the SNCs, were unilaterally decided by firms; (iii) the expired firm-level contracts often remained unrenewed for years; (iv) all types of firm-level wage premia were in fixed amounts of money, definitely embodied in the wage bill; and (v) high inflation rapidly reduced the real value of such wage premia.

The full exploitation of the 1992-93 agreements should imply: a pervasive diffusion of firm-level contracts, their regular renewals after four years and a continuous increase in

flexible performance-related wage premia. However, the coverage of firm-level contracts has only partly increased. Moreover, even inside the covered segment, the cumulative amount of performance-related premia remained markedly below the productivity trend. Overall only limited elements of wage flexibility and differentiation were introduced at the company level.

A long-run analysis of all the different data and sources on firm-level contracts in Italy is presented by Rossi and Sestito (2000). They show how different sources give a similar picture, once corrected for differences in definitions. In 1995-96 about 40 per cent of workers in firms with more than ten employees was covered by a FLC<sup>25</sup>, corresponding to 3.2 million employees, with about a half of them being concentrated in industry. The coverage was strongly positively correlated with the firm size and markedly lower in the south. Since 1997 there is evidence of only a slight increase in the FLCs' coverage, almost solely due to the banking sector and the large store chains. The Bank of Italy Survey on Investment in Manufacturing (SIM henceforth) shows a high and fairly constant coverage of FLCs since 1994<sup>26</sup> (Table 6.2). The reduced coverage in the south and in smaller manufacturing firms (20-49 employees) was confirmed in 2001. Overall, currently about a half of the workers in private firms above ten employees, and almost all of those working in smaller firms, are estimated to be still excluded by FLCs' coverage.

---

<sup>25</sup> The Istat Survey (1999) –conducted interviewing 8000 firms with more than ten employees– measured the cumulative flow of FLCs renewals in 1995-96, which was quite a good approximation of the stock of new regime contracts because of the first generalized implementation of the Income Policy Agreements.

<sup>26</sup> See Bank of Italy (1996) for more information about the annual survey conducted on a representative sample of about 1000 firms with more than 50 employees. In the SIM the estimated FLCs' coverage is higher than in Istat, because even earlier FLCs, paying the pre- 1992-93 fixed-amount payments, are included.

There has been a widespread adoption of performance-related pay within the covered segment. In 1994-95, together with the first renewals of the new regime national contracts, a large fraction of firms covered by a FLC immediately introduced some performance-related wage premia<sup>27</sup>. The Istat Survey for 1995-96 shows that about a quarter of employees in industry and a fifth in services received such premia. In the south the diffusion was only 7 per cent. In contrast to many other countries, in Italy the adoption of flexible firm-level premia was not helped by fiscal incentives<sup>28</sup>.

According to the SIM, a particularly strong adoption of performance-related wage bonuses was registered in the last decade, among medium and large manufacturing firms<sup>29</sup> (Table 6.2). However, in 2001, such wage bonuses were used in only 13 per cent of firms with between 20 and 49 employees. The traditional ‘fixed amount’ wage bonuses are still given in the south (more than 40 per cent of firms) and by firms with fewer than 200 employees (30 per cent)<sup>30</sup>. The share of manufacturing workers covered by performance-related wage bonuses has increased faster: up to nearly 75 per cent in 1999 (Table 6.2). Again in 2001 this share was below 15 per cent in firms with 20 to 49 employees. At the end

---

<sup>27</sup> In 1994, many firms simply added some decimal points to the 0.7 per cent wage increase decided centrally in the July 1993 agreement, as a start of more cooperative relations at the firm level. Often some sequential FLCs were signed in the following two years, renegotiating and monitoring the new performance-related bonuses.

<sup>28</sup> The incentives announced by the government at the end of 1997 were formally introduced in 1999, but only took effect in 2000. Firms with flexible wage premia gain bonuses on social contributions equal to the amount of such premia, up to the 3 per cent of workers’ wages. In 2000 total fiscal incentives amounted to about 400 million euro. The corresponding number of employees can be estimated at 650 000 to 800 000 employees.

<sup>29</sup> The share of firms above 50 employees with performance-related wage bonuses was negligible before 1992; and increased up to 21 per cent at the end of 1994 and to 47 and 63 per cent in 1996 and 1999 respectively.

<sup>30</sup> The flexible payments are equally divided between partly and totally variable with respect to performance. A total variability is predominant in firms with more than 500 employees (nearly 50 per cent of those firms); see Casadio (2003) for more details.

of 2001, considering only manufacturing firms with more than 20 employees, the total number of workers receiving flexible wage bonuses would be around two million.

The relationship between FLCs and actual wage increases is not an automatic one. Many firm-level contracts provide such increases irregularly, or just conditionally on specific targets. However, even firms without a formal firm-level contract can pay wage increases, individually and unilaterally. Using the Bank of Italy SIM data, we analyse the sector of the Italian economy which has shown the most widespread adoption of firm-level contracts – manufacturing firms with more than 50 employees – and find that additional wage bonuses, even if frequent, are still not paid continuously<sup>31</sup>. The result is the insufficient distribution to workers of the productivity gains.

In the SIM, the increase in total wages due to additional bonuses set at the firm level – both unilaterally paid or contracted upon – was about 0,3 per cent in 1995, reached peaks of 1.3 per cent in 1996 and 1.1 per cent in 1998 and then remained around 0.8 per cent until 2001. During the two peaks the increases were particularly marked for firms with more than 500 employees, for those paying flexible wage premia and for firms in the north (Figure 6.4).

In the last decade, firm-level contracts have tended to (1) reduce wage dispersion inside the firm<sup>32</sup>; (2) enlarge the wage differentials among similar workers in firms with

---

<sup>31</sup> Since 1996 the share of employees actually gaining additional firm-level premia in the reference year fluctuated around 65-70 per cent in the larger industrial firms and in the north; and remained between 25 and 40 per cent in firms below 200 employees and in the south. Even in firms with performance-related premia, the probability of gaining an additional wage premium was markedly lower than one, fluctuating between 60 and 75 per cent. Such a probability was between 35 and 50 for workers covered by old-fashioned FLCs, paying only fixed-amount premia; it was on average about 20 per cent for workers not covered at all by FLCs, with a clear cyclical pattern.

<sup>32</sup> Generally the wage premia contracted upon at the firm level pay the same amount to all the workers, or at most differentiate by category, on the base of the compressed SNCs' scale. The idea is to incentivize all the

different productivity/profitability; and (3) slightly increase regional wage differentials between firm located in the north or in the south of Italy. In particular, the SIM data show that in the south the average incidence of total firm-level wage increases was 0.3 percentage points smaller per year, compared to the other Italian regions. Cumulatively, between 1995 and 2001 the induced wage drift in the south was some 2.5 per cent smaller. That reflects compositional effects and productivity differentials<sup>33</sup>. Even assuming a proliferation of fully flexible company-level bonuses, it will take several years to create significant differentials across regions characterized by different productivity levels. We should interpret this as allowing the possibility to enlarge and institutionalize firm-level wage premia in the north – given the insufficient distribution of productivity gains pointed out before – and not as a means to reduce wages in the south.

In the income policy framework the existence of a performance-related pay firm-level contract could signal more collaborative labour relations which favour the adoption of a more flexible organization of the firm<sup>34</sup>. With the SIM data the adoption of FLCs with performance-related pay was recently shown to be a complement to a more intensive utilization of fixed-term contracts and to standard working time variability with respect to production fluctuations<sup>35</sup>.

---

workers as a team, assigning to the other unilateral payments the role to selectively incentivizing some high-skilled workers.

<sup>33</sup> Controlling for sectors, dimensions and the peculiar kind of FLC, some panel data estimations conducted on over 700 SIM firms between 1995 and 1999 pointed to bigger performance-related wage bonuses in the northeast of Italy. Compared to that region, firms in the northwest paid annual average per capita wage bonuses 0.2 percentage points lower. Such differentials in wage bonuses were 0.3 percentage points for firms located in the centre of Italy and 0.4 for the southern firms, see Casadio (1999).

<sup>34</sup> See Cainelli et al. (2002), Leoni (2001), Pini (2002) and their references.

<sup>35</sup> See Casadio and D'Aurizio (2001).

## The Increasing Relevance of Firms' Individual Wage-setting

Individual wage-setting in Italian firms is generally underestimated, particularly by the international literature, because of the lack of reliable data. Only for the important metalworking and engineering sector<sup>36</sup> are long-run data available that show the changing composition of wages.

In this sector the share of wages determined by the national contracts was about 79 percent in 1991 and then steadily declined to 75 per cent in 2000. The complementary 25 per cent determined at the firm level is mainly composed by the *extra-minima*<sup>37</sup> (see Figure 6.5). From the incentives and wage differentials point of view the individual and collective *extra-minima* are fairly different. The individual one tends selectively to increase internal wage differentials and skill premia. The collective *extra-minima* generally reproduce the compressed SNCs' wage differentials by category. With some simplifying assumptions<sup>38</sup> it is possible to distinguish between the two categories, showing the sharp increase in the individual *extra-minima* share, to above 15 per cent of total metalworking wage bills in the last six years. The incidence of the performance-related pay increased by three points since 1992, consistent with the Income Policy Agreements prescriptions, but almost completely at

---

<sup>36</sup> This sector accounted for 2 100 000 employees in 2000, corresponding to 16 per cent of Italian production and a half of both the exports and the production of investment goods. The sector is considered a leader in wage determination, together with the wholesale and retail trade. The *Federmeccanica* –representative association of the employers of the sector– has since 1976 provided yearly data about the wage composition by category of worker and by wage components, which is set in the national contract or at the firm level.

<sup>37</sup> In Italian *Superminimi*, which includes both individual and collective premia, additional to the national contracts minima. Such *extra-minima* are paid on a monthly basis and by a fixed amount, definitely embodied in the wage level.

<sup>38</sup> The total *extra-minima* coming from the *Federmeccanica* data were decomposed in individual and collective *extra-minima* on the base of the *Assolombarda* Survey, formally the subsample of firms and plants located in Milan province, which is one of the biggest and most productive Italian industrial districts. The incidence of individual *extra-minima* in the *Assolombarda* data should be upward biased, but the bias could be constant over time.

the expense of the collective *extra-minima*. Therefore a more efficient and variable team-productivity incentive – generally maintaining or reducing internal wage differentials – substituted the previous more rigid instrument. No real changes in the incentive policy of the metalworking and engineering Italian firms can be identified.

### **Some Open Questions**

In relation to wage-settings and income distribution in the long run, the Italian 1992-93 agreements dealt only indirectly with the regulation of the distribution of income between wages and profits. At the end of any biannual-length SNC, an *ex-post* compensation should be provided only with respect to the differential between the actual and the target inflation, that is, the real contractual wages, net of the terms-of-trade effects. Therefore a short-run reduction of the labour share should be expected after major devaluations or oil price shocks, to reduce their inflationary impact. No direct appraisal or correction is related to the actual distribution of productivity gains<sup>39</sup>. In particular, nothing can enforce the adoption of firm-level contracts in the majority of firms. In the long run an equilibrium relation should emerge between real wages and productivity, and the labour share should be stationary.

The simple model presented by Casadio (2003) shows how the 1992-93 agreements are likely to be biased towards the reduction of the labour share in the long run and may not support a reduction in the share of wages fixed at the national level. The main result points to a slow tendency towards actual real wages reduction, induced by the link with inflation for

---

<sup>39</sup> In contrast, a sort of distributional neutral wage growth rule is adopted in Germany. Some compensation should be considered if the past year wage growth differed substantially from the sum of the planned rate of inflation and the medium-run productivity growth.

contractual wages only<sup>40</sup>, and the insufficient aggregate distribution of productivity gains induced by the exclusion of a big fraction of employees by firm-level wage premia. Interestingly, the long-run tendency to reduce the labour share should emerge, even assuming that firms without an FLC unilaterally pay some additional wage premia to maintain constant the share of wages determined at the firm level.

An often-quoted weakness of the Italian wage structure is the rigidity that stems from its having inherited pay scales that are relatively flat and in reproducing them mechanically by granting all employees roughly the same nominal increases regardless of rank. In the traditional view, sectors and dimensions, but not the territory or the specific firm characteristics, are the main determinants of the wage differentials, reflecting the embodied human capital.

In recent years many changes in the Italian wage-setting have occurred, but the literature has presented only limited evidence of them<sup>41</sup>. In particular, on the aggregate side many authors have shown the substantial irrelevance of the local unemployment rates in determining wage dynamics during the 1980s and the early 1990s<sup>42</sup>. Using more disaggregate data, a few recent studies have found interesting results about the effects of regional unemployment on the lower quantiles of the wage distribution<sup>43</sup>.

---

<sup>40</sup> If the contractual wages are the  $\alpha$  per cent of total wages, and increases at the inflation rate  $\pi$ , the actual real wages decrease at the rate  $(1 - \alpha)\pi$ . For example, in manufacturing, contractual wages are about 85 per cent of the total; therefore in this sector total real wages decreased by 0.5 per cent per year if the inflation rate was 3.4 per cent.

<sup>41</sup> It depends partly on the delay in the release of administrative data, currently up to 1997, and partly on the low quality of the information on the wage drift one can get as a difference between national accounts and contractual wages.

<sup>42</sup> See Dell'Aringa, Ghinetti and Lucifora (2000) for a review.

<sup>43</sup> See Brunello, Lupi and Ordine (1999, 2000) and their references.

## Future Developments

The 1992-93 wage bargaining structure has not been fully supported by social partners, especially since 1999, but it has survived mainly because of the repeated crises that have been faced. In more recent years, trade unions have preferred to maintain the current wage bargaining system, while asking for new instruments to distribute the productivity growth at the central level. The employers' associations have alternated between calling for a significant reduction in the importance of national contracts and demanding a larger role for company-level contracts within the existing system.

After the May 2001 change of government, the effectiveness of the *Concertazione* among social partners was challenged directly. In July the metalworking SNC was renewed without the subscription of the bigger union in the industrial sector. In July 2002 a new pact was signed by the government, again without the subscription of the bigger union in the industrial sector. The main issue was the introduction of some temporary increase in the possibility of firing workers without just cause. This would increase the government's autonomy, reduce the role for unions and definitely end the *Concertazione* and incomes policy experience. This new phase has already been accompanied by a resurgence of social conflict.

The next contractual round, opening at the beginning of 2003, will face a large *ex-post* excess in inflation compensation at a time of a cyclical downturn and the ending of the *Concertazione*. In recent months the three bigger unions presented for the first time separate wage demands for the relevant metalworking and engineering national contract renewal. The

degree of wage coordination is sharply, because at the same time the credibility of the government target inflation is strongly questioned<sup>44</sup>.

In the short run some wage acceleration will probably emerge, but overall wage moderation seems not to be at risk. In our opinion, what is more vulnerable, is the set of flexible arrangements contracted upon at the firm level since 1995-96 under the general cooperation induced by the *Concertazione*.

---

<sup>44</sup> The July 2002 Italian Government Financial Programming Document set the target inflation for 2003 and 2004 respectively to 1.4 and 1.3 per cent. All three bigger unions announced that they would consider as a reference point for the next renewals a 2 per cent inflation expectation for both 2003 and 2004, which is in line with the Consensus forecasts.

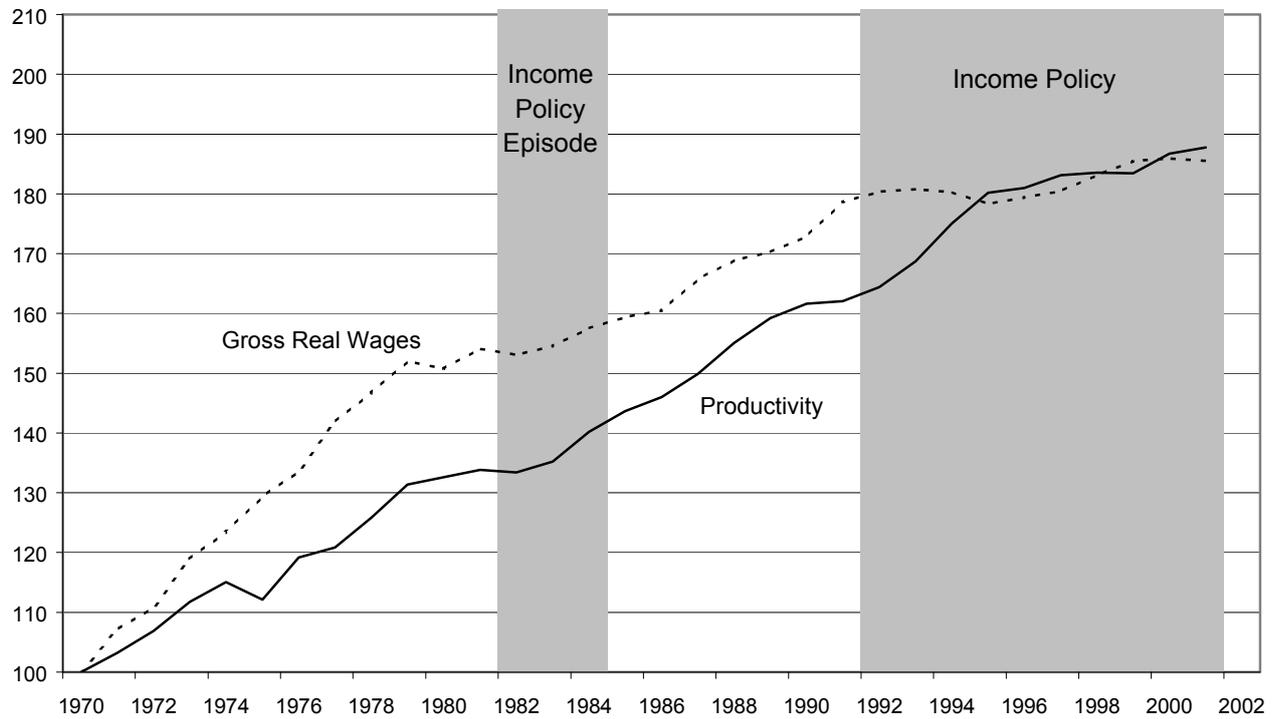
## References

- Bank of Italy (1996), *Metodi e Risultati dell'Indagine Sugli Investimenti delle Imprese Industriali*, Supplemento al Bollettino Statistico, Note metodologiche e informazioni Statistiche, **59** (6).
- Bank of Italy (various years), *Annual Report of the Governor*, 31 May, Rome.
- Brandolini, A., P. Cipollone and P. Sestito (2001), "Earnings dispersion, low pay and household poverty in Italy, 1977-1998", in D. Cohen, T. Piketty and G. Saint-Paul (eds.), *The New Economics of Rising Inequalities*, Oxford: Oxford University Press.
- Brunello, G., C. Lupi and P. Ordine (1999), *Widening Differences in Italian Regional Unemployment*, Fondazione ENI Working Papers N. 54.
- Brunello, G., C. Lupi and P. Ordine (2000), "Regional disparities and the Italian NAIRU", *Oxford Economic Papers*, **52**, 146-77.
- Cainelli, G., R. Fabbri, and P. Pini (2002), "Performance-related pay or pay for participation? The Case of Emilia-Romagna", *Human Systems Management*, **21** (1), 43-62.
- Calmfors, L. and J. Driffill (1988), "Bargaining structure, corporatism and macroeconomic performance", *Economic Policy*, **3** (6), 7-12.
- Casadio, P. (1999), "Diffusione dei premi di risultato e differenziali retributivi territoriali nell'industria", *Lavoro e Relazioni Industriali*, **1** (gennaio-giugno), 57-81.
- Casadio, P. (2003), *Wage Formation and Wage Differentials in the Italian Private Sector After the 1992-93 Income Policy Agreements*, Temi di discussione, Bank of Italy Working Papers, forthcoming.
- Casadio, P. and L. D'Aurizio (2001), "Working hours flexibility, employment flexibility and wage flexibility in the Italian industry: Complements or substitutes?", presented at the EALE Conference 2001, September, Jivaskila University, Finland, and *Economia e Lavoro*, **3** (settembre-dicembre, anno XXXV), 71-91.
- Cipollone, P. and A. Guelfi (2003), *Tax Credit Policy and Firms' Behaviour: the Case of Subsidies to Open-End Contracts in Italy*, Temi di discussione, Bank of Italy Working Papers, n. 471.
- CNEL (1997, 2000), *Rapporto Sulle Retribuzioni e il Costo del Lavoro*, Documenti CNEL, n. 30, maggio.
- Dell'Aringa, C. (1994), *Caratteri Strutturali dell'Inflazione Italiana*, Bologna: Il Mulino.
- Dell'Aringa, C., P. Ghinetti, and C. Lucifora (2000), "Pay Inequality and Economic Performance in Italy: A Review of the Applied Literature, presented at the PiEP LSE Conference, 3-4 November 2000, London.
- Fabiani, S., A. Locarno, G. Oneto and P. Sestito (1997), *NAIRU: Income Policy and Inflation*, OECD Economics Department Working Paper, N.187, and *Risultati e Problemi di un Quinquennio di Politica dei Redditi: Una Prima Valutazione Quantitativa*, Temi di discussione, Bank of Italy Working Paper, n. 9, March 1998.

- Gavosto, A., R. Sabbatini and P. Sestito (1994), “Inflazione e ciclo economico: alcuni elementi di analisi per interpretare i recenti avvenimenti in Italia”, *Moneta e Credito*, **188** (47), 495-514.
- Istat (1999), *Indagine Sulla Flessibilità nel Mercato del Lavoro nel 1995-96*, Rome
- Istat (2002), *Annual Report*, 15 May, Rome.
- Leoni, R. (ed.) (2001), *Disegni Organizzativi, Stili di Management e Performance d'Impresa*, Milano: Franco Angeli.
- Manacorda, M. (2002), *Can the ‘Scala Mobile’ Explain the Fall and Rise of Earnings Inequality in Italy? A Semi-parametric Analysis, 1977-93*, Centre for Economic Performance, LSE Working Paper.
- Nicoletti Altimari, S. (1997), “Uno studio sulle aspettative di inflazione in Italia: 1970-1995”, Banca d'Italia, *Ricerche quantitative per la politica economica 1995*, **1**, 1-46.
- Onofri, P. (1997), “La capacità previsiva dei modelli econometrici nella recente fase ciclica”, Banca d'Italia, *Ricerche quantitative per la politica economica 1995*, **2**, 819-40.
- Pini, P. (ed.) (2002), *Innovazioni Organizzative, Risorse Umane e Relazioni Industriali*, Milano: Franco Angeli.
- Rossi, F. and P. Sestito (2000), “Contrattazione aziendale, struttura negoziale e determinazione decentrata del salario”, *Rivista di Politica Economica*, ottobre-novembre, 129-84.
- Siviero, S. and D. Terlizese (1997), “Crisi di cambio e innovazione nei comportamenti: alla ricerca di discontinuità strutturali nel modello econometrico della Banca d'Italia”, Banca d'Italia, *Ricerche quantitative per la politica economica 1995*, **2**, 841-904.
- Torrini, R. (2003), *Cross-Country Differences in Self-Employment Rates: the Role of Institutions*, Temi di discussione, Bank of Italy Working Papers, forthcoming.
- Visco, I., (1994), “Caratteri strutturali dell’inflazione italiana: 1986-1991”, in C. Dell’Aringa, *Caratteri Strutturali dell’Inflazione Italiana*, Bologna: Il Mulino.
- Visco, I., (1995), “Inflation, inflation targeting and monetary policy: Notes for discussion on the Italian experience”, in L. Leiderman and L. Svensson (eds.), *Inflation Targets*, London: CEPR, pp.142-68.

**Figure 1**

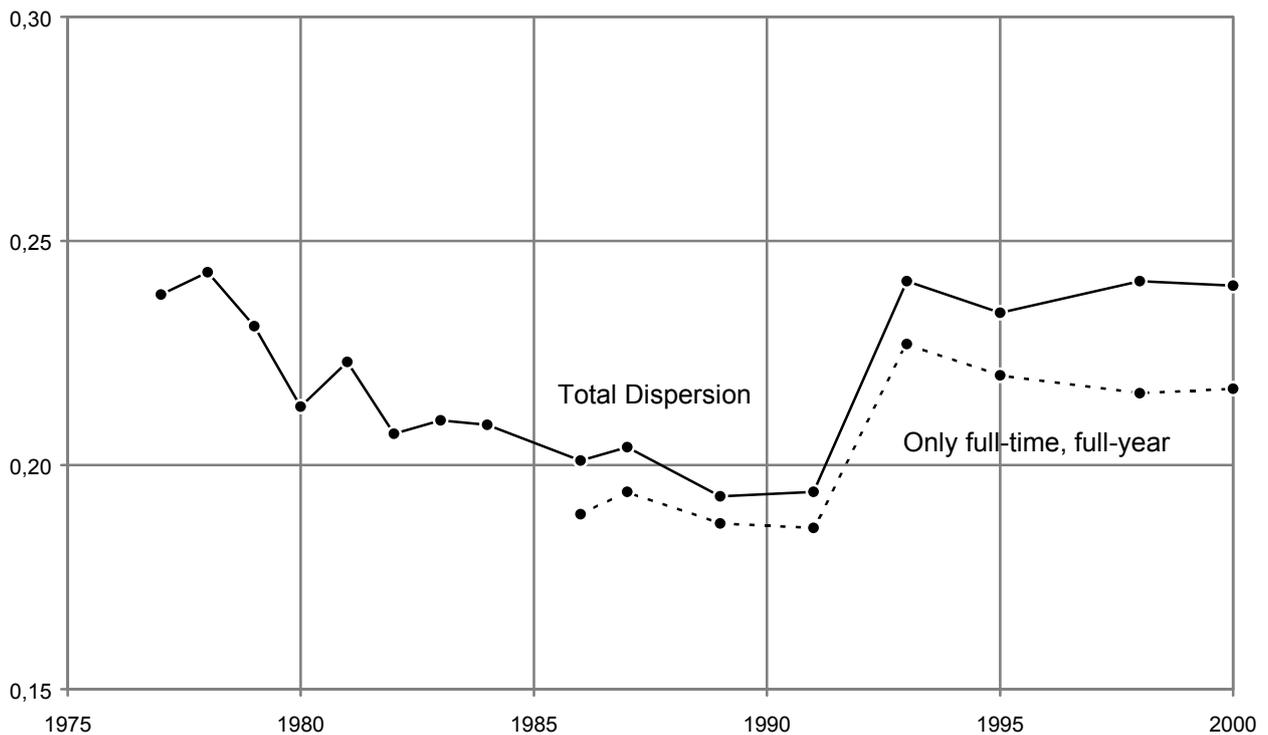
**Per Capita Gross Real Wages and Productivity in the Italian Private Sector (1)**  
(Index 1970 = 100)



Source: Istat. National Accounts. Notes: (1) Net of Agriculture and Energy.

**Figure 2**

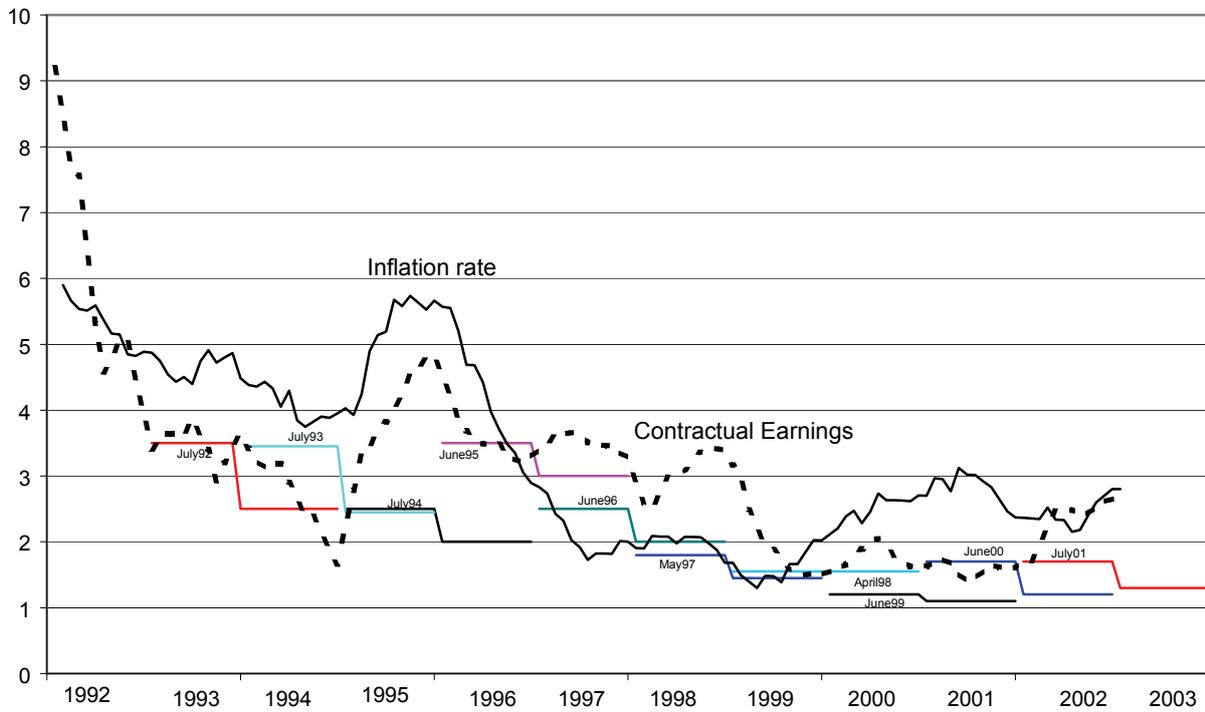
**Dispersion of the Italian Individual Real Wages, Net of Taxation**  
(Gini index, percentage values)



Source: Bank of Italy Survey on Households Income and Wealth (SHIW).

Figure 3

**Actual Inflation, Target Inflation (1) and Contractual Earnings  
in the Italian Private Sector**  
*(percentage changes)*

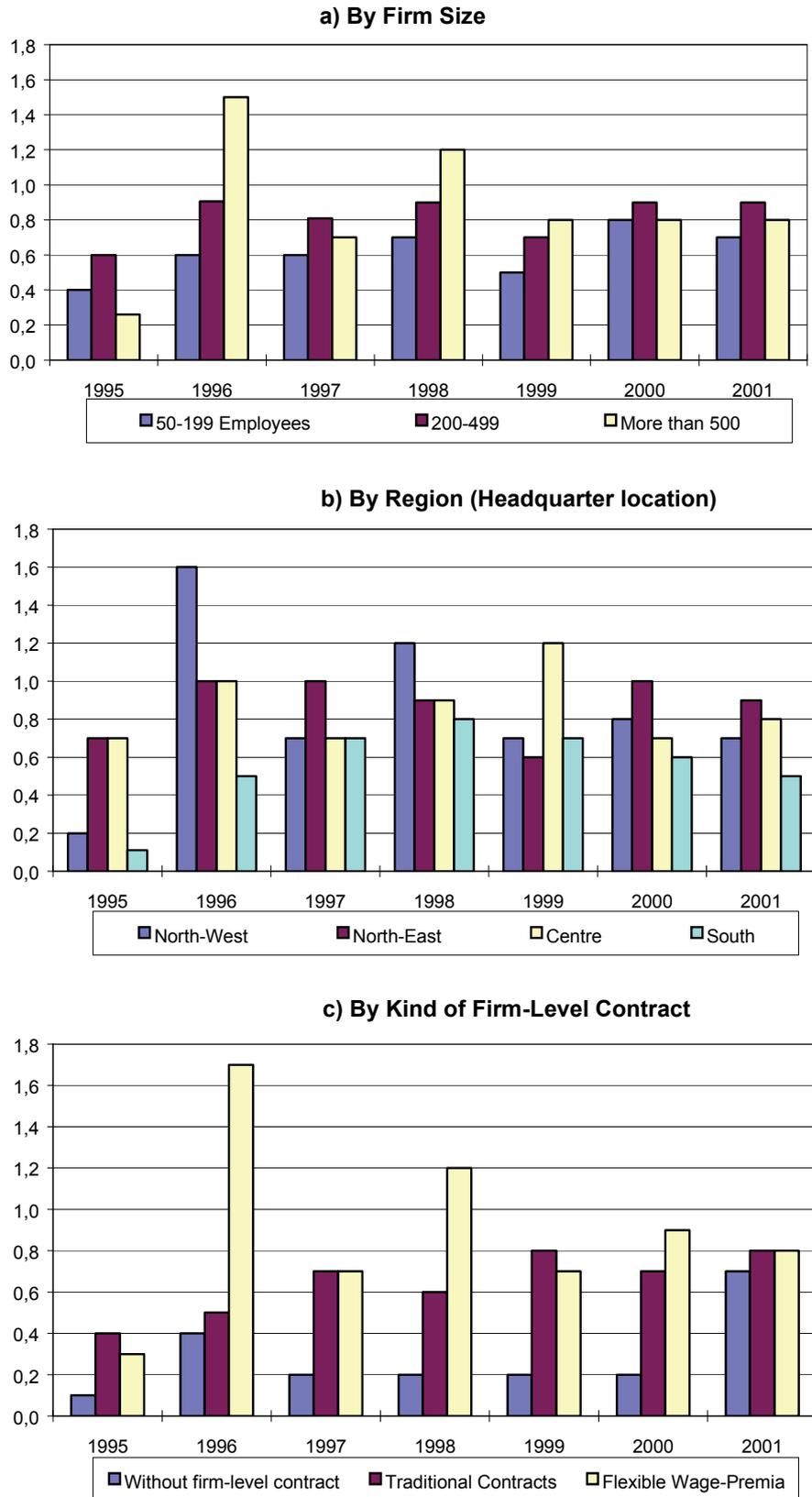


Source: Istat. Consumer Price Index; Government Target Inflation (DPEF, various years).

Notes: (1) the target inflation date is referred to the release by the Government for the following two years

**Figure 4**

**Incidence of Firm-Level Wage Increases on the Previous Year**  
**Total Wage Bill; All Firms, Paying or not Such Premia.**  
 (Percentage incidence; Manufacturing Firms with More than 50 Employees)



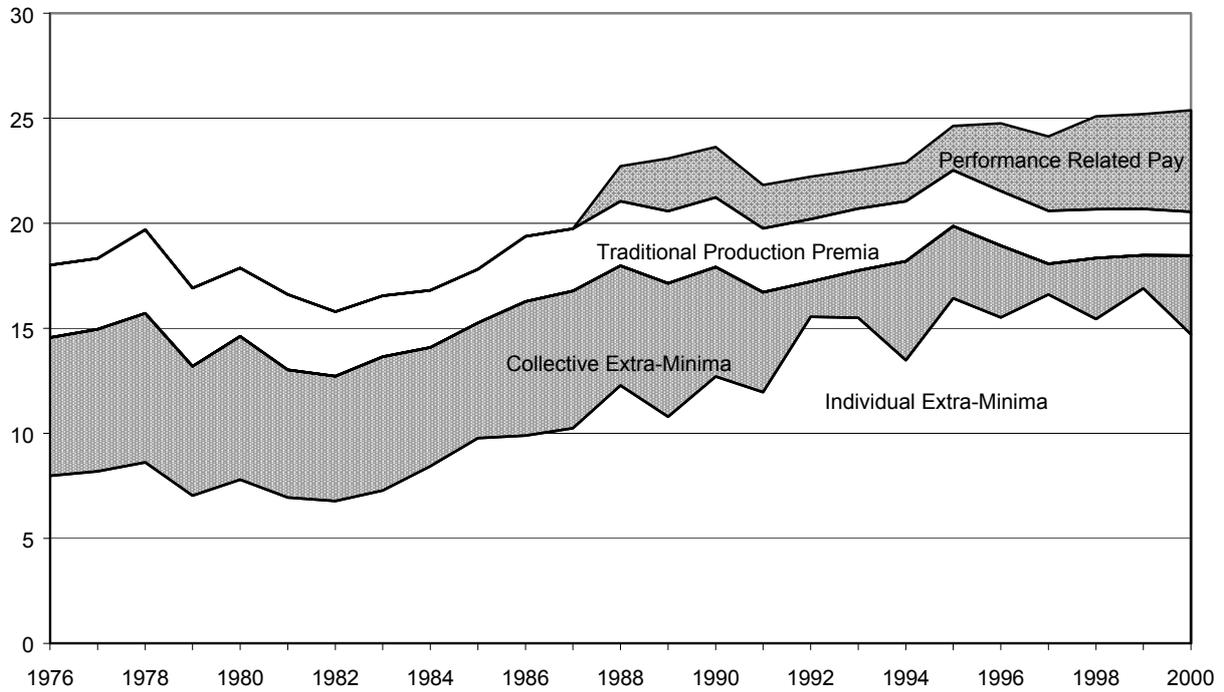
Source: Bank of Italy SIM, Survey on Investment in Manufacturing, telephonic follow-up.





Figure 5

Share of the Metalworking and Engineering Total Wage Bill (1)  
Determined at the Firm Level by Component  
(Percentage values)



Source: *Federmeccanica* Survey.

Notes: (1) The overtime premia are excluded by the total. The Extra-minima wage premia are computed as the difference –category by category– between actual monthly paid wage bills and the national contract ones. The only decomposition of Extra-Minima in an individual and a collective part, is based on the proportion obtained by the related *Assolombarda* Survey for the Milan province firms.

**Table 1****INFLATION AND WAGE CUMULATIVE GROWTH***(Indexes, 1992 = 100; percentages)*

|  | <b>1994</b> | <b>1996</b> | <b>1998</b> | <b>2002</b> |
|--|-------------|-------------|-------------|-------------|
| <b>Actual Inflation</b>  | 108.3       | 118.6       | 122.7       | 134.7       |
| <b>Target Inflation ( a year ahead)</b>                            | 107.1       | 113.6       | 118.6       | 126.0       |
| <b>Private Sector per capita Contractual Wages:</b>                |             |             |             |             |
| - <b>Contribution to the Total Wage Growth (a)</b>                 | 106.1       | 114.1       | 121.6       | 131.1       |
| <b>Private Sector: % Share of Contractual Wages on Total Wages</b> | 88.8        | 87.7        | 87.8        | 84.8        |

Source: Our Calculations on the base of Istat data.

Notes: (a) Computed assuming that all the other wage components, but the national contracts minima, remains constant.



Table 2

**FIRM-LEVEL CONTRACTS COVERAGE BY KIND OF WAGE BONUSES: MANUFACTURING SECTOR**  
(Percentages of firms and of employees)

| Types of firm-level contract                  | <i>Firms with more than 50 employees</i> |              | <i>Firms with more than 50 employees</i> |              | <i>Firms with more than 50 employees</i> |              | <i>Between 20 and 49 employees</i> |              |
|---|--|--------------|--|--------------|--|--------------|------------------------------------|--------------|
|   | End of 1994                              | End of 1994  | End of 1996                              | End of 1996  | End of 1999                              | End of 1999  | End of 2001                        | End of 2001  |
|   | Firms                                    | Employees    | Firms                                    | Employees    | Firms                                    | Employees    | Firms                              | Employees    |
| <b>a) Without company contract</b>            | <b>14.1</b>                              | <b>7.6</b>   | <b>10.2</b>                              | <b>5.7</b>   | <b>11.6</b>                              | <b>5.2</b>   | <b>66.4</b>                        | <b>66.4</b>  |
| <b>b) With a company contract</b>             | <b>85.9</b>                              | <b>92.4</b>  | <b>89.8</b>                              | <b>94.3</b>  | <b>88.4</b>                              | <b>94.8</b>  | <b>33.6</b>                        | <b>33.6</b>  |
| of which: by kind of wage premia              |  |              |  |              |  |              |                                    |              |
| <b>b.1) No additional firm-level premia</b>   | <b>0.0</b>                               | <b>0.0</b>   | <b>0.0</b>                               | <b>0.0</b>   | <b>0.0</b>                               | <b>0.0</b>   | <b>10.1</b>                        | <b>10.1</b>  |
| <b>b.2) Traditional bonuses.....</b>          | <b>64.9</b>                              | <b>35.0</b>  | <b>42.7</b>                              | <b>26.9</b>  | <b>25.3</b>                              | <b>19.7</b>  | <b>9.9</b>                         | <b>9.9</b>   |
| - of predetermined amount .....               | 60.5                                     | 32.7         | 39.9                                     | 25.4         | 22.3                                     | 17.5         | 8.8                                | 8.8          |
| - for organisational change.....              | 4.4                                      | 2.3          | 2.9                                      | 1.5          | 3.0                                      | 2.2          | 1.1                                | 1.1          |
| <b>b.3) Bonus related to performances ...</b> | <b>21.0</b>                              | <b>57.4</b>  | <b>47.1</b>                              | <b>67.4</b>  | <b>63.1</b>                              | <b>75.1</b>  | <b>13.6</b>                        | <b>13.6</b>  |
| - of the whole company .....                  | 16.8                                     | 47.9         | 39.0                                     | 50.0         | N.A.                                     | N.A.         | N.A.                               | N.A.         |
| - of single production units.....             | 4.3                                      | 9.5          | 8.1                                      | 17.4         | N.A.                                     | N.A.         | N.A.                               | N.A.         |
| Or  |  |              |  |              |  |              |                                    |              |
| - partly related to performances.....         | N.A.                                     | N.A.         | N.A.                                     | N.A.         | 31.6                                     | 35.3         | 5.5                                | 5.5          |
| - totally related to performances.....        | N.A.                                     | N.A.         | N.A.                                     | N.A.         | 31.5                                     | 39.8         | 8.1                                | 8.1          |
| <b>Total a) + b).....</b>                     | <b>100.0</b>                             | <b>100.0</b> | <b>100.0</b>                             | <b>100.0</b> | <b>100.0</b>                             | <b>100.0</b> | <b>100.0</b>                       | <b>100.0</b> |

Source: Bank of Italy, Survey on Investment in Manufacturing.

