WAGE CONTROLS: 
THE BULGARIAN EXPERIENCE IN 
1991 – 1993 

Mariella Nenova 

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The incomes policy with its key element, the wage regulation, is among the most important instruments in the stabilization programmes of most Eastern European countries. Its purpose is to assist the restrictive monetary and fiscal policy in depressing real demand until stabilization is achieved. Inflation is reduced by relieving the demand pull on the market (the so-called demand-push inflation), as well as by avoiding the inflationary increase in production costs that could result from a free movement of the nominal wage towards regaining its real level prior to the reform outset (the so-called cost-push inflation).

The policy of wage regulation in the period of transition from socialist-style to a market economy has one particular purpose: to fill in the void after the practices of a centrally-planned value-added distribution between wages and profits have been terminated. The predominance of state ownership coupled with the suspension of direct control over state enterprises make them run the risk of decapitalization in the absence of an economic agent that is motivated by and serves the capital’s interests. Enterprise decapitalization* involves a collapse in investment (including the minimum necessary for a simple capital recovery) as the wages eat up the profits and part of the depreciation allowances. The value-added distribution ratio shifts in favour of wages thus depriving the state of the revenues it is entitled to as an owner. Therefore, the sustaining of a relatively low inflation level and of profits as a revenue source in state enterprises are two basic criteria for assessing the incomes policy efficiency.

* The decapitalization has other aspects as well.
1. Direct Instruments for Wage Regulation in the State Sector

In the first few months of the stabilization programme initiated in early 1991 the restrictive incomes policy was facilitated by the existing rigid system of wage formation setting the absolute range of nominal-term wage changes in accordance with the educational level, the professional qualifications and the position of the respective individual. Having been geared to a non-inflationary environment and a full government control over income distribution, the system authorized a centralized allocation of compensatory payments for inflation so that the government could preserve its hold on income distribution.

1.1. Wage Compensations Versus Free Wage Bargaining

The compensation amounts were determined by the Tripartite Commission set up in the beginning of 1991 which included representatives of the government, the two largest trade union organizations (the Confederation of Independent Trade Unions in Bulgaria and the Podkrepa Labour Confederation) and employers (the Employers’ Union). The initial compensation scheme projected a fixed amount of 235-270 leva to be added to gross wages on a monthly basis. However, the higher-than-anticipated inflation rates in the first few months of 1991 induced certain changes in the selected method for income compensation. Decisions for compensation increases were made almost every month after calculating the real inflation rate. This caused a gradual rise in the compensation/average wage ratio. In the first quarter of 1991 it amounted to 29.5% while in the second it gradually rose to 51.2%.

The preserved government control over wage growth was an appropriate instrument for curbing inflation and avoiding the infla-
tionary spiral that could emerge in the event of a full wage indexation. Compensations were paid off with a 1-2 month lag. For instance, the January compensations were fixed in April, and the April compensations - in May. This mechanism was instrumental in reducing the CPI from 222.9% in February 1991 (after the initial price jump) and 150.5% in March (after the initial impulse had died down) to 102.5% in April and 100.8% in May. The increase in the compensations paid off in the summer months boosted inflation to 5.8% in June and 8.4% in July. The subsequent inflation dynamics remained unstable and at a relatively high level (over 4.5% on a monthly basis).

The trade-union pressure for a change in the method of wage formation and inflation adjustment was very strong and partly justified. The existing obsolete system did not benefit wage earners while it proved remarkably suitable for the state as owner. (The stabilization programmes in other countries include a set of mutually complementary instruments that can be used to different degrees. There is always an opportunity to lift certain restrictions as the reform progresses, if necessary.) Eventually a new system of wage formation based on wage bargaining was adopted. It was enforced as of 01.06.1991 in relation to enterprises with over 50% of government interest, budget organizations included.

The Ordinance approved by consensus in the Tripartite Commission introduced three levels of wage bargaining: national, company (in the enterprise) and individual. Negotiations on the national level involved the government, the trade unions and the employers (within the frame of the Tripartite Commission) and were aimed at determining the minimum and starting wages, wages in the budget sector and the mechanism for wage growth regulation as an indirect instrument for implementing the government stance on income distribution by means of wage bargaining.
The national-level agreements were compulsory to the lower levels as they set the minimum wage level below which no decrease was possible. Negotiations at the lower levels could not endorse more unfavourable conditions than those agreed on at the national level.

In fact, the new system abolished all kinds of government control over wage formation in non-budget state organizations. The November 1991 jump in the wage level (particularly in the industrial sector) indicated that enterprises could actually pay higher wages. Hitherto they had been restrained by the previous rigid system of wage formation. The wage bargaining campaign concluded in November 1991 with an agreement on a 67% higher average wage as compared to its level prior the reform outset.

The real wage increased correspondingly. In December 1991 it reached 54.5% of its level in the last quarter of 1990 while back in April this percentage was a mere 32.3%. The industrial wage rise was much greater: from 36.8% in April (as percentage of the average wage in the last quarter of 1990) up to 63.9% in December 1991. Inflation rose too, reaching 5-6% monthly rate until July 1992 before new changes in the wage regulation policy were made.

1.2 Wages in the Budget Sector

The chain of strikes in April 1991 led to an increase in the relative wages of government employees in budget organizations (the so-called non-productive sector, viz. education, health care, public administration, science, art, culture and public utilities). Due to the fixed amount of compensatory payments, however, (an advisable minimum without any fixed upper limit applied to organizations in the other sectors) budget sector wages started falling behind once again. Following the introduction of the wage bargaining system the spread between wages in budget and non-budget state organizations grew
rather large. The subsequent strikes forced the government to agree to another 60% rise in budget sector wages in November 1991.

Wage bargaining was introduced in budget organization too. However, it was confined to tight wage bill limits set on the basis of payroll, position classification, educational level and average wage rates. The wage bill growth in budget organizations was also restricted by the State Budget Act adopted by the National Assembly.

Having lifted all centralized control on wage formation in non-budget state organizations, the government resorted to tighter restrictions on budget-related incomes (wages of government employees, pensions and social benefits) in order to hold back the inflation. The average unemployment benefit also suffered a sizable reduction. At the end of 1991 it fell to 33% of its December 1990 amount, and at the end of 1992 - to 21%.

The restrictive fiscal policy with its key element - squeezing all budget-related incomes - were the main traits of the 1992 incomes policy. As a result, wages in budget organizations were frozen by mid-year. The ensuing series of strikes followed by intense negotiations between the government and the trade unions led to an agreement on a 26% wage rise for government employees which should have been come into force of 1 July. However, the actual payout was shelved until the autumn of 1992.

The government efforts to sustain a restrictive policy stance in relation to at least 25% of the state sector employees (equal to the share of government employees in the overall number of employed in the state sector) were instrumental in curbing inflation. The July, August and September 1992 monthly inflation rates amounted to 2.8%, 1.2% and 3.4%. Since October, however, inflation has been surging again with a monthly rate of over 5%.
2. Indirect Instruments for Wage Regulation: An Excess Wage Tax

The excess wage tax was introduced back in 1990 and underwent subsequent modifications. In the course of the stabilization period its rates were changed and its scope was reduced in view of alleviating the tax burden on enterprises*. The tax was paid out of enterprise profits. The government issued an Ordinance for the second half of 1992 specifying that the tax was to be paid irrespective of whether enterprises were profit-making or not.

The tax scheme involves taxation of the excess wage bill above the set wage bill ceilings. Taxation is based on the principle of tying the wage bill in the current quarter down to the wage bill and the average wage in former periods.

**Basic Scheme for Calculating Wage Bill Ceilings**

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Base Wage (WB)</th>
<th>Average Wage (W)</th>
<th>Price Index</th>
<th>Wage Ceiling</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st/1991(Q1 91)</td>
<td>WB Q1 90</td>
<td>W Q4 90/W Q1 90</td>
<td>-</td>
<td>1<em>2</em>3</td>
</tr>
<tr>
<td>2nd/1991(Q2 91)</td>
<td>WB Q2 90</td>
<td>W Q4 90/W Q2 90</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>3rd/1991(Q3 91)</td>
<td>WB Q3 90</td>
<td>W Q2 91/W Q3 90</td>
<td>1.2*</td>
<td></td>
</tr>
<tr>
<td>4th/1991(Q4 91)</td>
<td>WB Q4 90</td>
<td>W Q3 91/W Q4 90</td>
<td>1.13*</td>
<td></td>
</tr>
<tr>
<td>1st/1992(Q1 92)</td>
<td>WB Q1 91</td>
<td>W Q4 91/W Q1 91</td>
<td>1.176*</td>
<td></td>
</tr>
<tr>
<td>2nd/1992(Q2 92)</td>
<td>WBQ2 91</td>
<td>W Q1 92/W Q2 91</td>
<td>1.17*</td>
<td></td>
</tr>
<tr>
<td>3rd/1992(Q3 92)</td>
<td>WB Q1 91</td>
<td>-</td>
<td>1.367**</td>
<td></td>
</tr>
<tr>
<td>4rd/1992(Q4 92)</td>
<td>WB Q1 91</td>
<td>-</td>
<td>1.457**</td>
<td></td>
</tr>
</tbody>
</table>

Note:  
* The actual RPI  
** Forecast Price Index

* The excess wage tax concerns enterprises with government share more than 50%.
All ordinances on wage bill regulation (including those for 1993) feature a requirement under which the wage bill for employees who have been dismissed due to economic layoffs (under Article 328 of the Labour Code) should be deducted from the base wage bill. This gives an opportunity for simplifying the wage bill ceiling equation. It can be represented as a function of the number of employed in the corresponding quarter of the previous year (minus the layoffs over a 12-month period), the average wage for the previous quarter of the current year and the price index coefficients.

In 1991 the excess wage growth tax could not provide a veritable restriction of the wage bill growth. In the first three quarters enterprises kept below the ceilings due to the rigid system for wage formation. As the introduction of the wage bargaining system did away with payroll and position restrictions, wages increased sharply and the fourth-quarter ceilings were exceeded.

The selected mechanism for wage squeezing by taxing the excess wage bill growth has two major shortcomings that run counter to the economic reform in the transition period. They relate to the tying-down of the wage bill in the current quarter to the relative wage structure* in the previous quarter and the number of economic layoffs. This method of calculation results in higher wage bill ceilings that are more favourable for the enterprise provided the level of its wage bill in the corresponding previous-year quarter has also been higher. On the other hand, the number of layoffs under Article 328 of the Labour Code lowers the ceilings, so enterprise managers prefer the redundant work force to resign voluntarily.

The extrapolation of previous-year branch-wage ratios on the current situation impedes the process of its dynamic readjustment to new economic conditions. Branches that were, for some reason or

*The relative wage is the ratio between the average wage by branches and the average wage for the country as a whole.
another, favoured by higher-than-the-average wages prior to the reform outset, got higher wage bill ceilings irrespective of their performance under the new conditions. On the other hand, enterprises that have better prospects for development but have paid out relatively lower wages to their work force before the reform outset, are forced to exceed their ceilings and get taxed for their higher economic activity.

In 1990 the branch differentiation of wages was relatively weak. The coefficient of variation* of relative wages in the industrial branches was about 16.7%. In the fourth quarter of 1990 the lowest wage was observed in paper industry (0.719 of the average for the country), and the highest - in oil and gas extraction (1.3 of the average for the country). A process of larger differentiation between the average branch wages in industry began in the first and second quarter of 1991. It affected uncompensated wages more strongly, and had weaker impact on compensated wages. The efforts to maintain the existing structure of relative wages were reinforced by the wage bill ceilings for the first three quarters of 1991 which reflected the previous year's structure and imposed it on the new interbranch relations. The coefficient of variation of uncompensated relative wages in industry reached 20% in the first, 26% in the second, and 27% in the third quarter of 1991. Regarding compensated wages, the same indicator amounted to 17% (16% for the ceilings) in the first, 17% (16% for the ceilings) in the second, and 17% (17% for the ceilings) in the third quarter of 1991.

The introduction of the wage bargaining system in the last quarter of 1991 increased the branch differentiation in relative wages. The coefficient of variation reached 37% for wages minus bonuses, and 30% for wages plus bonuses. At the same time the ceilings required a differentiation of relative wages by a coefficient of variation of 17%, the same as in the third quarter of 1991.

* The coefficient of variation is a percentage ratio of the standard variation to the mean.
The impact of branch relative wage structures in previous periods on the current one was eliminated in the second quarter of 1992, although the large differences among branch wages at the end of 1991 were preserved in 1992 as well. The coefficient of variation was 34% in the first, 32% in the second, 38% in the third, and 33% in the fourth quarter of 1992. At the same time the high coefficient of variation in comparing wages minus bonuses and wages plus bonuses was preserved. This indicates a greater stability of the relative wages by industrial branches. The wage bill ceilings allowed for a relative wage differentiation with a coefficient of variation of 20% in the first, 34% in the second, 33% in the third, and 32% in the fourth quarter of 1992. In 1991 and 1992 relative wages changed irrespective of the wage bill ceilings. Usually enterprises exceeded the ceilings and paid the excess wage bill tax out of their profits.

The second shortcoming of the wage growth regulation mechanism is again directly related to the structural reform which is, in the narrow sense, a restructuring of industry to match the changes on the domestic and foreign markets. The reduction of the base wage bill according to the number of redundancies does not encourage economic layoffs. On the contrary, the employees who stay on would prefer that their colleagues resigned voluntarily so that the overall wage bill would not be reduced correspondingly. People who should be dismissed, however, are not interested in resigning voluntarily because they would not receive unemployment benefits.

In 1991 the wage bill ceilings did not regulate the layoff process either. The intensity of layoffs and resigning was almost equal. No layoffs accompanied the enormous output slump in 1990; therefore in 1991 it became impossible to sustain a growing overemployment. The large layoffs in 1991 were a spinoff from the 1990 and 1991 output slumps.
One way to reduce employment due to falling output was early retirement. In 1991 the number of retired almost doubled in comparison with the previous year. 63 000 people retired in 1990, 110 000 - in 1991, and 69 000 in 1992. Another way was to dismiss younger employees who, being new to the trade, had not made a name and were more vulnerable in case of layoffs. The share of people below 30 years of age in the 1991 structure of unemployment was exceptionally high. 1992 witnessed falling unemployment growth rates in this age cohort.

In 1992 the wage regulation system had a more clearly manifested impact on employment restructuring and overemployment reduction. The chain indices of voluntary resigning, including retirement, reached higher values than the layoff indices. This has additionally impeded the closing down of unprofitable enterprises.
3. Wages and Prices

The instruments used in regulating the wage growth influenced the real wage dynamics. A superficial comparison between the nominal wage dynamics and inflation would indicate that the strongest restrictive stance of the wage policy corresponds to the lowest inflation rates. A simple regressive linear equation* gives an opportunity to study the nominal wage dynamics in relation to price changes.

For the April 1991 - December 1992 period the average rate of inflation compensation by means of the nominal wage amounted to 55.5%: 43% in 1991 and 60.8% in 1992. The regression residuals had negative values until November 1991 as the compensation of real wage was below the average. From November 1991 till June 1992 they had positive values near to the zero point, indicating a full compensation of the respective period inflation. The June-December 1992 period saw a continuous real wage increase.

* Cf. Blanchard, O.J., Layard, R., „Post-Stabilization Inflation in Poland”, World Bank Discussion Papers, p. 158. In this case a simple regressive linear equation between the logarithms of the base average wage index (base: the average wage in the fourth quarter of 1990) and the base CPI (base:December 1990) is used. The coefficient of regression represents the average rate of inflation compensation, and the regression residual indicates the monthly variations from this norm.
Similar processes have been unfolding in industry as the percentage of real wage rise is higher than the average for the country. However, in 1992 it maintained a relatively stable level.

The link between the nominal industrial wage dynamics and the producer price index (PPI) indicates an increase in wage expenditures* as a price constituent.

In comparison with their sharp rise in 1991, in 1992 producer prices in industry recorded a negligible increase. At the end of 1991 they had already accommodated the exchange rate changes, the adjustment of electricity and fuel prices, and the wage increases late in the year. The rise in unit labour costs in 1992 was, obviously, at the expense of profits. This reflected clearly in the twice-lower absolute amount of state enterprise profits recorded in 1992, as well as in the twice-lower amount of profits-tax budget revenues from non-financial institutions.

The increased share of the wage bill in sales proceeds is a common trend in all branches. Given the relative producer-price

* The unit labour costs indicator has been assessed; its values are published in the monthly business surveys of the Agency for Economic Coordination and Development.
stability in 1992, the rise in the nominal wage and in unit labour costs indicates that wage increases did not fuel the cost-push inflation because the wage bill has grown at the expense of profits. In 1993 there is a much higher possibility for an emergence of a wage-related inflation spiral than in 1992.

4. Conclusions

The overall assessment of wage regulation is not positive. The decapitalization of enterprises and the demand-pull inflation are obvious. The incomes policy is another obstacle to economic restructuring as it does not encourage profitable enterprises and does not put pressure for closing down the loss-making ones.

Apart from the above-mentioned defects, the new ordinance on wage bill growth regulation in 1993 has another shortcoming. The basic scheme for calculating the wage bill ceilings is preserved with the addition of one coefficient. It represents a ratio between the proceeds in the current quarter and those in the corresponding previous-year quarter at comparable prices, adjusted by 0.3. Thus the more profitable enterprises are „punished“ once again, and the low-performing ones are „propped up“.

The analysis indicates that the instruments for direct control on the wage bill growth in state enterprises are efficient, while the instruments for indirect control cannot fulfil their function. What is more, they frustrate the process of transition to a market economy in the country. The missing link between the employees and the state that should protect the interests of the state as enterprise owner could not be substituted by the applied indirect regulative instruments.

It is difficult to find a way for solving the problems. One alternative is to tax the value-added instead of profits (independent of the VAT) or to regulate the growth of the average wage instead of the
Wage Control...

wage bill. Another alternative is to set minimum compulsory contributions of value-added to be pooled in investment funds and thus reduce the decapitalization of state enterprises. A third alternative is to strengthen the manager institution.

As long as they dominate in the economy, the balance of direct and indirect means of control over the value-added distribution in state enterprises presupposes a careful choice of instruments so that it does not destroy the desired economic independence of enterprises.
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