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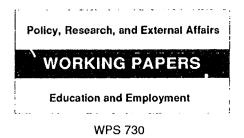
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# Wage and Employment Policies in Czechoslovakia

Luis A. Riveros

The key short-term measures for reform of the labor market in Czechoslovakia are wage indexation, deregulation of the wage structure, and the facilitation of labor mobility. In the long term, it is important to reform the institutions responsible for setting wages and unemployment compensation plans.

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This paper — a product of the Education and Employment Division, Population and Human Resources Department — is part of a larger effort in PRE to assess the role of labor markets in the process of economic adjustment. Copies are available free from the World Bank, 1818 H Street NW, Washington DC 20433. Please contact Valerie Charles, room S6-228, extension 33651 (24 pages).

Riveros discusses the short-term and long-term labor market policies Czechoslovakia needs for the economic reform envisaged in the current economic program. The policy implications of his analysis can be extended to other Eastern European countries.

Riveros emphasizes that wage indexation, deregulation of the wage structure, and facilitation of labor mobility are key short-term measures. They increase the prospects for success not only of structural reform but of other macroeconomic policies aimed at controlling inflation.

In the long term, reforming labor market institutions — especially those responsible for setting wages and unemployment compensation plans — must take priority, to ensure that the labor market functions in harmony with the overall market environment.

Riveros further concludes that:

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• Unemployment will not cause significant fiscal strain if dismissals of retired employees are made a priority, but there will be more open unemployment that the government expects.

• Unemployment will be a feature of the economy for structural reasons and because of short-term mismatches of skills and the normal fallout from the econmic cycle. A scheme integrating government subsidies and an insurance system with participation of both employee and employer could be developed initially.

• The wage indexation system is adequate to drive down inflationary expectations and to stimulate employment adjustments. But there will be practical problems enforcing the wage policy.

• Ar'equate mechanisms must be established for managing the minimum wage. The price must be used as a signal of economic developments and of the basic price for unskilled labor — and not as an instrument of income distribution.

• As for labor mobility, breaking the link between providing benefits and jobs is fundamental to ensuring more rapid adjustment in job opportunities and encouraging the supply response.

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#### I. INTRODUCTION

Czechoslovakia (CSFR) faces marked challenges for successfully accomplishing its transition to a market economy. In recent years the economy was characterized by a good deal of internal and external equilibrium, making possible the current marketoriented reforms without the complications which arise from a complex stabilization program. However, the present administration is contending both with the distorted allocation of resources and a rigid regulatory framework left by the old system; these have created potential impediments to the success of reform measures. Improving CSFR's investment and growth record through better use of productive factors primarily requires price and trade liberalization, privatization, and closure of inefficient activities. But these policies necessitate a highly stringent program whose short term repercussions would be aggravated still further by the depressed international economy and a negative terms of trade shock arising from both the oil crisis and the breakdown of the CMEA trade agreement.

Labor market reforms in both the short and long term represent a dramatic change from the past, and a key challenge for designing programs and attaining political sustainability. The labor market policies traditionally followed in CSFR are an important source of market rigidities, inhibiting a rapid supply response to the reform program. While labor allocation in the past was determined according to non-economic criteria, and the centralized wage management favored equity to efficiency targets, substantial interindustry labor mobility and real wage flexibility stand out as necessary pre-conditions for successful restructuring of the productive sector. During the transition, the contrast with the past will be pronounced, especially with the introduction of open unemployment and a decline in real wages, making the political aspect of adjustment important.

In the short run, proper labor market policies play a central role in preventing an inflationary spiral. Price liberalization was instituted in January 1991. The economic program set the exchange rate and the wage rate as nominal anchors for domestic prices, implying that they will be adjusted for inflation. However, if traditional price setting practices are continued while large state monopolies are maintained, wage increases will be readily translated into prices. Hence, introducing wage restraint by means of an indexation scheme and tight fiscal management is necessary to contain any potential inflationary pressure. Given that an indexation system designed to curb inflation will trigger a drop in real wages, it is almost as important that it be politically acceptable as that it be appropriately designed from a technical point of view. In particular, a too restrictive wage indexation system runs the risk of being effective only at the beginning of the program, but politically unsustainable as the program advances. Most likely, the effectiveness of the wage indexation policy will be key to the effectiveness of the macroeconomic adjustment program between 1991 and 1992.

In the longer term, CSFR, alike all other Eastern European countries in economic transition, faces the challenge of designing an appropriate institutional framework for the labor market. Unemployment will be a normal byproduct of market allocation as persons flow between jobs, necessitating an unemployment insurance system along with policies and institutions aimed at easing the friction incurred with intersectoral labor mobility. Similarly, wage setting mechanisms must be instituted, possibly through collective bargaining. These would be more compatible with the way a market economy functions, and include limited state intervention. The new system will also require a new union movement and new regulations on job security and non-wage compensations.

During the transition period, crucial labor market policies to be adopted include: (a) Adoption of suitable wage indexation norms using wages as a nominal anchor while the wage structure is deregulated to reflect lrbor productivity; (b) Facilitation of labor dismissal and encouragement of labor mobility; and (c) Implementation of a social safety net to assist the unemployed. In the medium to longer term the basic reforms to be pursued are: (a) Creation of a wage setting mechanism based on employer bargaining; (b) Establishment of an unemployment insurance system and other institutions needed in a market economy; (c) Design of an appropriate system for monitoring the labor market.

This paper is written in four sections. After this introduction, Section 2 describes the present economic situation and the policies adopted to date with respect to employment, unemployment and wages. Section 3 analyzes the implications and problems associated with these policies and presents alternative unemployment scenarios. Section 4 offers conclusions and elaborates policy implications.

#### II. LABOR MARKET CONDITIONS AND RECENT POLICIES

#### A. Labor Force and Employment

CSFR is characterized by relatively low population growth and high labor force participation (LFP). Over the period 1970-1990 the population grew at a rate of 0.4 percent per annum (p.a.), a rate that dropped to 0.2 percent p.a. during 1985-90. The working age population (WAP) grew at a similar rate (0.4 percent) during these periods. This change in the age structure in turn suggests the absence of important supply pressures.<sup>1</sup> In general, the LFP is relatively high (Table 1A, Appendix), reaching on average 86.9 percent in 1981-88<sup>2</sup>. In contrast, in 1981 and 1980 this rate reached 55.8 and 72.5 percent in, respectively, Hungary and Yugoslavia. In the Western European countries of Austria, the former West Germany, France, and Spain, the LFP was respectively 65.9%, 67.2%,

<sup>&</sup>lt;sup>1</sup> Figures on flow of entrants into and leavers from the labor force also indicate a relatively static labor market. In 1985-1987 the net additions to the labor force were 0.3% p.a., while this same indicator declined to 0.1% in 1987-1989.

<sup>&</sup>lt;sup>2</sup> According to the International Labor Office (ILO), in 1980 the LFP in CSFR reached 78.9%. ILO defines working age population as those between 15 and 65 years. CSFR's statistical sources define working age population as those between 15 and 60 years for males, and 15 and 55 years for females. Therein lies the difference between ILO results and those reported here.

65.8% and 54.7%.<sup>3</sup> The female LFP is also relatively high; at present it is greater than that of the other European countries.

In addition to sustaining this high level, the LFP continued to grow during the 1980s. This was not due to an increase in the WAP as indicated by the relative constant ratio of the WAP to the total population (Table 2A, Appendix), but rather to an increase in secondary labor force participation (i.e., women, youth, and workers eligible for retirement). This observation is consistent with the high, and yet increasing, female participation rate, the drop in the rate of school attendance, and the increasing number of retired people actually holding jobs (Table 1A, Appendix).

Official figures indicate small rates of growth in aggregate employment at 0.6 percent p.a. during 1970-90, and a small drop in 1989-90 (Table 1A, Appendix)<sup>4</sup>. Corrected employment figures (Table 2A, Appendix) indicate that employment grew at even lower rates (0.5 percent p.a. in 1981-88), and even declined by 1.4 percent during 1988-90. During the period 1970-88, the real growth of the net material output reached about 2 percent p.a., further declining to 0.7 percent and -3.5 percent respectively in 1989 and 1990. This suggests a relatively small aggregate employment-output elasticity, which reached a value of only 0.25 in 1981-1988<sup>5</sup>.

The composition of civilian employment across industrial sectors (Table 5A, Appendix) was fundamentally static from 1981-1989<sup>6</sup>. The only important change during this period was the chronic decline in employment in the agricultural sector at a rate of about 0.7 percent p.a.; this period was concurrent with growth of agricultural output at 1.9 percent p.a. In contrast, during that same period, employment in the total non-material sphere grew at 0.9 percent p.a. while in the service sector it grew 1.3 percent p.a. between 1981 and 1988. While employment grew at 0.7 and 0.4 percent p.a. respectively in the industrial<sup>7</sup> and construction sectors, the employment-output elasticity of the former indicated by official figures is as low as 0.1, while it reaches 0.4 in the latter case. During the 1980s, employment dropped in the aggregate tradeables sector; employment growth was concentrated in non-tradeable activities, particularly those more directly linked with the central Government (Table 1).

<sup>&</sup>lt;sup>3</sup> Data taken from the ILO Yearbook, 1987. The years for the countries mentioned are respectively 1986, 1985, 1986 and 1981.

<sup>&</sup>lt;sup>4</sup> Official employment estimates (Table 1), exclude women on maternity leave, trainees, armed forces and other groups considered working in high security fields, such as workers in uranium mining and those employed by the Communist Party. These estimates did not correct for those persons holding two or more part-time jobs.

<sup>&</sup>lt;sup>5</sup> Econometric estimates, which have accounted for the role of both wages and output in explaining observed employment changes, indicate a similar, small, long run employment-output elasticity of 0.27. Similar phenomenon is observed in other former socialist countries. (See Riveros, 1990).

<sup>&</sup>lt;sup>6</sup> The civilian employment figures exclude military personnel.

<sup>&</sup>lt;sup>7</sup> The definition of industry used here is broad, in order to match statistics on net material product; thus, it includes mining, manufacturing and utilities.

#### Table 1

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Tradeable <sup>4</sup>	100.0	100.2	100.4	100.4	100.3	99.4
-Manufacturing	100.0	100.7	101.2	101.6	101.7	101.5
Non-Tradeable	100.0	103.5	104.7	105.4	106.6	107.4
-Services A <sup>b</sup>	100.0	103.2	104.1	104.5	105.0	105.8
-Services B <sup>c</sup>	100.0	105.4	106.7	107.7	109.9	111.4

#### Czechoslovakia: Aggregate Employment Trends

a/ Includes Agriculture, Mining and Manufacturing.

b/ Includes wholesale and retail trade; restaurants and hotels; transport, storage and communications; financing, insurance, real estate and business services.

c/ Includes community, social and personal services.

#### B. <u>Wages and Productivity</u>

Small industry and skill wage differentials characterize CSFR's labor market. These are fundamentally the result of distributionist policies systematically pursued through active state intervention. The lowest paying industry, commerce, has an average wage which is 83 percent that of the average wage for the economy (Table 8A, Appendix)<sup>8</sup> The highest paid industry, mining, is characterized by wages 47 percent higher than the average. The total differential across industries is about 1.8. In terms of skills (Table 8A, Appendix), the lowest paid, a worker with primary education in the health sector, receives one third as much as the average wage of the highest paid, a worker with higher education working in mining.

To a large extent, the reason inter-firm and inter-occupational wage differentials are small is because traditional wage controls were implemented through the so-called tariff-wage system. By establishing a base hourly wage for 12 different skill groups in 9 economic sectors, the tariff wage system sets and regulates wages for about one hundred jobs. Naturally, the underlying purpose of such a system was to regulate the income distribution resulting from productive activities, without consideration of individual worker productivity. Under the current system, the highest paid group is assigned wages twice that of the lowest paid group within a specific economic sector, and wages differ by a factor of 2.5 between the lowest and the highest wage sectors for a given skill level.

<sup>&</sup>lt;sup>8</sup> See further Kux, (1988).

The average real wage for the aggregate public sector grew 1.5 percent in 1970-89 (see Table 6A, Appendix). The real wage grew 2.2 percent p.a. between 1970-80. But growth slowed down significantly to 0.9 percent p.a. between 1980-89. During the 1970s and most of the 1980s, price inflation was recorded below 1 percent p.a., but in 1989, inflation escalated to 2.3 percent p.a. Moreover, in 1989-90 the real wage dropped by 3 percent, reaching almost 4 percent in the material sphere; inflation reached 10.9 percent during 1990. Similar wage fluctuations are observed across all sectors; the agricultural sector underwent the largest real wage increase between 1970-89, and it was the only sector in which real wages did not drop in 1989-90. The non-material sphere experienced a lower increase during 1970-89, but it also suffered a smaller decline in 1989-90.

Among industries, relative wages clearly show a trend towards equalization in the material sector (see Table 7A, Appendix); this has taken place primarily because of a relative increase in agricultural wages. The erosion of inter-industry wage differentials observed originally in 1970 has been notable, declining from a maximum of 20 percent in 1970 to approximately 6 percent in 1990. Moreover, compressing wage differentials in the material sphere have resulted in lower relative wages for the non-material sphere; relative wages between material and non-material spheres dropped significantly between 1970 and 1985.

Given the existence of a 50 µercent payroll tax, the total cost of labor from the viewpoint of the employer amounts to 1.5 times the level of total wages. This includes bonuses, premiums, and overtime payments amounting to about 20 percent of basic wages. Therefore, it does not include family allowances and other health-related state subsidies. The average hourly labor cost for the manufacturing employer is about Kcs 28 or about US\$ 1.1, using the prevailing commercial exchange rate; this is still lower than the labor costs in market economies<sup>9</sup>. From the employee's point of view, there is in effect a wage tax amounting on average to 17 percent of total wages. This would be changed in the future to a tax system based upon declared income.

#### C. Policies Adopted for the Transition

#### 1. Employment and Unemployment

The government has adopted policies to avert likely pressure arising from increases in the labor supply. Vacation periods and maternity leaves will be extended, and women will be allowed to work part-time. In addition, the government plans to proscribe employment of retired persons. Nonetheless, the most fundamental pressure on the market in the short term will arise from the labor spillover between contracting and expanding economic activities. This spillover will necessitate emphasis on policies oriented to fostering efficient labor mobility. For this purpose, the government has implemented an

<sup>&</sup>lt;sup>9</sup> The hourly compensation cost of manufacturing in 1989 amounted to, respectively: US\$ 13.6; 9.1; 12.7 and 17.6 in Austria, Spain, France and Germany. In the USA, this figure reached US\$ 14.3, and in Hong Kong,Singapore, Korea and Taiwan, this figure reached respectively US\$ 2.8; 3.1; 3.6 and 3.5. (Source: BLS, U.S. Department of Labor: International Comparisons of Hourly Compensation Costs)

unemployment compensation scheme which will operate through labor exchange offices and include training activities and adequate incentives for starting an efficient job search<sup>10</sup>.

Actions have also been taken to diminish the social impact of the labor adjustment that must take place in 1991-92 while market efficiency is improving. A severance payment plan has been set in place which stipulates that a laid-off worker will receive three months' notice and the equivalent of two months' wages. Recently, the government decided to authorize firms to pay this amount for five months as a lump-sum severance compensation packet, and dismiss the worker immediately. In order to stimulate labor absorption through expanding activities, a 1990 provision has been abolished which required the hiring firm to pay the wage differential between the old and the new job.

In the short run, one of the most important problems that CSFR will face is growing unemployment. This is a new phenomenon, with broad political and social implications. The creation of a social safety net for the unemployed primarily requires adequate budgetary provisions to finance payment of unemployment compensation and well functioning employment/training services. In what is considered a likely scenario, the government estimates that open unemployment may reach 4 percent of the labor force in 1991<sup>11</sup> (see Table 2). Depending upon the extent of industrial restructuring and the elimination of excess employment, the rate of open unemployment may reach substantially higher levels. For instance, in its high scenario, the Government estimates an unemployment rate of 11 percent.

#### 2. Wages

Through the General Agreement with the trade unions, the Government has introduced a mechanism for adjusting nominal wages for inflation. This mechanism will allow for a 12 percent real decline of the wage bill in the economy during 1991, continuing the trend downward of the real wage from the 1990 decline of about 3 percent. The indexation mechanism will permit quarterly adjustments in the nominal wage bill of enterprises by looking at past inflation rates. In March 1991, the amount of growth permitted in the nominal wage bill was to be 5 percent for the non-government sector and 6 percent for the government sector; in the latter case is claimed that real wages have lagged behind in recent years. In successive quarters during 1991, the nominal wage bill will be adjusted by measuring the accumulated inflation since December 1990. For purposes of implementing this mechanism, the concept of wages is a broad one, and includes all labor payments normally paid out of total expenses in the form of bonuses and benefits.

Enterprises may increase the nominal wage bill by a percentage greater than that stipulated if the additional wage increase can be financed out of profits. However, if

<sup>&</sup>lt;sup>10</sup> The characteristics and operation of these programs are discussed in Holzman (1991), Thompson (1991), and Pascoe (1991).

<sup>&</sup>lt;sup>11</sup> As of January 1990, there were about 80 thousand registered unemployed, which is roughly 1 percent of the labor force.

the firm exceeds the permitted increase in the wage bill by more than 3 percent, a tax of 200 percent will be levied on the difference. This tax will increase to 750 percent if firms exceed the permitted increase in the wage bill by more than 5 percent.

#### Table 2

# CSFR Government: Unemployment Estimates (000s)

	High Scenario	Low Scenario	Likely Scenario
(A) <u>Employment Contraction</u> : State Initiated			
Structural Reforms <sup>a</sup>	-158	-64	-158
Organizational Changes <sup>b</sup>	-36	-25	-36
Elimination of Overemploy	•••	-350	-350
Recessionary Impact	-700	-400	-400
(B) Employment Expansion:			
Development of Travel	100	150	100
Financial Sector Developm		26	19
Creation of New Organism		25	15
Private Enterprise Develop		625	485
Unemployment [(A)-(B)]Y	1,017	38	340
μď	(12.0)	(0.5)	(4.0)

a/ Conversion of the arms industry; slowdown of ore, coal and uranium mining; slowdown of metallurgical industry.

b/ Administrative reforms.

c/ Establishment of labor exchanges, revenue bureaus, trade bureaus.

d/ Unemployment rate (number of unemployed divided by the labor force, which for 1990 is equal to the total corrected employment). For 1992, the absolute size of the labor force was not increased for the calculations.

#### **III. POLICY ANALYSIS**

#### A. <u>Macroeconomic Framework</u>

The economic program for 1991 considers almost complete liberalization of wholesale and retail prices, along with the unification and liberalization of the exchange rate. The trade system will continue to be liberalized; export and import licensing have already been almost completely eliminated. Continuing these policies will imply substantial change in relative prices and, in the medium term, better allocation of resources. In the short run, following the collapse of the CMEA trade agreement and the effect of the oil crisis, these changes will be accompanied by a substantial drop in the terms of trade. The 1991 economic program entails tight fiscal management which aims to consolidate surplus at 1 percent of GDP. With respect to credit policy, the economic program for 1991 includes a target rate of growth in liquidity of 5.5 percent, which should be achieved concurrently with an interest rate system which reflects the social opportunity cost of capital. The short run recessionary impact of the program, especially associated with the higher cost of imports, will result in an estimated drop in 1991 GDP of between 5 and 10 percent.

All of these adjustment and demand management policies will take effect while important structural transformations are implemented. Privatization of small businesses began in 1991, and privatization of large state enterprises will start by late 1991. The latter will be accomplished by transforming the enterprises into corporate entities; a proportion of their shares will be sold to foreign and domestic investors, while the rest of these shares will be distributed among the population through a voucher system.<sup>12</sup>

#### B. Labor Mobility

The high LFP observed in CSFR may be attributed to the virtual obligation to work because of prevailing low wages combined with many non-wage benefits which had been used in the past to promote employment. Given the high participation rates of the secondary labor force, it is unlikely that the economy will face major additional labor supply pressures stemming from the response of family groups to adjustment policies and to worsening economic conditions in 1991-92. Therefore, most of the policies adopted to date to prevent labor supply problems are not strictly necessary and, to some extent, may be undesirable, as in the case of one policy to increase certain subsidies in order to prevent the active participation in the labor market. In particular, attempts to prohibit employment of retired persons can be detrimental to firms in which they are in high demand due to their specific skills. It would be more advisable to institute a policy aimed at increasing their relative cost to the enterprises, while introducing a higher tax rate on incomes obtained above pension payments.

Attaining an adequate supply response requires encouragement of interindustry and geographical labor mobility. In this context, measures are necessary which aim to erase social benefits from job contracts in order to ease short run labor mobility. This is particularly important in the case of housing since in many cases, houses are provided by the firms as part of the job contract; thus, dismissal of a worker also conveys his iction. Similarly, firms commonly provide some free-of-charge social services to their employees such as health and education. These benefits are normally considered part of total labor income. They may be crucial factors for retarding the employment adjustment that must take place both due to the recessionary impact of the 1991 economic program and to the beginning of industrial restructuring. They may also prompt labor hoarding practices. This situation calls for measures aimed at solving the implicit property problem

<sup>&</sup>lt;sup>12</sup> In February 1991, the Parliament approved the law required to proceed with an extensive privatization of state firms by selling them to foreign or domestic investors, or returning them to their previous owners.

and, over the medium run, at developing a housing market. It also calls for privatization and transference to local governments of the health and education services now provided by firms. Policies in these areas would contribute to diminishing the negative social impact of these benefits through better targeting of the more needy population and improved program efficiency.

#### C. <u>Wage Differentials</u>

In a system in which wages reflect labor productivity, it is normal to observe larger inter-occupational and inter-industrial wage differentials than those seen under a regulatory scheme. Achieving larger wage differentials derived from differences in labor productivity is important for both encouraging better labor allocation and providing a signal of the most productive sectors and jobs in the economy, which is in turn important with regard to investment. These larger differentials would naturally result if measures were implemented which were aimed at fully liberalizing the wage setting process. This however is infeasible in the short run given the risk of entering an inflationary spiral. Nonetheless, even within the context of a system permitting wage increases, enterprises should be allowed to effect different adjustments according to productivity differentials, in order to begin allocation of resources in a more efficient manner. This may be achieved through current provisions which allow for wage increases out of profits if no other regulation forces a more compressed wage structure.

While the wage policy should aim at obtaining higher wage differentials, the short run regulations on wage adjustment have been framed in the context of the traditional tariff-wage system. Therefore, firms are not free to provide different wage increases to different labor groups within the firm if these changes do not comply with the wage differentials implicit in the regulated tariff wages. Even if certain categories of labor are dismissed, normally freeing up resources which could then be used to increase the wages of remaining workers, the firm must preserve regulated wage differentials. In a period of strong competitive pressure, this system impairs the firm from improving its supply response by tying wages more closely to productivity. This system also impedes free pricing of labor and, in the end, a more efficient labor market.

The tariff wage system must also be eliminated if unnecessarily high unemployment is to be avoided. Current wage regulations impede the firm from proceeding with internal reallocation of labor and subsequent wage adjustment. For instance, workers cannot be downgraded or assigned to different responsibilities which imply lower pay. These steps might be necessary in a period of both shifts in relative prices and technical change. Because of this system's inflexibility, the firm must resort to dismissing its labor and then hiring new workers from outside the firm to shift labor, an operation which would otherwise be economically costless. Also, higher private and social costs result, which could be eliminated by introducing fundamental change in the regulatory structure.

Privatization and wage deregulation should be joint policies: firms which are privatized should not be subject to wage regulation. In fact, the CSFR government has declared it will follow this principle. In the short term, liberalization of private sector wages is imperative for attracting foreign investment and for implementing the privatization program. Implementing a policy of private sector deregulation of wage controls is also an important element for founding a legal framework for the labor market, which should aim to minimize the degree to which the Government intervenes in setting wages. The liberalization of wages in the private sector might be considered a risk from the viewpoint of aggregate demand expansion and inflation. However, given the actual small scale of the private sector and the fact that large scale privatization will start only by the end of 1991, this risk is minimal compared with the advantage of providing incentives to support the privatization effort.

Management of the recently created minimum wage must reflect reduced Government intervention. The minimum wage must be managed conservatively so that it might signal the base price for unskilled labor, important later as key information in the collective bargaining process. The minimum wage should be maintained as a signal of general economic conditions, and not as a tool for achieving any equity goals. The social impact resulting from low wage levels can be addressed through various means, such as by establishing a minimum income level with Government subsidies, a tool much more efficient for targeting and protecting the poor. At the same time, the monetary level and coverage of the minimum wage should be reviewed carefully, including its applicability to special situations -- i.e., part-time workers and trainees, -- its negative effect on the employment of unskilled labor, and its probable major role in pushing up overall wages and prices.

#### D. <u>Wage Indexation</u>

A basic prerequisite of an efficient wage indexation system has been included in the precepts recently approved by the Government. Sufficient time is allotted between successive wage adjustments to curb popular inflationary expectations. The wage adjustment procedure will take place quarterly. If accumulated inflation is greater than 10 percent but less than 35 percent, the nominal wage bill will be adjusted by 60 percent of the measured price increase. If accumulated inflation is greater than 35 percent, the wage bill in successive quarters can be adjusted by adding 80 percent of the amount by which actual inflation exceeds 35 percent. The targeted drop in real wages during 1991 is about 12 percent.

The political sustainability of the indexation mechanism envisaged is guaranteed because the expected decline in the real wage during 1991 will not be great enough to elicit social unrest; if, as expected, inflation reaches 35 percent, real wages will decline by about 14 percent. This latter percentage will slowly increase with higher rates of inflation. As the recent experience in Poland demonstrate, a system based on monthly wage adjustments is prominent to full inflationary expectations. In this country, given that inflation was likely higher than expected, the negative effect on real wages became politically and socially unsustainable.<sup>13</sup>

<sup>&</sup>lt;sup>13</sup> However, the Polish wage indexation system was not binding during the first part of 1990, possibly due to rising unemployment. During the second part of the year, the indexation scheme became binding as workers attempted to recover real wages which had declined by half. See, Coricelli, Fabrizio and Revenga (1991).

An important problem implicit in the recently approved provisions regarding wage indexation concerns the unit of reference for adjustment purposes. The General Agreement asserts that the <u>average nominal wage</u> will be the unit which should be adjusted. As stated above, the Ministry of Labor had asserted that the <u>wage bill</u> will be the unit to be adjusted, given that this is the only form by which the measure can be adequately enforced. The problem with the former reference unit is in defining the average wage in a practical way so that the adjustment process can be implemented. The relevant measurement of employment to be used may create enforcement problems, especially in periods when workers are being dismissed. In addition, in an economy characterized by substantial non-wage payments, defining what should be included as wages may also be highly controversial.

By focusing on the wage bill rather than on average wages, firms have incentive to accelerate labor dismissals to increase the wages per worker, thereby ensuring more rapid employment adjustment: If t is the tax rate and p is the permitted percentage increase of the wage bill (wL), then the tax per worker  $(T_1)$  is:

$$t [wL - (w_{.1} L_{.1}) (1+p^*)]$$

where  $(w_1 L_1) (1 + p^*)$  is the permitted growth in the wage bill.

Relative to the past period's wage bill  $(w_{-1} L_{-1})$  the tax per worker is:

$$\frac{T_L}{w_{.1} L_{.1}} = t (\hat{w} + \hat{L} - p^{\circ})$$

where  $\hat{w}$  and  $\hat{L}$  are the growth rate of wages and employment respectively.

Therefore, this sytem taxes the employment growth (L), providing incentives to the reduce job places (Layard, 1990), during the first phase of the adjustment this may be a desirable outcome to allow elimination of overemployment. If the tax is on the wage rate (or the average wage) the formula for the tax per worker is:

$$TL = t [w - (w_{1}) (1 + p^{*})],$$

which corresponds to:

$$\frac{T_L}{w-1} = t (\hat{w} - p^*)$$

implying that the employment level is not directly affected by the taxation mechanism.

Allowing enterprises to determine worker premiums for productivity is both sensible and important for facilitating labor allocation. But one problem lies in measuring profits on a quarterly basis in a suitable and practical form. As discussed above, the payment of a productivity premium based on profit may be an important mechanism for providing labor compensation under a more deregulated wage structure. However, it could be misused by large monopolies as justification for increasing prices in order to increase profits, which would present serious problems for the anti-inflation program; this situation would demand significant monitoring on the part of the enforcing authority.

Another serious problem associated with the wage indexation scheme is with respect to the minimum wage. As previously stated, in February 1991 the Ministry of Labor and Social Affairs estimated that about 8 percent of the labor force earned less than the minimum wage level of Kcs 2,000 established in the General Agreement. Given that the minimum wage is fully indexed for inflation greater than 5 percent while the average wage will only be partly indexed, progressively more workers will be earning the minimum wage. Therefore, firms will have to allocate additional resources in order to pay the corresponding wage increases to workers covered by the law. This situation would be particularly true in an economy like that of CSFR since it is characterized by a relatively compressed wage structure. During a period of financial difficulty, this requirement may impose a serious burden on firms and be detrimental to their most productive labor. In addition, due to prevailing extreme wage compression with the structure of relative wages, serious problems will arise in any given quarter whose severity will be dependent upon the inflation rate.

#### E. <u>Unemployment consequences</u>

Unemployment estimates are important in two fundamental respects. First, they are necessary for adequately assessing the fiscal cost associated with providing monetary compensation and employment services to the unemployed. Second, they force political realism into an evaluation of the short run impact of reforms. A serious underestimate not only implies that fiscal provisions will be insufficient, but also signals that the government's expectations will be out of line with the actual dimension of the adjustment and its social cost.

Three fundamental factors have to be taken into account in the estimates. These are: (a) elimination of existing overemployment, which is to a large extent derived from the fiscal program aimed at producing a 1 percent surplus in 1991; (b) contraction of certain activities as a result of the adjustment in relative prices; (c) the privatization process which would begin by late 1991, likely entailing some technological change and labor shifts. The estimates must also account for the impact of the recession the economy will experience during 1991, associated with a terms of trade shock and an expected decline in real GDP of between 5 and 10 percent.

Estimates presented by Riveros (1991) differ from those of the Government in two ways. First, a methodological difference is the projection of quarterly unemployment flows, as opposed to the Government's method of projecting an average stock for 1991-92. The average estimate of the employment contraction(704 thousand fewer jobs in 1991-92 in the high unemployment scenario) differs from government projections (944 thousand fewer jobs are reported in their likely scenario) by about 25 percent. This difference is principally explained by the fact that the Government estimates assume a much larger employment impact of the recession and privatization processes. To the contrary, Riveros' estimates imply that there will be much room for significant labor hoarding. This assumption is clearly justified on the grounds of the recent Polish experience where, due to significant labor hoarding, there were a small number of labor dismissals relative to a sizable output drop (Coricelli and Revenga, 1991).

The second difference is conceptually more important, and refers to the high optimism of the Government with respect to the prospects for employment creation in the short run. Obviously, the path to recovery of those industries contracting due to the recession, and the expansion of other competitive industries will take some time in accordance with investment growth. Macroeconomic indicators reveal that the net fixed investment declined by 12 percent in 1990, and is not likely to significantly increase this year, making the prospects for massive employment creation rather slim, particularly in the case of the private sector. Riveros projects the creation of about 278 thousand jobs, as opposed to the Government estimate of 604 thousand jobs. The basic assumptions are that the private sector (currently employing about 100 thousand persons) will expand 10 percent in 1991 and 20 percent in 1992. In addition, it is assumed that trade and services will expand by 10 percent during both years, while the financial sector will expand by 30 percent p.a. Tourism is assumed to expand by 40 percent in 1991 and 1992, while employment in the manufacturing sector is assumed to increase by 5 percent in 1992. The average unemployment rate projected is 8.5 percent of the labor force, reaching as high as 12 percent during 1992.

An important feature associated with those alternative unemployment estimates concerns their fiscal implications. The Government has projected fiscal needs on the basis of the average unemployment indicated by their likely scenario, about 340 thousand persons for the period 1991-92, therefore, contrasting with the about 679 thousand persons projected by Riveros. However, the eligibility criteria for the unemployment compensation scheme excludes those persons who receive pensions, currently about 700 thousand employees (Table 1A, Appendix). If the Government is successful in making the dismissal of retired employees a priority, it may well be possible that its budgetary allocations are consistent with the projections presented here. For instance, if 60 percent of all retired persons holding jobs are dismissed, the average number of unemployed persons eligible for benefits in 1991-92 reaches 369 thousand persons, which basically corresponds with the amount allocated by the Government.

#### IV. SUMMARY AND CONCLUSIONS

Alike in all other transitional Eastern European countries, an efficient labor market is crucial for achieving the fundamental economic reforms envisaged by CSFR. Adequate labor market policies during the transition period are important both for making the adjustment more efficient and in alleviating its direct social impact. 1991 is a critical year for CSFR's reform process. Macroeconomic stability must recover soon after price liberalization and setting of new relative prices. The productive sector must respond efficiently to the constraints imposed by harsh budgets, especially in a period characterized by a terms of trade shock and a major recession. The privatization process would augur well if macroeconomic stability accompanies an institutional framework which is able to stimulate investment. In this context, development of an efficient financial market is equally important. Finally, the political sustainability of the program will depend fundamentally upon evaluation of the observed social cost for 1991. In all these respects, the short term labor market policies must accomplish a great deal. Also, insofar as they provide clear signals indicating the future path of changes in the economy, long term labor market policies are also important, especially for framing a new institutional environment with respect to the wage determination process.

The most important challenge in the short run is to control wage increases in order to avoid creation of an inflationary spiral. In addition to the restrictive fiscal and credit policies already implemented, suitable wage indexation is necessary to restrain firms from using price increases to finance wage adjustments. The wage adjustment mechanisms implicit in the General Agreement signed in January 1991 must be properly disseminated among enterprises. During implementation of the wage policy during 1991, the following should be kept in mind:

- (i) Enterprises should be permitted to pay wage increases according to a profit scheme so that they may pay bonuses to their more productive labor; this would introduce greater wage differentiation. In order to accomplish this end, the traditional tariff-wage system must be eliminated;
- (ii) To achieve the stabilization target, the minimum wage adjustment system must be eliminated. This also precludes attainment of more efficient labor allocation, since otherwise there will be further compression of the wage structure;
- (iii) The private sector should be exempt from wage regulations. While this is not crucial for controlling inflation, given the current size of this sector and the prospects that large scale privatization will not begin before late 1991, it is imperative that the privatization process be promoted. In general, the imposition of limit wage adjustments for the wage bill gives incentives to eliminate overemployment which can be a problem affecting the efficiency of the productive sector. Moreover, as the Polish experience indicates, this problem can be further exacerbated by labor hoarding practices. Once the first plane of the adjustment is completed and the inflationary problem is under control, the economy may move towards a policy aimed at controlling the wage rate which may render benefits in terms of providing productivity premia and set the conditions to transit to a market-oriented wage determination system.

A second important short term policy issue is the need to directly encourage employment adjustments. In the cases of both the non-material sector and the central Government, adjustment hinges on the adoption of administrative-cum-privatization reform comprehensive of a significant change of both traditional structures and state institutions. Within firms, this necessitates an attempt to detach social benefits, particularly housing, from job provisions. If these reforms are not adopted shortly, employment adjustment will be more difficult and incur greater social cost. Furthermore, in addition to measures already adopted by the Government to facilitate dismissals, labor reallocation must be permitted within firms in order to adjust the employment and wage structure without having to resort to dismissals. These steps require that the internal wage structure be more flexible, which in turn necessitates softening or eliminating the tariff-wage system.

A third important aspect of the labor market policy in the short run is related to the unemployment impact of the adjustment. The Government has already adopted a series of policies regarding unemployment benefits and employment services. Government projections, which have been used to make all necessary fiscal allocations, are consistent provided that dismissals concentrate heavily on retired persons. However, the actual unemployment rate, independent of the eligibility criteria for receiving compensation payments, will be higher than expected, especially because employment creation will be slower than expected. It must be determined whether society will be prepared to accept this fact as a necessary outcome of the adjustment process.

As regards longer term policies, this paper has argued that three areas are vital for progress:

- (i) Design of the future institutional framework for the labor market, already being studied, must be realistic about the future market environment. In particular, in an economy in which collective bargaining at the firm level will be the basic means for determining wages, the coordination and the degree of centralization are important issues, which connect with both union organizational structure and the extent and timing of state intervention. In addition, adequate institutional mechanisms must be established for managing the minimum wage. This price must be used as a signal of economic developments and of the basic price for unskilled labor, and not as an instrument of income distribution;
- (ii) Unemployment will be a feature of the CSFR economy in the future because of structural reasons, short term skill mismatches, and the normal fallout from the economic cycle. A scheme integrating Government subsidies and an insurance system with participation of both employee and employer could initially be developed;
- (iii) An adequately designed system for monitoring the labor market is a fundamental tool for policy making. This system must include firm-based data which takes into account firms regardless of their property holdings and size. In addition, the system must require periodic labor force surveys.

The crucial role of the labor market during the transition of CSFR to a market economy is twofold. First, the observed labor market results will be a paramount factor concerning the political sustainability of the overall transition. Second, the efficiency of transitional policies in obtaining a rapid supply response depends upon the flexibility observed in the labor market to produce an adequate labor reallocation. Therefore, adoption of a suitable set of labor market policies and establishment of an adequate sequencing to minimize the social cost of the adjustment and maximize the effectiveness of the macroeconomic policy, constitute the challenge for the present administrations in Eastern Europe. This paper has attempted to contribute to the current debate in this area.

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**APPENDIX TABLES** 

	Czechoslovakia: Computation of the Total Population (000*s)												
<u>, , , , , , , , , , , , , , , , , , , </u>	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1 <b>990*</b>
Total Population	14334 (100)	14802 (100)	15311 (100)	15356 (100)	15369 (100)	15414 (100)	15458 (100)	15499 (100)	15534 (100)	15573 (100)	15608 (100)	15639	
Working Age Population <u>1</u> /	8158 (56.9)	8483 (57.3)	8709 (56.9)	8710 (56.7)	8696 (56.6)	8700 (56.4)	8713 (56.4)	8734 (56.4)	8765 (56.4)	8784 (56.4)	8839 (56.6)	8867 (56.7)	8901 (56.8)
Employment	6,871 (76.5)	7060 (76.0)	7358 (77.0)	7407 (77.4)	7435 (77.9)	7466 (78.1)	7534 (78.5)	7606 (79.0)	7705 (79.4)	7754 (79.8)	7804 (80.0)	7830 (80.3)	7815 (79.9)
Retired with Employment	625	610	655	669	669	664	694	705	744	747	736	712	701
Students	477	481	521	523	493	462	444	4 <b>29</b>	430	435	455	n.a.	n.a.

1/ Statistical Yearbook; corresponds to males between 15 and 60 years old and female between 15 and 55 years old. Between brackets, as a proportion of the total population.

\* Exclude women on maternity leave, trainces and the armed forces. Includes double employment. See Table 2. Between brackets, the total employment, minus retired with employment, as a proportion of the working age population

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<u>Czeckoslovaki</u>	ia:	Corrected	Employment
	(	000's)	

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Population	15356 (100)	15369 (100)	15414 (100)	15458 (100)	154 <b>99</b> (100)	15534 (100)	15573 (100)	15608 (100)	15639	15670
Working Age Pop.	8710 (56.9)	8696 (56.6)	8700 (56.4)	8713 (56.4)	8734 (56.3)	8765 (56.4)	8784 (56.4)	8839 (56.6)	8867 (56.7)	8901 (56.8)
Corrected Employment <u>1</u> /	8181 (86.2)	8184 (86.5)	8200 (86.6)	8251 (86.7)	8317 (87.2)	8379 (87.1)	8409 (87.2)	8449 (87.3)	8339 (86.0)	8331 (65.7)
Females <u>2</u> /	3786 (46.3)	3797 (46.4)	3812 (46.5)	3843 (46.6)	3891 (46.8)	3929 (46.9)	3961 (47.1)	3985 (47.2)	3944 (47.3)	3932 (47.2)
(Uncorrected Employment)	3/ 7407	7435	7466	7534	7606	7705	7754	7804	7830	7815
Under-estimate <u>6</u> /	9.5	9.2	8.9	8.7	8.5	8.0	7.8	7.6	6.1	6.2

"Corrected" employment includes women on maternity leave, trainees, armed forces, and excludes those with two or more jobs in the state sector

1/ Between brackets, as proportions of the working age population. See note in Table 1.

2/ Between brackets, as proportions of the total employment.

3/ From Table 1.

4/ As a proportion of corrected employment figures.

Table	3A
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Structure of Employment

	<u>1980</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>
Total	100	100	100	100	100
State	88.8	89.1	88.9	88.8	88.7
Cooperatives	10.9	10.7	10.6	10.6	10.6
(of which Agricultural)	(18.5)	(8.3)	(8.2)	(8.3)	(8.3)
Self-Employed	0.3	0.3	0.6	0.6	0.7
(of which farmers)	(0.2)	(0.1)	(0.1)	(0.1)	(0.0)

### Table 4A

# Employment<sup>1</sup> by Training (percent)

	<u>1960</u>	<u>1963</u>	<u>1970</u>	<u>1973</u>	<u>1978</u>	<u>1983</u>	<u>1989</u>
University	3.3	3.5	4.5	5.1	6.2	7.8	8.8
Secondary School	15.6	17.1	19.9	21.0	22.5	25.9	27.1
School for Apprentices		••	0 8			35.7	38.1
Primary School		• •				30.6	26.0

<sup>1</sup> Civilian employment excluding the private sector.

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	(Artilat Averages; UUU-S)											
iten	•	1981	1982	1983	1984	1985	1986	1987	1988	1989		
	Total	7815 (100)	7822 (100)	7837 (100)	7887 (100)	7953 (100)	8011 (100)	8039 (100)	8078 (100)	8075 (100)		
	Agriculture, hunting, forestry and fishing	1031 (13.2)	1020 (53.0)	999 (12.7)	1002 (12.7)	1003 (12.6)	995 (12.4)	987 (12.1)	975 (12.1)	948 (11.7)		
2.	Nining and quarrying	209 (2.6)	214 (2.7)	217 (2.8)	223 (2.9)	225 (2.8)	226 (2.8)	227 (2.8)	<b>229</b> (2.8)	229 (2.8)		
3.	Nenufacturing	2735 (35.0)	2737 (35.0)	2740 (35.0)	2741 (35.0)	2754 (34.8)	2769 (34.6)	2778 (34.6)	2782 (34.4)	2776 (34.4)		
4.	Electricity, gas and water	106 (1.4)	107 (1.4)	111 (1.4)	113 (1.4)	111 (1.4)	113 (1.4)	113 (1.4)	115 (1.4)	117 (1.4)		
5.	Construction	667 (8.5)	658 (8.4)	659 (8.4)	663 (8.4)	667 (8.4)	678 (8.5)	685 (8.5)	689 (8.5)	684 (8.5)		
6.	Wholesale and retail trade, restaurants and hotels	901 (11.5)	905 (11.6)	919 (11.7)	923 11.7)	936 (11.8)	935 (11.7)	942 11.7)	947 (11.7)	955 (11.8)		
7.	Transport, storage and communication	514 (6.6)	512 (6.5)	510 (6.5)	513 (6.5)	514 (6.5)	518 (6.5)	520 (6.5)	519 (6.4)	523 (6.5)		
8.	Financing, insurance real estate, business services	257 (3.3)	261 (3.3)	265 (3.4)	269 (3.4)	275 (3.5)	287 (3.6)	285 (3.5)	290 (3.6)	291 (3.6)		
9.	Community, social and personal services	1374 (17.6)	1387 (17.7)	1397 (17.8)	1420 (18.0)	1448 (18.2)	1466 (18.3)	1480 (18.4)	1510 (18.7)	1530 (18.9)		
10.	Activities not adequately defined	21 (0.3)	21 (0.3)	20 (0.3)	20 (0.3)	20 (0.3)	23 (0.3)	22 (0.3)	22 (0.3)	22 (0.3)		

Table 5A					
Czechoslovakia: Total Civilian Employment by Industry <sup>1</sup> 1981	<u>• 1988</u>				
(Annual Averages; 000's)					

<sup>1</sup> ISIC-68 major divisions

Brackets give item as a percentage of the total.

Table 6A	ı.
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	Averag							ige Growth Rate (%)					
	1970	1975	1980	1985	1986	1 <b>987</b>	1988	1989	1990	й 70-89	ມ 70-80	¥ 80-89	ม 89-90
<u>Real Wage</u> Total Wage	100	118	124	125	125	128	130	133	128	1.5	2.2	0.7	-3.8
1. Material Sphere	100	118	125	127	128	131	134	138	133	1.5	2.2	1.0	-3.6
- Agriculture	100	122	130	139	139	143	148	152	152	2.2	2.7	1.8	
- Industry	100	118	126	130	131	134	137	139	135	1.6	2.3	1.1	-2.9
- Construction	100	117	122	124	125	128	131	133	130	1.4	2.0	0.9	-2.3
2. Won-Material Sphere	100	118	122	119	119	122	126	127	123	1.3	2.0	0.4	-3.2

#### Index of Average Monthly Wages and Earnings

\* preliminary

Source: Statisticka Rocenka

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#### Table 7A

<u>Kelotive Wages</u> (Average Material Sector = 100)									
	1970	1975	1980	1985	1986	1987	1988	1989	1990
Agriculture	92	95	96	99	99	99	100	101	103
Industry	101	100	101	103	103	102	102	102	102
Construction	110	110	108	108	108	109	108	109	109
Non-Material	95	96	93	90	90	90	90	90	90

Pelativa Vanes

\* Includes Education and Health

23

## Table 8A

Branch		Total	primary	appren-	nich_education secondary	y higher
e				ticeship	) 	(underversity)
constant of the second s				in Kcs	l	10-11-14 Subarament
Total	workers	3196	2660	3275	3273	4213
From	the total:					
agric	ulture <sup>1</sup>	3162	2882	3320	3214	4075
indus	try	3265	2706	3413	3450	4439
o.w.:	mining	4689	3833	4924	4915	6180
	metallurgie	3741	3069	3858	3969	5137
	chemistry	3512	2921	3552	3695	4488
	machinery	3225	2569	3341	3308	4155
	electrotechnics	3064	2456	3118	3181	4033
	textile	2704	2579	2765	3073	4129
	food	2811	2390	2946	3150	4249
consti	ruction	3444	3004	3523	3490	4426
transp	port	3317	3173	3300	3510	4125
commen	ce	2667	2156	2600	3019	4282
educat	ion	3037		2234	2708	3910
health	L	2879	2055	2569	2749	3959

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# Average Monthly Wages of Workers by Qualification (classified by sectors) (in June 1988)

1 excluding agricultural cooperatives

Source: Kux (1989)

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