

Wage and Non-Wage Labor Cost in the Czech Republic - The Impact of Fringe Benefits

Randall K. Filer, Ondrej Schneider and Jan Svejnar*

November 1994

Abstract

The paper discusses the development of nonwage benefits in the Czech economy during the transition from a planned to a market economy. It shows a slowly increasing importance of such instruments of attracting best employees as social insurance or subsidized goods and services.

Following an initial discussion of the benefit system in the pre-transition Czechoslovak economy, the second section discusses the evolution of the national insurance scheme since the transition. The third section presents some econometric evidence regarding the current extent of non-mandatory fringe benefits provided by individual employers, as well as a discussion of why we believe such benefits are likely to become increasingly important in the coming years.

Abstrakt

Tato práce se zabývá vývojem nepeněžní části odměny pracovníků před rokem 1989 a během období transformace. Význam různých netradičních forem odměňování, jak je ukázáno v práci, postupně vzrůstá. Velké akciové firmy i menší společnosti nabízejí například výhodnější formy pojištění, dotují různé služby a zboží pro své zaměstnance.

Po stručné diskusi před-transformačního systému se druhá část práce soustřeďuje na vývoj systému sociálního a zdravotního pojištění po roce 1989. Ve třetí části jsou prezentovány ekonometrické výpočty nasvědčující rostoucímu významu dobrovolných forem pojištění. V závěru je uvedena stručná diskuse důvodů, proč bude podle názoru autorů, význam těchto forem odměňování růst i v budoucnosti.

Introduction

* Filer is Professor of Economics at Hunter College and the Graduate Center of the City University of New York and at The Center for Economic Research and Graduate Education, Charles University, Prague (CERGE) and The Economics Institute of the Academy of Sciences of the Czech Republic (EI). Schneider is a graduate student at CERGE and a Research Associate at EI. Svejnar is Professor of Economics at the University of Pittsburgh and at CERGE-EI.

This paper discusses the development of nonwage benefits in the Czech economy during the transition from a planned to a market economy. This development is perhaps best understood as a two-step process. In the first stage many fundamental welfare activities, such as health insurance and pensions, were shifted from the state budget to parallel, quasi-private insurance funds; a large part of this stage has been completed. In the second stage, which is much less far advanced, there will be a shift away from uniform, mandated benefits towards individualized packages designed by and for each firm.

Following an initial discussion of the benefit system in the pre-transition Czechoslovak economy, the second section discusses the evolution of the national insurance scheme since the transition. The third section presents some evidence regarding the current extent of non-mandatory fringe benefits provided by individual employers as well as a discussion of why we believe such benefits are likely to become increasingly important in the coming years.

Employee Benefits in Czechoslovakia before 1989

Social policy in "socialist" Czechoslovakia was characterized by a striking gap between proclaimed successes and rather mixed results. There was full employment, but at the price of an inefficient allocation of resources. Another result of central planning was an extremely equalized wage distribution. This system left only limited decision scope to firms. Benefits were overwhelmingly supplied on the basis of legal requirements, with only a small part differing according to the profitability of a firm. Many areas that are commonly treated as firm benefits in the West (such as pensions and medical insurance) were part of the state budget and financed out of general government revenues. Trade unions were obligatory in all firms and were subordinated to the Communist party. Trade union leaders were nevertheless granted by the Communist party the power to decide on the allocation of some employee benefits, predominantly heavily subsidized recreation facilities. This power provided a major reason for joining trade unions for the majority of workers.

In the former Czechoslovakia¹ the social sphere was under the direct control of the state. All benefits were financed through the state budget and were therefore often treated according to the interests of the government rather than those of firms or their workers (for example, taxes were adjusted every year in order to achieve a formally balanced government budget). There were no independent funds which provided medical or pension insurance. The level and accessibility of benefits were therefore totally dependent on the discretion of state authorities.

State policy concentrated mainly on family welfare. A number of measures were taken to support family incomes². For instance, family allowances were increased several times in the 1980's, as were maternal allowances. Conditions for claiming an old-age pension while employed were very liberal. Due to this, and to the low real level of pensions, almost 25% of pensioners were simultaneously employed. State intervention was also common in the housing market, with the costs of constructing and maintaining housing being covered mostly by the state budget and by funds provided by industrial firms. A certain part of dwellings were directly designed to serve social purposes, for instance housing for elderly or specially adjusted apartments for disabled persons³.

Although the structure of benefits in the former Czechoslovakia resembled that in Western countries, it is difficult to assess these benefits because of their vague definitions and non-transparent accounting practices in the state budget. The main disadvantage for people depending on these benefits was their infrequent updating and the bureaucratic system of provision. As a result, benefits often did not keep pace with hidden inflation and their real value decreased over the 80's.

Enterprises had only a negligible influence over the decision of the social policy of the state. They were, however, obliged to secure possibly inconsistent goals such as full employment⁴, and the "reproduction of physical and mental abilities." Crucial for the purposes of this essay is the fact that enterprises were *forced to*

¹ The main source for this section was "The Labor Act", No. 65/1965 and its later amendments from 1968-1994.

² Source: "The Family Act", No.94/1963 and its amendment from 1992.

³ Source: "The Social Security Act", 100/1988 and its amendments 1990-1993.

⁴ Quotations in this section were taken from "The Labor Act", No.65/1965.

provide these benefits by law. In 1993 the Czechoslovak government adopted regulations and principles concerning workers' welfare in enterprises. According to these regulations, enterprises provided conditions for employing all parts of the population. This included creating special working conditions for young workers, mothers of young children and handicapped persons. Enterprises were also responsible for satisfying "*vital needs*". As the vague term suggests, this included not only provision of health care and catering, but also such imprecise items as the reproduction of physical and mental abilities mentioned above. A final class of enterprises' responsibilities was labelled "*conditions for personal development.*" This included educational and cultural activities, sport and hobby facilities, holiday camps for children, etc.. Very popular among workers were enterprise-owned vacation facilities which offered subsidized accommodation and services for employees. In 1986 these facilities had sufficient capacity to provide an annual five-day stay per worker. Enterprises were also obliged to improve the education of workers by establishing enterprise schools. The wording of all these laws was, however, very vague ("*the enterprise helps workers to find or build an appropriate accommodation*", etc.) and therefore the reality was often quite bleak.

Another peculiarity of the nonwage benefit system before 1989 arose from the difficulties of the centrally planned economy. There were shortages of many commodities at the announced prices. Since market forces were absent, the state shifted responsibility for allocating these scarce items to enterprises. Enterprises therefore provided commodities which were simply consumption goods and had only limited social protection merit. Although such an allocative mechanism was common to all centrally-planned economies, it appears not to have been as extensive in the former Czechoslovakia as in some other countries.

Formally, the programs provided by enterprises were divided into four groups. Catering was in the first of these. The law specified at length conditions under which enterprises could, or had to, provide catering. Nevertheless, no specific amount of subsidy was set. Trade unions had the legal power to "*control the quality of meals and efficiency of the production*".

A second group of benefits consisted of pre-school facilities for children. Facilities were built at the expense of enterprises, but stayed under the state control and the state could order them to accept non-employees' children.

Recreation supervised by trade unions was the third main part of employees' benefits. Programs included both special camps for children and recreation facilities for whole families. Prices were subsidized by trade unions, usually by around 50% (or even more for children's camps).

The last program addressed housing problems of workers. Profitable firms were allowed to contribute to building and maintenance costs. However, this program never achieved significant results and most new housing was constructed through consumer cooperatives rather than by employers.

An indication of the extent of these firm-based benefits can be obtained by examining amounts transferred to "funds for social and cultural needs" which was perhaps the accounting concept closest to fringe benefits. Firms paid employee benefits from this fund, including subsidies to catering and recreation and "*presents to devoted employees*". This fund also provided interest-free loans to workers. According to official statistics, non-capital expenses paid by these funds grew from around 4 billion crowns in 1980 to about 6.5 billion crowns by the end of the decade. Such expenditures were reported to be between 2 and 3 percent of total payrolls. This level seems unbelievably low in comparison to levels typical in developed countries (even allowing for the fact that many insurance needs were met from general budget revenues) or in comparison to the obligations assumed by firms in the areas supposedly funded from these accounts. It is likely that such a low level of reported benefit expenditures is best explained by inaccurate accounting practices rather than accurately expressing the level of employees' benefits in pre-transition Czechoslovakia.

It is plain from this discussion that the system of employee benefits provided by firms in Czechoslovakia before 1989 was developed in a typical "socialist" way: broad definitions with little concrete sense and without any possible control. It is therefore not surprising that accurate measures of the extent of these benefits are hard to come by. Whether this lack of reliable information is due to bureaucratic incompetence, lack of interest or a deliberate attempt to mask deterioration of workers' status is an open question.

Development after 1989

Following the fall of the communist government in late 1989, the years 1990 and 1991 were devoted to the preparation of the reform and to the introduction of basic macroeconomic changes. Firms spent this period preparing their new business plans. Many larger firms were divided into several smaller units in an attempt to mitigate the monopolistic structure of the former system. The social sphere was, for the time being, left almost unchanged. The only significant change was that firms often tried to shed their extensive recreational and sport facilities by selling them to the private sector. In addition, many firms which provided housing began the process of turning these units into cooperatives.

At the end of 1991 the situation was as follows:⁵

- 1) Enterprises provided a system of health care which covered almost 70% of their employees as well as many of their family members.
- 2) Enterprises still owned many flats, to which they provided an annual subsidy of some 2.2 billion Kcs in 1990. Approximately 40% of the tenants in these flats, however, had no relation to the owning enterprises.
- 3) Subsidies to catering in 1991 were around 2,000 Kcs per employee, an amount equal to slightly less than 10% of payroll costs.
- 4) Pre-school facilities were subsidized by an amount of between 7 and 21 thousand Kcs per child.
- 5) Firms kept supporting recreation facilities and heavily subsidized children's summer camps with parents paying only around 20% of actual costs.

The legal system reacted to the social changes by omitting most of the vague requirements previously imposed on state enterprises. The private sector has been exempted from these duties from the outset; nor have private entrepreneurs been obliged to subsidize trade unions through funds derived from payrolls.

⁵ Helena Salkova, *Socialni politika*, 1991 (in Czech).

There was a major shift in the provision of social protection at the beginning of 1993. A National Insurance Company consisting of four independent funds was established. These funds assumed from both the state budget and individual enterprises the responsibility for providing pensions, health insurance, disability insurance and unemployment benefits. (The last of these, of course, was a new addition to the social protection scheme since unemployment was not recognized in the pre-1989 economy.) All four funds are financed by payroll taxes. Nominally, these taxes are imposed on employers and employees in a ratio of slightly less than three-to-one, although their true incidence obviously depends on elasticities of supply and demand for labor and has not yet, to our knowledge, been studied. The tax rates for these four funds are shown in Table I.

The high tax rates shown in Table I plus the fact that these taxes are imposed on the entire wage bill, rather than on wages up to a maximum level as in the United States, results in an unusually high level of mandatory indirect labor costs in the Czech Republic when compared with the typical Western market economy. Mandatory insurance payments comprise almost 25% of labor costs in the Czech Republic as opposed to 6.4% of labor costs in the U.S., 7.6% in the U.K. and 16.4% in Germany.⁶ Obviously, such a high tax burden serves to reduce somewhat the labor cost advantage that Czech manufacturers would otherwise have in competing in global markets.

Administration of the individual social insurance funds varies somewhat. Pensions are still handled through the state budget, in a manner similar to Social Security in the U.S. The government argues that this is necessary since current revenues are needed to pay pension obligations incurred by the state for current retirees. Recently, however, there has been pressure from trade unions and other labor organizations to transfer the obligation for current retirees to the general state budget and use current social insurance taxes to support a fully-funded and vested pension system for current workers.

The situation with respect to health insurance is somewhat more complicated. In January 1992, a government-owned corporation (the General Health Insurance Office or GHIO) was established to assume health insurance activities. From

⁶ U.S. Chamber of Commerce, *Employee Benefits, 1991*, Washington, D.C. and D. Mitchell and J. Rojot, "Employee Benefits in the Single Market," in Ulman, Eichengreen and Dickens "Labor and an Integrated Europe", The Brookings Institution, Washington, D.C., 1993

January 1993, however, other companies have been allowed to compete in the health insurance market. These companies are free to sign a contract with an employer to represent that employer's workers, with revenues being transferred to the insurance company from the general insurance fund according to the number of workers covered.⁷ As of January 1994, there were 18 private health insurance companies that insured approximately 16% of Czech citizens. Interestingly, while workers and the self-employed made up only 43% of the clients of the GHIO, they comprised 61% of the clients of the private insurance companies.⁸

Wages and Benefits

This section contains 1993 data on average wages and other benefits from a representative sample of about 3,500 Czech firms. The data are crosstabulated in various levels of detail with respect to the sector of the economy, ownership type of firms, and firm size. Access has been provided to the tabulated data reported below, but not to the underlying firm-level data.

Table II presents a relatively detailed breakdown of the total hourly labor cost in the sampled firms. Hourly labor cost is decomposed into several subcategories within each of the following major categories: earnings (wages and bonuses), employer-paid wage-related benefits, non-insurance benefits, social security (insurance) benefits, and hiring and training costs. The first two categories are referred to as direct costs, while the latter three are termed indirect costs. The data are presented for nine aggregate sectors of the economy: mining, manufacturing, utilities (electricity, gas, and water), construction, "trade in and repair of motor vehicles", restaurants and hotels, travel agencies, financial and insurance institutions, and "real estate, research, etc".

As can be seen from Table II, there are major differences in average hourly wages, earnings, and total labor costs across the nine sectors. In term of average hourly earnings, for instance, the hotel and restaurant sector pays 32.99 Kc, while firms

⁷ There is also a complex equalization formula based on the age and sex of covered participants designed to reduce the disparities that would be created by private insurance companies "cream-skimming" the best insurance risks.

⁸ "Analysis of the Contemporary Situation of Transformation of Czech Health Care" Report for the Committee for Social Policy and Health Care of Parliament, Ministry of Health, 28/2/94.

in financial services and insurance pay almost twice as much -- 64.41 Kc. Within the earnings category, base wages represent the most important item, amounting on average to 27.08 Kc (71% of average earnings). As far as other components of earnings are concerned, firms in most sectors pay regular periodic bonuses (wage premia) that amount to about 15% of hourly earnings. Financial and insurance companies and travel agencies are an exception in that they pay little in the way of periodic bonuses. In contrast, however, the financial and insurance firms pay by far the largest share of total hourly earnings (31%) in the form of sharing in "economic results", profit-sharing, extra (usually year-end) monthly salaries, and "other salaries". Travel agencies and institutions in the real estate & research sector in turn pay 9% of earnings in the form of sharing in "economic results" of the firm.

Employer-paid wage-related benefits amount on average to a significant 11.5% of earnings. In this category one observes major expenses primarily for paid vacations (equal to 8.8% of earnings) and, to a lesser extent, paid holidays (1.3% of earnings). All sectors except travel agencies provide significant paid vacations, with mining being the leading sector in this area, with paid vacations amounting to more than 10% of total hourly earnings. In contrast, travel agencies spend very little on paid vacations but devote significant amounts of money to payments for "obstacles to work", such as train delays, which may result in the employee's missing a shift.

It should be noted that a significant component of these wage-related expenditures are mandatory under the terms of the labor code. Thus, for example, firms are required to provide four weeks of paid vacation for employees who have worked for more than 15 years since their 18th birthday. In addition, partial pay for sick days was required under the labor code. Since, however, firms often offer more generous vacations than are required or pay full compensation for sick days, it is impossible to divide amounts spent under this general heading into mandatory and voluntary components. Differences across firms or industries may represent differences in the generosity of the voluntary component or differences in age, experience and illness history of the work-force. For example, it is likely that the fairly low expenditures for vacations in the travel industry represent the relative newness of firms in that industry and the related relative youth of their workforces.

As we mentioned earlier, indirect benefits can be divided into non-insurance benefits (equivalent on average to 4.5% of earnings), social security contributions (initially equal to 48.5%, then decreasing to 43.4% of earnings), and hiring and

training costs (3.3% of earnings). Within the category of social benefits, one finds that mining companies contribute significantly to employee housing, mining companies and financial-insurance institutions provide sizable food subsidies, and electricity and gas as well as financial-insurance companies contribute meaningfully towards a social fund. Benefits in terms of buying the firm's products or using company cars are quantitatively small across the board. As with wage-related benefits, the bulk of social security contributions are legally mandated, although mining and financial-insurance firms have also paid out significant severance benefits. In the category of hiring and training costs, one observes significant training expenditures in the finance-insurance sector and "other costs" in mining.

Overall, one can see from Table II that mining and finance-insurance are the sectors with the highest indirect labor costs. They are also the two highest paying sectors, followed by travel agencies, electricity and gas, and real estate-research.

Tables III-V present information on wages and benefits according to a finer division of industries, type of ownership, and size of firm, respectively. The information in these tables is based on monthly rather than hourly labor cost and therefore differences in some categories of the pay package may be associated with differences in hours worked in an average month in addition to the structure of employee compensation.

Table III provides a breakdown of the labor cost data by two digit industrial classification. As can be seen from the table, coal mining dominates other types of mining by paying higher employer-paid wage-related benefits, social benefits, voluntary social security, and hiring and training costs.

Within manufacturing, one finds a relatively uniform pattern with the following outliers. Coke production and oil refining displays the highest overall labor cost, brought about to a significant extent by the high social benefits and training expenditures observed in this industry. The production of transport equipment provides the second largest social benefits and training expenditures, followed by the chemical industry. Interestingly, the textile industry dominates other industries in the amount of its voluntary insurance contributions.

Within the electricity, gas and water industries, we can see that electricity and gas have higher benefits than water in all categories. Among finance and insurance companies, financial institutions pay much higher wages than insurance companies, but they provide lower voluntary fringes as a percentage of direct labor cost.

In addition, there are differences in the compositions of the fringe benefits paid, with financial institutions placing a greater emphasis on voluntary insurance contributions and training, while insurance companies pay more in non-insurance benefits.

Table IV provides a breakdown of the main categories of total monthly labor cost by firm ownership type. Since by the end of 1993 many new (small and medium size) private firms had emerged, almost one-half of existing firms were privatized, and substantial western investment had taken place, all types of ownership are relatively well represented in the sample. As can be seen in the table, foreign-owned firms provide the highest wages and voluntary fringe benefits, both in absolute value and as a percentage of the base wage. Their total labor cost is 59% above the all-firm average, with the largest differential between them and other firms being in the category of recruitment and training. Hence the foreign firms pay more and engage in more (costly) recruitment and training. State organizations, international organizations and joint ventures rank next in wages and non-wage benefits. State organizations in fact furnish the highest non-insurance benefits and voluntary insurance contributions.

Table V shows how labor cost components vary with firm size. As can be verified from the data provided in the table, small (11-24 worker) firms pay 22% higher base wages than larger firms but they provide much smaller non-wage benefits. However, the wages of small firms are so much larger that total monthly labor cost per worker in small firms is still 13% higher than in larger firms. An interesting implication of the data in Tables IV and V is that small firms are either not dominantly private or that small private firms pay considerably higher wages than large private firms. This follows from the finding in Table IV that workers in domestic private firms earn below average wages and total compensation and the result in Table V that small firms have the highest wages and labor cost.

For firms with 25 and more employees, one finds in Table V that monthly earnings and hiring & training costs per employee fall with firm size up to the category of 200-499 employees and increase with size afterwards. Non-insurance benefits increase with size until the category of 100-199 employees, fall for the 200-499 group and grow with size thereafter. Finally, insurance benefits are found to increase monotonically with size.

Overall, wages and benefits increase with firm size except for the smallest firms. Small firms in turn provide a more generous overall package and place more emphasis on wages than non-wage benefits.

Determinants of Non-Wage Benefits

Some simple regression analyses provide insight into the development of fringe benefits in the Czech Republic. Table V reports the results of regressing various measures of fringe benefits as a fraction of base wages on firms' characteristics. The units of observation for these analyses are industry averages by two-digit industry. Observations are restricted to mining, manufacturing and utilities (rows 1 through 29 of Table III, excluding rows 4 and 27) since it was only for these industries that average firm characteristics were available.⁹

The results indicate that fringe benefits are more important relative to wages in industries with higher labor force productivity (calculated as sales per worker rather than value added per worker due to data limitations). On the other hand, private firms offer a lower share of compensation as fringe benefits than other firms. The reference group for this comparison is dominated by state-owned firms and does not reflect the result of voucher privatization distributions that occurred during 1993. There was no difference between state-owned firms and foreign firms or joint ventures with respect to the division of compensation between wages and benefits.

Finally, there was a negative relationship between changes in the labor force and the share of compensation that consisted of non-regular cash payments (bonuses, profit-sharing, etc.) plus benefits, but not the share that consisted solely of benefits. This implies that firms that were shrinking in size made greater than average use of bonuses and profit-sharing. Such a pattern is consistent with these firms' comparative advancement in a restructuring process that involves both labor shedding and greater use of incentive compensation schemes.

⁹ These were calculated from data for all industrial firms provided by the Ministry of Industry. Thus, they are for the entire population of firms rather than for the sample used to generate the wage and benefit data. This should not pose a problem as long as the wage sample is representative.

Incidence of Specific Fringe Benefits

Additional evidence regarding the incidence of fringe benefits in the current Czech labor market can be obtained from the results of annual compensation surveys conducted by the consulting firm Coopers & Lybrand. Primarily conducted in order to aid international clients in setting compensation policies, these surveys are not designed to be representative of the labor market as a whole. Rather, they focus on larger firms with some foreign participation. Firms included, however, may fall in several of the categories contained in Table IV, since the foreign participation may be a minority stake in a private or still majority state-owned domestic firm. As large firms with some connection to the international market, it might be appropriate to regard these firms as leaders in the labor market. While it would appear that they offer greater current levels of many benefits, one would expect competitive pressures in the currently tight Czech labor market to cause other firms to match these firms' compensation packages in the near future.

In the most recent survey, conducted in the first quarter of 1994, 58 firms provided information on the salaries of over 3500 employees in selected occupations ranging from senior management to drivers and receptionists.¹⁰ Line production workers were not among the types of workers covered. Table VI shows the fractions of firms that provided each of several common types of fringe benefits in each of the two most recent surveys (1993 and 1994). In addition, firms surveyed in 1994 that did not offer a specific benefit were asked if they planned on offering that benefit in the near future.¹¹

It is clear from the table that, although most benefits are not now offered by a majority of firms, there is a continual pattern of increasing penetration. Within the near future over half of all firms can be expected to offer at least some of their workers pension plans and medical insurance in excess of the mandatory social security coverage, as well as life insurance and loan programs or housing assistance. If firms implement their current plans and the trends of the past two years continue, the incidence of common types of fringe benefits in the Czech Republic should soon approach that of Western Europe and North America.

¹⁰ "1994 Czech Republic Wage Survey," Coopers & Lybrand, Prague, Summer 1994.

¹¹ It must be emphasized that the figures given are for the fraction of firms offering a benefit. As such, they probably overstate the fraction of workers receiving that benefit since some firms will offer a given benefit to only a fraction of their workers.

Conclusions

Taken as a whole, the evidence cited in the previous three sections indicates that voluntary insurance payments in excess of what is mandated to the social insurance funds play a small but increasing role in labor compensation in the Czech Republic. There is reason to believe that their importance will continue to increase in the future. The Czech government has recently approved the registration of the first domestic private pension funds and there are applications pending that would dramatically increase the number of such funds. Bills are expected to be introduced in Parliament this year to authorize private medical insurance companies to offer policies that are more generous in their payment schedule than those offered by the national insurance funds. Several private clinics are in the process of opening in Prague to take advantage of these expected higher insurance payments by offering improved facilities and services. In private conversations, operators of these clinics have claimed that their intended market is private firm' employee benefit programs. Indeed, clinics currently in operation typically accept direct payments from firms for their employees' care while awaiting reform of the insurance industry.

There are several reasons for which it would be economically rational to expect the provision of voluntary fringe benefits to become more prevalent in the Czech Republic in the near future. Among these are:

- 1) The extremely high social insurance (48.5%) and income tax (maximum of almost 50%) rates make it attractive for firms to offer compensation in the form of fringe benefits that are not subject to these taxes.
- 2) The very tight labor market, with unemployment rates less than 3.5% for the country as a whole and less than 0.5% in Prague makes it important for firms to reduce turnover and retain valuable employees who might be subject to recruitment by other employers. As is well-established, fringe benefit programs (especially pensions) can be used to bind employees to firms and reduce turnover in ways that simple wage payments cannot.
- 3) The continued existence of wage controls renders it attractive to increase compensation in the form of benefits that are not subject to these restrictions.

Thus, we would anticipate that the role of non-mandatory fringe benefits in the Czech Republic will increase substantially in the next few years as firms continue the process of evolving normal market relationships with their employees.

TABLE I

Social Insurance Tax Rates (as of January 1993)

Type of Insurance	Employer	Employee	Total
Health Insurance	9.0%	4.5%	13.5%
Pension Fund	20.4%	6.8%	27.2%
Disability Insurance	3.6%	1.2%	4.8%
Unemployment Insurance	2.25%	0.75%	3.0%
TOTAL	32.25%	13.25%	48.5%

TABLE II

Components of the Average Hourly Cost of Labor in 1993

		Av. of All Sectors	Mining	Manuf'g	Electricity, Gas & Water	Av. of 2-4	Construc'n	Trade & Repair of Motor Vehicles	Hotels and Restaurants	Travel Agencies	Finance & Insurance Companies	Real Est., Research, Etc.
		1	2	3	4	5	6	7	8	9	10	11
1	Earnings:	38.21	47.81	35.27	41.8	36.97	39.29	34.81	32.99	46.92	64.41	42.28
2	Base Wages	27.08	30.2	24.92	25.62	25.48	29.35	25.89	23.81	39.14	42.52	32.5
3	Regular (Periodic) Bonuses	5.61	7.58	5.35	7.18	5.70	6.87	5.18	5.88	1.8	0.56	5.59
4	Bonuses Based on Economic Results	0.85	0.18	0.88	0.78	0.81	1.02	0.99	0.23	4.09	1.44	1.78
5	Profit Sharing Bonus	0.42	0.18	0.3	0.43	0.30	0.21	0.5	0.33	0.58	3.76	0.35
6	Extraordinary (13th & 14th) Salaries	1.43	3.16	1.07	3.48	1.45	0.73	0.8	0.75	0.06	8.48	0.83
7	Overtime Pay	0.29	0.47	0.32	0.22	0.33	0.31	0.19	0.23	0.16	0.12	0.23
8	Other Bonuses	1.26	4.56	1.41	1.77	1.74	0.28	0.42	0.72	0.91	0.98	0.4
9	In-kind Wages	0.02	0.22	0.01	0.01	0.03	0	0.01	0	0.03	0.02	0.02
10	Bonuses for Emergency Work Readiness	0.06	0.19	0.03	0.45	0.08	0.02	0.03	0.01	0	0.02	0.07
11	Other Wages	1.07	1.07	0.99	1.85	1.06	0.48	0.79	1.03	0.15	6.53	0.5
12	Employer-Paid Wage- Related Benefits:	4.38	6.73	4.47	4.79	4.71	4.16	3.15	2.9	4.02	5.37	3.87
13	Work Stoppages	0.2	0.16	0.29	0.06	0.26	0.19	0.03	0.02	0	0.06	0.07
14	Paid Vacation	3.4	5	3.36	4.07	3.57	3.18	2.61	2.6	0.86	4.91	3.31
15	Paid Holidays	0.48	0.84	0.53	0.34	0.55	0.58	0.27	0.18	0.16	0.07	0.35
16	Obstacles to Work	0.31	0.73	0.3	0.36	0.35	0.21	0.23	0.11	3	0.33	0.14
17	1-16 Direct Costs	42.59	54.54	39.75	45.58	41.68	43.48	37.96	35.9	50.94	69.77	46.15
18	Non-Insurance Benefits:	1.74	4.9	1.57	3.18	2.01	0.81	1.21	0.87	0.34	3.64	1.32
19	Discounted Products of the Firm	0.08	0.14	0.09	0.03	0.09	0.05	0.15	0.05	0	0	0.02
20	Contributions to Housing	0.34	2.58	0.29	0.56	0.53	-0.04	-0.01	0	0	0.28	0

		Av. of All Sectors	Mining	Manuf'g	Electricity, Gas & Water	Av. of 2-4	Construc'n	Trade & Repair of Motor Vehicles	Hotels and Restaurants	Travel Agencies	Finance & Insurance Companies	Real Est., Research, Etc.
		1	2	3	4	5	6	7	8	9	10	11
21	Use of Company Cars for Private Purposes	0.07	0.02	0.04	0.02	0.03	0.09	0.18	0.05	0.06	0.11	0.18
22	Contributions to Food	0.68	1.41	0.66	0.82	0.74	0.41	0.51	0.43	0.26	1.2	0.68
23	Contributions in the Form of Savings, Sale of Shares	0.02	0	0.01	0	0.01	0	0.01	0	0	0.38	0.01
24	Contribution to the Social Fund	0.45	0.57	0.37	1.54	0.48	0.24	0.26	0.29	0.02	1.57	0.36
25	Contributions to Trade Unions	0.11	0.2	0.11	0.2	0.12	0.05	0.11	0.04	0	0.09	0.09
26	Insurance Benefits:	16.59	23.98	15.24	18.14	16.30	16.44	14.59	13.49	19.4	29.7	17.64
27	Compulsory Contributions to Social Security	15.9	21.18	14.67	17.42	15.50	16.16	14.13	13.24	18.94	28.08	17.11
28	Additional Programs of Social Security	0.06	0.61	0.02	0.03	0.08	0.01	0.03	0.01	0	0.22	0.02
29	Employer-Paid Sickness Benefits	0.1	0.34	0.11	0.25	0.14	0.03	0.02	0.02	0	0.02	0.01
30	Severance Pay	0.48	1.61	0.41	0.42	0.52	0.17	0.39	0.21	0.45	1.37	0.47
31	Other Social Contributions	0.04	0.24	0.03	0.02	0.05	0.06	0.01	0.01	0	0.02	0.03
32	Hiring and Training Costs:	1.24	1.81	1.25	1.22	1.30	1.05	0.99	1.62	0.13	1.94	1.11
33	Hiring Costs	0.05	0.03	0.05	0.02	0.04	0.03	0.09	0.13	0.02	0.08	0.09
34	Apprenticeship Costs	0.3	0.28	0.41	0.2	0.38	0.28	0.17	0.4	0	0	0.04
35	Professional Training Costs	0.34	0.15	0.29	0.44	0.28	0.15	0.44	0.26	0.06	1.47	0.56
36	Other Personnel Costs	0.54	1.35	0.51	0.56	0.59	0.59	0.29	0.73	0.04	0.39	0.42
37	Taxes and Subsidies:	0.14	0.3	0.11	0.24	0.14	0.55	-0.61	0.3	0.36	0.6	0.24
38	Taxes Linked to Employment	0.28	0.37	0.15	0.25	0.18	0.56	0.24	0.31	0.36	0.6	0.29
39	Subsidies Linked to Employment	-0.12	-0.07	-0.04	-0.01	-0.04	-0.01	-0.75	-0.01	0	0	-0.05
40	Indirect Costs	19.7	30.99	18.18	22.78	19.75	18.86	16.28	16.18	20.23	35.88	20.31
41	Total Labor Cost	62.29	86.53	57.92	69.36	61.44	62.32	54.24	52.08	71.17	105.65	66.46

Table III

Components of the Monthly Labor Cost
by 2 Digit Industrial Classification

		Total Labor Cost	Earnings	Employer-Paid Wage-Related Benefits	Direct Costs (2. + 3.)	Non-Insurance Benefits	Compulsory Insurance Benefits	Voluntary Insurance Benefits	Hiring and Training Costs	Taxes and Subsidies
1	Coal Mining	12379	6883	950	7833	732	3055	443	266	50
2	Gas Extraction	10675	6700	716	7416	205	2761	75	220	-3
3	Other Mining	9892	5688	965	6653	457	2509	97	185	-7
4	Total Mining	12048	6734	948	7683	690	2984	395	255	43
5	Food and Beverages	8320	5140	546	5686	201	2118	61	260	-6
6	Textile Ind.	6732	3901	601	4503	207	1668	225	94	36
7	Apparel Ind.	8361	3879	480	4360	173	1617	36	171	5
8	Leather Ind.	6902	4289	535	4824	159	1769	62	84	4
9	Wood Ind.	7392	4668	501	5169	164	1917	54	91	-2
10	Paper Ind.	8171	5050	613	5663	243	2072	41	143	10
11	Printing Ind.	9684	6148	584	6733	211	2527	65	141	8
12	Coking & Oil Refining	11400	8383	754	7141	1079	2716	12	450	2
13	Chemical Ind.	9835	5851	687	6538	353	2581	81	243	39
14	Rubber and Plastics	9007	5549	697	6246	219	2311	36	167	28
15	Other Mineral Products	8658	5258	657	5913	239	2237	69	182	19
16	Metal Production	10131	6173	804	6978	336	2504	95	209	9
17	Production of Metal Constructions	8406	5238	615	5853	172	2131	60	168	22
18	Machinery Ind.	3103	4955	693	5647	209	2079	75	170	12
19	Office Machines and Computers	6916	4473	542	5015	154	1523	75	120	30

		Total Labor Cost	Earnings	Employer-Paid Wage-Related Benefits	Direct Costs (2. + 3.)	Non-Insurance Benefits	Compulsory Insurance Benefits	Voluntary Insurance Benefits	Hiring and Training Costs	Taxes and Subsidies
20	Electrical Machines	8944	5457	737	6194	192	2279	105	151	23
21	Production of Radios and TVs	7177	4378	654	5032	139	1862	72	88	-16
22	Medical Equipment and Watches	7977	4882	626	5508	153	2030	122	136	29
23	Motor Vehicles	9062	5469	681	6150	226	2253	92	316	25
24	Other Transport Equipment	9164	5420	723	6142	414	2238	74	266	40
25	Furniture and Other Ind.	7217	4483	591	5074	89	1877	57	93	26
26	Manufacturing of Semifinished Mater.	9889	6148	708	6854	149	2526	59	158	113
27	Manufacturing Industries	3376	5101	647	5748	227	2121	83	180	16
28	Production and Distribution of Electricity and Gas	11585	6881	759	7640	636	2886	165	223	34
29	Production and Distribution of Water	8605	5326	652	5978	245	2194	25	124	39
30	Production and Distribution of Energy	10354	6239	715	6954	475	2600	107	182	36
31	Industry Total	8883	5346	681	6027	291	2242	115	188	20
32	Construction	9651	6085	645	6730	126	2503	43	163	86
33	Sale and Repair of Motor Vehicles	7886	4979	538	5517	117	1996	97	144	15
34	Wholesale Trade	10316	6872	584	7256	270	2704	82	231	-228
35	Retail Trade	6961	4444	400	4844	134	1810	59	95	18
36	Trade and Repair of Vehicles	8355	5362	485	5847	185	2176	71	153	-78
37	Hotels and Restaurants	7954	5040	443	5483	133	2023	38	232	46
38	Travel Agencies	11163	7372	631	8004	54	2977	72	20	57
39	Financial Institutions	16800	10273	828	11101	523	4463	278	328	108
40	Insurance Companies	12934	7702	805	8508	768	3449	87	124	-1

		Total Labor Cost	Earnings	Employer-Paid Wage-Related Benefits	Direct Costs (2. + 3.)	Non-Insurance Benefits	Compulsory Insurance Benefits	Voluntary Insurance Benefits	Hiring and Training Costs	Taxes and Subsidies
41	Financial and Insurance Companies	16229	9894	825	10718	559	4313	249	298	92
42	Real Estate	7483	4647	501	5149	172	1887	162	65	48
43	Rental of Machinery & Equipment	8612	5492	439	5931	233	2277	6	149	16
44	Data Processing	10288	6630	559	7189	240	2638	76	133	-9
45	Research and Development	9833	6282	630	6912	255	2520	81	73	-7
46	Other Commercial Services	11224	7159	624	7782	192	2904	57	238	61
47	Real Estate, Research and Development	10170	6470	592	7062	202	2618	81	170	36
48	Total	9216	5663	648	6301	257	2362	102	183	21

TABLE IV

Components of Monthly Labor Cost by Ownership of Firm

		Total Labor Cost	Earnings	Employer-Paid Wage-Related Benefits	Direct Costs (2.+3.)	Non- Insurance Benefits	Compulsory Insurance Benefits	Voluntary Insurance Benefits	Hiring and Training Costs	Taxes and Subsidies
		1	2	3	4	5	6	7	8	9
1	Private Firms	8792	5522	596	6118	182	2262	68	158	6
2	Cooperative Firms	6850	4271	486	4757	134	1778	75	79	27
3	State Organizations	9175	5476	701	6177	348	2303	143	172	32
4	Municipal and Local Organizations	6510	4265	285	4550	113	1766	2	38	41
5	Social Organizations	3992	5334	448	5782	238	2454	77	57	385
6	Foreign Firms	14678	9092	724	9816	300	3626	64	846	25
7	International Organizations	10907	6856	656	7512	219	2739	58	350	29
8	Joint Ventures	10678	6474	727	7201	296	2810	123	219	29
9	Total	9216	5653	648	6301	257	2352	102	183	21

TABLE V

Components of Monthly Labor Cost by Size of Firm

		Total Labor Cost	Earnings	Employer-Paid Wage-Related Benefits	Direct Costs (2.+3.)	Non-Insurance Benefits	Compulsory Insurance Benefits	Voluntary Insurance Benefits	Hiring and Training Costs	Taxes and Subsidies
		1	2	3	4	5	6	7	8	9
1	Total	9216	5653	648	6301	257	2352	102	183	21
2	Comprising: 11-24 Employees	10357	6847	479	7326	129	2713	26	154	9
3	25 and More Employees	9162	5596	656	6252	263	2335	105	184	21
4	Within 25 and More: 25-49	9523	6333	497	6830	145	2520	38	194	-204
5	50-99	9348	6005	535	6540	154	2427	49	141	37
6	100-199	8957	5620	569	6189	192	2325	55	140	56
7	200-499	7809	4834	582	5416	151	1993	76	127	45
8	500-999	8683	5287	661	5948	239	2186	99	190	21
9	1000 and more	9852	5853	744	6598	366	2490	149	223	26

TABLE VI

Fraction of Firms With International Connection Offering Various Benefits

	1993	1994		
	Offering	Offering	Planning to Offer	Total
Pension Plan	15%	10%	40%	50%
Profit Sharing Plan	10%	20%	7%	27%
Medical Insurance	25%	30%	25%	55%
Life Insurance	15%	25%	40%	65%
Disability Insurance	15%	32%	20%	52%
Housing Assistance	5%	23%	5%	28%
Loans to Employees (inc. Mortgage)	15%	30%	20%	50%
Reduced Price Meals	60%	75%	5%	80%
Public Transit Subsidies	35%	30%	10%	40%
Discounts on Products	20%	40%	7%	47%

NB: Figures for pension plans, medical insurance and disability insurance refer to benefits offered in excess of the required participation in the social insurance scheme.

TABLE VII

REGRESSION RESULTS - BENEFITS AS A SHARE OF BASE WAGES

	Bonuses, Profit Sharing, Non-Insurance Benefits and Voluntary Insurance	Non-Insurance Benefits and Voluntary Insurance
Productivity (Sales per Worker) (10,000 Kc)	.22 (1.62)	.23 (2.14)
Percentage Change in Labor Force (1992-1993)	-.0035 (1.72)	-.0015 (0.93)
Percentage Change in Sales (1992-1993)	.00029 (0.30)	.00020 (0.26)
Percentage of Firms Privately Owned	-.387 (2.55)	-.292 (2.37)
Constant	.164	.054
R ²	.34	.38