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FROM PLANNING TO MARKETS
HOUSING IN EASTERN EUROPE

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**HOUSING ALLOWANCES
AND CZECHOSLOVAKIA'S
SOCIAL SAFETY NET**

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PREFACE

Housing allowance programs are becoming the primary mechanism for delivering government housing assistance to low income families in a number of Western countries. Because they focus resources on the poor, this approach could be extremely attractive for countries like Czechoslovakia where substantial increases in rents in government owned housing are mandatory to maintain the viability of that housing stock.

In May 1991, Minister Karel Dyba of the Czech Ministry of Economic Policy and Development, requested assistance from the U.S. Agency for International Development (USAID) to support a study of how the housing allowance approach could be applied in Czechoslovakia. This report has been prepared in response to his request. Against a backdrop of information on current incomes and expenditure patterns, it simulates the financial impacts of alternative housing allowance program designs. It also looks at how a housing allowance program could fit into the context of the country's broader social safety net.

Many individuals contributed to the work. The authors wish to thank, in particular: Lee Bawden and Wayne Vroman of the Urban Institute who provided many of the guiding concepts for the review of current social assistance policy as well as contributing useful methodological and substantive comments on all phases of the work; Jiří Dlouhý of the Federal Ministry of Labor and Social Affairs and František Hajnovič of Infostat in Bratislava who played a major role in building the data files used in this work and were directly responsible for the estimates used to update income data in the file; and Hana Zelenková of Coex and Petr Tajčman of the Urban Institute who assisted in designing the work program, provided supporting data, and provided valuable comments on earlier drafts.

Our primary government contact in this work was Jan Wágner, Director of Housing in the CR Ministry of Economic Policy and Development. We would also like to express our appreciation, however, for the background information and ideas gained from discussions with Petr Višek and Michaela Kepkova of the Federal Ministry of Labor and Social Affairs, Karel Povolný, Josef Březina, and Břetislav Domisch of the CR Ministry of Labor and Social Welfare, and Jozef Sopira of the SR Ministry of Labor and Social Welfare.

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EXECUTIVE SUMMARY

INTRODUCTION AND SUMMARY

Tenants in Czechoslovakia's government-owned social housing pay an extremely small fraction of their incomes for rent compared to those in Western democracies. The rental revenue generated is substantially below the amount needed to cover operating and maintenance expenditures. Enormous government subsidies have been provided in the past to make up the difference (e.g., Kcs 4.8 billion in 1990), but the economy cannot afford a continuation of housing subsidies at those levels.

Since 1989, both of the nation's Republics have recognized that rents will have to be markedly increased if accelerated deterioration of the social housing stock is to be avoided. They also have recognized, however, that while many residents may have sufficient incomes to be able to pay more in rent, large rent increases could be very painful for low-income groups.

Housing Allowance Programs, increasingly the dominant form of housing assistance in Western Europe and North America, are designed precisely to address this issue. In such programs, assistance is focused tightly on the poor. Subsidy payments cover the gap between a standard rent and the fraction of income it is reasonable to assume families can afford to pay for housing. With this formula, subsidies decline as incomes increase and higher-income families are not entitled to any subsidy.

This study, supported by the U.S. Agency for International Development (USAID), was prepared at the request of the Government to examine the implications of implementing a housing allowance approach in Czechoslovakia.

Major Findings

Analysis of a new database developed for this study yields quite optimistic findings. The income distribution in rental housing is very similar to that for the nation as a whole—not dominated by low-income groups. While a sizeable share of the total 1.8

million renter households are poor (18 percent have incomes below Kcs 30,000 per year), a surprisingly large number are in the higher-income ranges (360,000 households, or 20 percent, make more than Kcs 100,000 per year). This suggests that most renters should be able pay much higher rents without significant strain on their family budgets. A simulation model based on these data indicates:

- 94 percent of all renters can afford the 100 percent rent increase scheduled for July 1992 without having to spend more than 15 percent of their income for rent. Housing allowance subsidies to prevent the others from having to exceed the 15 percent threshold amount to only Kcs 52 million annually. At this point (with increased rents plus housing allowances), operating subsidies would still be required, but at a lower level.

It is generally understood that even after the July 1992 increases, rents will still be well below "market" levels; (market rents are those just high enough to cover the full cost of adequate building operation and maintenance, along with reasonable compensation for owners and managers, such that operating subsidies no longer required). A second simulation (for January 1993) makes a high assumption about market rents (i.e., that they average 400 percent of current rent levels) and cautious assumptions about the economy (i.e., income declines implied by the unemployment rate growing to 10 percent). Even under these assumptions:

- Only 18 percent of all renters could not afford such increases without having to pay more than 20 percent of their incomes for rent. Housing allowances subsidies required to eliminate budgetary strain for them would cost Kcs 588 million annually.

In other words, it should be possible to increase rents as needed to cover adequate building operations and maintenance while, at the same time, reducing total government subsidy outlays for social housing by at least 87 percent (from Kcs 4.8 billion to Kcs 0.6 billion) and avoiding the creation of true budgetary hardships for any family.

Short-Term Recommendations

1. Given the tremendous advantages indicated above, *Czechoslovakia should formally adopt the housing allowances approach as its primary vehicle for the provision of housing assistance.* The adoption of the program should be widely publicized since doing so should significantly dampen public fears about impending rent increases. Rent increases will be troublesome to everyone who has to pay them, but the public should be responsive to the fact that, if a housing allowance program is available, the only people who face large increases will be higher-income households who have benefitted from very large (and inequitable) operating subsidies in the past.

2. Considering the planned schedule for rent increases, there is an urgent need to develop the program in 1992. *The fastest way to implement the housing allowance approach will be to build it into the existing Social Allowance (SA) program* being operated by the Ministries of Labor and Social Affairs in both Republics. Although not optimal, the formula for the SA program is similar to that of the housing allowance approach (subsidies are calculated to fill the gap between actual incomes and the poverty line). Housing expenses are already considered in the calculations that determine the poverty line for the SA program. *The only legal change required for the implementation of a basically adequate housing allowance system in this framework will be to re-set the official poverty line to reflect the rent increases to be implemented in 1992.* A major advantage is that this approach avoids making housing allowances a separate program administratively (which would be duplicative).

3. However, the present SA program does not have the staff or procedures needed to operate the program successfully. *A high priority in 1992 should be to strengthen the administrative capacity of the SA program* so that it can handle a substantial growth in workloads by the end of the year. This will entail the development of efficient systems and procedures, as well as staff recruitment and training, with emphasis being given to procedures for income verification and quality control.

Longer-Term Recommendations

4. Czechoslovakia's existing social safety net, including the SA program, has a number of faults. *The recent proposals of the Federal Ministry of Labor and Social Affairs to develop a new Family Allowance program to correct many of the deficiencies in the present safety net should be broadly supported.* They would: (a) combine the existing Child Allowance benefit and other social programs with the SA program into a unified Family Allowance Program; (b) provide a more adaptable system by specifying formulas, rather than absolute benefit amounts, in the law itself; (c) focus assistance on the poor (subsidy amounts are reduced, then eliminated, as incomes increase); and (d) provide strong work incentives in the assistance formula.

5. *The Housing Allowance (HA) program can, and should, be incorporated within the Family Allowance (FA) program framework.* The overall FA for a family would be the sum of the CA, the HA, and the SA it is entitled to receive, each determined by its own formula. Although the components are calculated separately, eligible families would receive only one combined FA payment each month.

6. Over the next few years, *a major effort should be made to expand and improve the surveys used to determine the poverty line and standard rents.* The equity and effectiveness of the FA program depends on the quality of the database. It is likely that substantial locational variations in prices will develop in the CSFR; i.e., different poverty lines and standard rents will have to be established for different cities, and they will need to be adjusted on a reasonably regular schedule as prices change.

PROBLEMS IN COMMUNAL HOUSING

The remainder of this Executive Report presents data and conclusions from the study that support the findings and recommendations outlined above. We begin with a review of the present problems in the government owned housing sector.

A total of 1.4 million apartments in the CSFR (about one quarter of all housing units nationally), are government-owned. Roughly 30 percent of these "communal" units were built prior to 1960 (most confiscated from earlier private owners) and the remaining 70 percent have been built by the state since then, mainly in the form of large concrete-panel apartment blocks.

Low Rents. In 1990, on average, tenants in communal housing paid Kcs. 131 per month in rent (excluding payments for utilities). This was equivalent of about 2.5 percent of their income on average, a sharp contrast to the 20 to 30 percent of income typically paid by tenants of rental units in western market-oriented economies. These rent payments were sufficient to cover only 24 percent of the operating and maintenance costs in communal housing in 1990. Even after counting in rents from commercial tenants in these buildings and other fees, the Federal government had to provide a subsidies averaging Kcs. 4.8 billion annually from 1985 through 1990.

Inadequate Management and Physical Deterioration. Through the communist era, communal housing was managed by government management companies, widely criticized for their inefficiency. The popular perception is that these bureaucracies were overstaffed (having no incentive to use funds carefully), yet the quality of the maintenance and services they provided was woefully inadequate in relation to the need. Most communal housing suffers from deferred maintenance, and is deteriorating rapidly.

Inequity. Another cause of social dissatisfaction with communal housing its tenants receive an enormous subsidy that residents of cooperatives and family houses, at the same income levels, do not. Within communal housing, a wealthy tenant receives the same amount of subsidy for a given type and size of apartment, as a poor tenant.

REFORMS AND THE NEED FOR A NEW TYPE OF ASSISTANCE

Rent Increases. In 1991, the new governments in both CSFR republics adopted policy statements calling for broadscale reform of the communal housing system. Recognizing that continuing subsidies to this housing at the levels of recent years would be intolerable, the basic theme was to increase rents paid by tenants. In January 1992, tenant payments for services (excluding space heat and hot water whose prices were increased substantially in 1991), were increased by 80 percent. Current directives call for net rents for apartments to be increased by 100 percent on July 1, 1992. The

previous special rent exemption for families with children will also be dropped at that time. Although these increases are significant, they alone will obviously be insufficient to cover costs in full. However, but the policy statements propose further increases over time until something approximating "market rents" is achieved.

Changes in Ownership and Management. Perhaps the most dramatic moves so far concern the ownership of this stock. In May 1991, the ownership of all communal housing was transferred from the state to new, popularly elected, municipal governments. Under a "restitution" law passed in 1990, if individuals can demonstrate that they or their families owned what is now a communal apartment building before 1948, title to the property will be restored to them. The municipalities have fairly wide latitude as to what they can do with communal housing not subject to restitution. In the short term, most are changing management arrangements, some by terminating the old bureaucracies and replacing them with new private management companies on a competitive basis. Many indicate the desire to sell most of this housing to tenants and other private buyers in the next few years—a new "condominium" law is now being considered by parliament which would enable them to do so.

The Need for a New Form of Assistance. The Republics have naturally been concerned about the possible social unrest that could emerge because of rent increases and reductions in subsidies. It is generally believed that large rent increases will not be judged inappropriate for wealthier families that live in communal housing. But, such increases could prove intolerable for poor tenants, and this is particularly important now since their numbers could expand substantially with the temporary growth in unemployment that is expected to accompany the restructuring of the national economy. Republic governments have reasoned that some form of subsidy assistance will be required to soften the impact of rent increases for the poor.

THE HOUSING ALLOWANCE APPROACH

The Formula. The housing allowance approach, which is becoming the dominant form of housing assistance in Western Europe and North America, is well suited to this problem. The approach begins with the estimation of Maximum Social Rent (MSR)—the rent needed to cover the cost of operating and maintaining a modest apartment in decent condition, plus reasonably compensating managers and owners for their efforts and investments. Under the formula, the tenant pays that fraction of the MSR it can reasonably afford, given its income, and the subsidy makes up the difference.

Examples. One of the efficiencies of this approach is that the subsidy automatically decreases as a tenant's income goes up and richer households are automatically cut off from any assistance. Suppose the MSR is Kcs 5,000 per year and tenants can afford to pay 15 percent of their incomes for rent. In this case, a household with an annual income of Kcs 20,000 would receive a subsidy that year of Kcs 2,000

(5,000 minus 0.15 times 20,000). At an income of Kcs 25,000, the subsidy would drop to Kcs 1,250. At an income of Kcs 35,000 the tenant could afford to pay the full MSR and would not be entitled to any subsidy.

INCOMES AND ESTIMATED IMPACTS

The Housing Allowance and Income Support (HAIS) Data Base and Model. To estimate the impacts of the housing allowance approach in the CSFR, we created a data base by combining information from the 1988 *Mikrocensus* and the 1989 *Family Budget Survey* and then using data on recent income trends to update household incomes on the file to 1991 levels. We then developed equations to permit us to estimate the number of participants in, and the subsidy requirements of, key social assistance programs based on the way different economic scenarios might alter the 1991 income distribution in the data base.

Household Types and Incomes. The data base shows that the median annual 1991 income for all of the 5.5 million households in the CSFR was Kcs 83,000. The relative size (percent of households) and median incomes of different social groups (defined by the primary income source of the household head) shown in Table 1.

Table 1
CSFR Household Income (1991)

	Percent	Median Income
Agricultural income (co-operative)	6.5	107,000
Agricultural income (private)	*	112,000
Blue collar wages	34.6	92,000
White collar wages	31.1	94,000
Entrepreneurial activity	0.2	131,000
Pensions (age 60 and over)	23.0	33,000
Pensions (age under 60)	4.4	91,000
Other	0.3	43,000
All households	100.0	83,000

*less than 0.05 percent

The data-base indicates that all types of households receive considerable income from sources other than their primary source. For example, blue-collar wage earners noted above receive only 71 percent of their household incomes from those wages, the rest being accounted for by various social assistance payments, interest on investments, etc. Thus making estimates of household income based on the average wage alone, for any group, is likely to seriously understate the actual income likely to be received. This gap is probably widening now, since so many new income earning opportunities are emerging as the economy goes through the reform process.

Renters households (about one quarter of the total) had a median income almost exactly the same as that for all households (not substantially lower than average, as is typical in western economies), and their composition (defined by social groups noted above) is very similar to the overall distribution; i.e., there was no particular concentration of pensioners or any other group in rental units.

Distribution of Incomes. While incomes in the CSFR are low compared to those in western market-oriented economies, they are more equally distributed. But this does not mean that all households are tightly concentrated around the average. There is still substantial amount of variation in the CSFR income distribution; i.e., substantial numbers in very low income groups and significant numbers, as well, with quite high incomes. The urban distribution shows a sizeable group with very low incomes (almost 10 percent of all households in the Kcs 20,000-30,000 range). Percentages drop off somewhat between Kcs 40,000 and 70,000, then peak again in the Kcs 80,000-100,000 range. The distribution then gradually declines as incomes increase. Those with incomes above Kcs 100,000 make up 32 percent (almost one third) of the total, while those with incomes below Kcs 60,000 make up 30 percent.

In Western economies, government-owned housing (which dominates the rental category in the CSFR) is reserved mostly for low-income groups, but this is not the case in the CSFR where sizeable numbers with high incomes live in rental units. While 18 percent of all renter households make less than Kcs, 30,000 per year, and 41 percent make less than Kcs 60,000, almost 360,000 (20 percent) make more than Kcs 100,000; 13,600 make more than Kcs 180,000. Thus the expectation noted earlier does appear justified: a large number of renter households should be able to afford substantial rent increases without undue hardship, while there are those at the lower end that are likely to require assistance.

Economic and Housing Allowance Program Scenarios. A year ago, it was estimated that economic reforms would dramatically increase unemployment (and poverty) by the end of 1991. In fact, the reforms have not been implemented as rapidly as was anticipated and it appears that the pain of the transition will be spread over a longer period. In our models we assume that the unemployment rate will increase from 7.0 percent at the start of 1992 to 8.5 percent in July 1992, and to 10.0 percent in January 1993.

With this background, we define three housing allowance program scenarios. In each, the Maximum Social Rent (MSR) is defined as a gross rent concept; i.e., payment for space rent plus payment for utilities (including heat, electricity, gas, and other fuels). Also we assume that those eligible to receive housing allowances include all renters: the 1.4 million that live in communal housing plus 0.4 million others, almost all of whom rent units owned by their employers. The average gross rent actually paid by this population as a whole in 1991 was Kcs 665 per month (Kcs 160 for space rent plus Kcs 505 for utilities).

- *Scenario 1* sets the MSR using gross rents calculated from the planned schedule of rent increases for Category II units (those with plumbing facilities but no central heat). Various levels of housing affordability, ranging from 10 percent to 20 percent of income, are examined at each of the dates noted above. In the HAI model, the MSR varies for households of different sizes, but for a family of four persons at the beginning of 1993 in this scenario, the monthly MSR would amount to Kcs 378—still only about six percent of the median income.
- *Scenario 2* makes the same assumptions as Scenario 1 except that the MSR is calculated using the rent schedule for Category I units (provided with heat and plumbing facilities).
- *Scenario 3* sets the MSR at levels that may approximate true market rents and evaluates the effects of such rent increases as of the beginning of 1993.

Housing Allowance Simulations. Table 2 shows the impacts estimated for each scenario. The right three columns indicate the number of renter households that would be receiving a housing allowance subsidy, the percent they represent of all renters, and the total annual subsidy they would receive. Three main results emerge from these simulations.

- *The number of eligible households is very sensitive to program parameters.* The number of eligible households rises tremendously when the benefit reduction rate is dropped from 15 percent to 10 percent. This reflects the relative "flatness" of the Czechoslovak income distribution, with a large share of households clustered close to the median income. Also, number of eligible households jumps significantly when the MSR is calculated based on Category I quality standards rather than the lower rents of Category II.

Table 2
CSFR - HAIS Simulation Model Results (Renters)

Scenario	Simulation Period	Rent Increase Over 1991	Allowance Housing Cost Share	Eligible Households		Total Annual Allowances (Kcs '000s)
				Number	Percent of Renters	
Scenario 1	January 1992	50 percent	20 percent	300	0.02	180
			15 percent	3,816	0.21	708
			10 percent	144,841	7.83	50,856
	July 1992	100 percent	20 percent	9,919	0.54	14,652
			15 percent	16,309	0.88	26,016
			10 percent	248,143	13.41	177,660
	January 1993	100 percent	20 percent	22,884	1.24	34,056
			15 percent	30,618	1.66	57,456
			10 percent	258,884	13.99	221,136
Scenario 2	January 1992	50 percent	20 percent	347	0.02	276
			15 percent	4,874	0.26	1,848
			10 percent	227,629	12.31	109,404
	July 1992	100 percent	20 percent	13,689	0.74	22,092
			15 percent	106,856	5.78	52,056
			10 percent	411,996	22.27	335,232
	January 1993	100 percent	20 percent	27,494	1.49	51,012
			15 percent	120,994	6.54	93,600
			10 percent	407,208	22.01	383,580
Scenario 3	January 1993	100 percent	15 percent	120,994	6.54	93,600
		200 percent	15 percent	256,565	13.87	310,932
		300 percent	15 percent	440,763	23.83	725,196
		400 percent	15 percent	614,713	33.23	1,344,888
		400 percent	20 percent	321,375	17.37	588,132

- *The need for a Housing Allowance Program will be quite urgent by the beginning of 1993. For the rent/income ratio of 20 percent in Scenario 2, for example, the number of eligible households after both the January and July 1992 rent increases remains very small (less than 1 percent of all renter households). But by the beginning of 1993, as unemployment increases and households begin to exhaust their unemployment insurance benefits, the number of eligible households almost doubles compared to mid-1992 even without any further rent increases. With additional rent increases (as estimated under Scenario 3—surely needed by then to meet national objectives for developing a market-oriented housing system) the number of eligibles increases substantially beyond that.*
- *Even with the largest rent increases shown, the housing allowance approach would permit a dramatic net reduction in government subsidies for housing. With the 400 percent increase in Scenario 3, only 18 percent of all renters could not afford to pay the new rent increases without having to pay more than 20 percent of their incomes for rent. Housing allowances subsidies required to eliminate budgetary strain for them would cost Kcs 588 million annually. In other words, it should be possible to increase rents as needed to cover adequate building operations and maintenance while, at the same time, reducing total government subsidy outlays for social housing by at least 87 percent (from Kcs 4.8 billion to Kcs 0.6 billion) and avoiding the creation of true budgetary hardships for any family.*

Given the advantages indicated above, it would certainly seem advisable for Czechoslovakia to formally adopt the housing allowances approach as its primary vehicle for the provision of housing assistance. When adopted, the program should be widely publicized since doing so should significantly dampen public fears about impending rent increases. Rent increases will be troublesome to everyone who has to pay them, but the public should be responsive to the fact that, if a housing allowance program is available, the only people who face large increases will be higher-income households who have benefitted from very large (and inequitable) operating subsidies in the past.

The next question, however, is how the program should be implemented. Lessons from other countries suggest that it is extremely important to implement it as an integral part of the country's overall social benefits system rather than as a separate free-standing program. Doing the latter would imply the need to set up separate administrative systems and require poor households to go through separate interviews to certify their incomes. It is challenging enough to administer any income-tested program efficiently—this sort of duplication could make the task much more difficult. Also, with separate programs there is the danger that rules adopted in one might counteract positive incentives established in the other. With this reasoning, the paragraphs below describe the broader social benefits system in Czechoslovakia and suggest how a housing allowance program might be integrated in an improved version of it.

THE SOCIAL BENEFITS SYSTEM

Objectives and Policy Parameters

Objectives. Before reviewing the features of the existing social safety net in Czechoslovakia it should be helpful to consider the goals and operating principles for such a system more broadly. International experience suggests that a social benefits system should have three key objectives:

- *Protection from poverty in an equitable manner.* The social benefits system should keep households out of extreme poverty and should ensure both horizontal equity (households in similar circumstances are treated equally) and vertical equity (households with lower incomes receive more support than those with higher incomes).
- *Economic efficiency.* At the macroeconomic level, the cost of the system must fit within the state's budget constraint. At the microeconomic level, the system must provide adequate incentives for work and income growth.
- *Administrative practicality.* The system should not place unnecessary burdens on participants, should have safeguards to control fraud, and should have reasonable administrative costs.

Meeting all of these targets is not a simple task. Indeed, it will often be impossible to avoid conflicts between the various objectives and compromise will be necessary.

Policies. The two basic policy parameters which affect these objectives are the income guarantee (the level required to maintain some adequate living standard) and the rate at which the benefit is paid out (which affects the work incentive faced by the household as benefits are reduced when income rises).¹ Increasing the income guarantee improves the income of low-income beneficiaries, but raises the cost of the social benefit program and harms labor supply incentives. Raising the benefit reduction rate has a negative effect on the achievement of an adequate income (for qualifying households) and on labor supply while reducing social benefit program costs. In addition to these two policy parameters, there are other policy choices to be made:

- *Eligibility for benefits.* Income is often the most efficient criteria for deciding eligibility, but is often very difficult to measure and verify.

¹ A benefit reduction rate of 1.0, for example, yields very poor work incentives--for every Kcs 1 gained in income from a job, the government reduces its support by the same amount. If the benefit reduction rate is 0.5, however, there are stronger incentives to work: for every Kcs 1 earned from a new job, the government reduces its support payment by only Kcs 0.5.

- **Benefit delivery.** Benefits are often delivered through cash payments, but in some situations it may be more effective to make transfers in a non-cash or in-kind form.
- **Income qualification.** If income is used as an eligibility criterion, which forms of income are counted is an important consideration.
- **Financing benefits.** Resources can be raised either by allocating a portion of general tax revenues or by using explicit social benefit taxes. Having both workers and employers involved in financing benefits can help avoid the perception that benefits are paid by some other "third party".

The Existing Social Benefit System in Czechoslovakia

Income support. There are two income support programs: (1) compensatory grants; and (2) the social allowance (SA), or poverty level benefit, program operated by the Ministries of Labor and Social Affairs in both Republics. Compensatory grants are universal payments ranging from Kcs 140 to Kcs 220 per person per month and were introduced in 1990 to cushion the shock of price increases after price controls were lifted from most foods and energy prices were moved to world levels. The SA program is an income maintenance program designed to bring households with very low incomes up to the poverty line. (For example, for a family of four with two children aged six to ten years, the poverty line is established in the law as Kcs 4,200 per month.) The amount of the benefit is equal to the difference between the household's income and the poverty line. In practice, the program is more *ad hoc* at this point. The number of participants is still very small and local welfare officers have a wide range of discretion over the granting of benefits (which in the past have been mainly non-cash or in-kind assistance). Rising unemployment is likely to severely strain this current system.

Unemployment insurance. The unemployment insurance system was started at the beginning of 1991 under Federal Law 1/1991. In general, unemployed persons must register with the local employment office and be available for work. Benefits are paid for up to one year, with payments set at between 60 percent and 70 percent of the previous wage. (Unemployed graduates receive a fixed benefit.) There is no maximum or minimum benefit level.

Pensions. There are three main groups of pensions in the Czechoslovak social benefits system: (1) old-age/retirement pension; (2) disability pensions (for both total and partial disabilities); and (3) other pensions (widows, widowers, and orphans).

Eligibility for old-age pensions varies according to sex, age, occupation, and number of children (for women). Retirement ages range from as low as 53 (for women with five or more children) to 60 (for men in occupations without special occupational risks). Early retirement is allowed under certain circumstances. Pensions are based on

the five best earning years in the ten years previous to retirement and on the occupational category of the retiree. Supplements are provided for persons with lengthy employment records and for those who continue to work beyond their eligibility date and defer drawing their pension. Regular retirees are allowed to remain employed without penalty as long as they are employed under short-term contracts and their earnings do not exceed Kcs 22,000 annually.

Persons may qualify for disability pensions if their health prevents them from being employed. The applicant must have worked a minimum number of years and eligibility for these pensions is determined by a local committee of physicians which makes initial and follow-up examinations. The committee can also recommend alternative treatment or withdraw the pension of those who have found work (although in practice this happens only rarely).

Social Insurance. There are a number of programs (usually paid through the employer, who is then reimbursed by the government) which fall under the social insurance category:

- *Sickness and family care benefits.* These benefits replace wages foregone due to sickness affecting the employee or by absence from work caused by sickness or problem in the employee's family.
- *Maternity allowance, birth grant, and parenthood allowance.* These programs all provide support to parents in households with children and include paid leave for parents and cash grants.
- *Child allowance.* Working households receive a monthly payment ranging from Kcs 200 for one dependent child to Kcs 1,740 for four dependent children (with Kcs 350 for each additional qualifying child).

INTEGRATING HOUSING ALLOWANCES IN THE SOCIAL ALLOWANCE PROGRAM

Given the schedule for rent increases that is already planned, and the need for even more ambitious increases to stabilize the communal housing stock, the development of an operational housing allowance program should be a high priority in 1992. There would be no time to develop a new free-standing program, even if it was advisable, and as noted earlier, sound social policy suggests that housing allowances should be integrated as a part of the overall social benefit system.

The Social Allowance Program

In our view, the most rapid and effective way to develop a housing allowance program in the short term, would be to build it into the existing Social Allowance (SA), or poverty-level benefit program. As noted, this program is operated by the Czech and Slovak Ministries of Labor and Social Affairs.

Although not optimal, the formula for the SA program is similar to that of the housing allowance approach; i.e., subsidies are calculated to fill the gap between actual incomes and the poverty line. Again, subsidies decline as incomes increase and richer families are not entitled to any subsidies.

Housing expenses are already considered in the calculations that determine the poverty line for the SA program. The only legal change required for the implementation of a basically adequate housing allowance system in this framework will be to re-set the official poverty line to reflect the rent increases to be implemented in 1992.

Priority for Administrative Improvements

While the present SA program is a good starting point, it does not have the staff or procedures needed to operate the program successfully. A high priority in 1992 should be to strengthen the administrative capacity of the SA program so that it can handle the substantial growth in workloads that can be anticipated by the end of the year. This will entail the development of uniform, efficient procedures and systems, as well as staff recruitment and training, with emphasis being given to procedures for income verification and quality control.

Both the SA and Housing Allowance HA programs will lose support and not achieve their intended objectives unless they have administrative credibility; i.e., unless the public believes with certainty that payments will be made regularly and that their amounts will be reasonable given the family's circumstances. Doubt has been expressed by some that, considering the wider array of income opportunities now being created in Czechoslovakia, it will be impossible to obtain accurate information on incomes to determine family needs. Experience in the U.S. and elsewhere indicates, however, that quite accurate assessments are possible even in quite complicated market economies if appropriate verification and quality control techniques are applied.

Priority in this effort should be given to regions where unemployment rates are growing most rapidly. These regions could be the focal points for staff and administrative improvement programs since potential SA workload volumes there could increase dramatically by the end of this year.

LONGER TERM IMPROVEMENTS TO THE SYSTEM

Czechoslovakia's existing social safety net, including the SA program, has a number of faults that lead to inequities, as well as inefficiencies.

New Proposals by the Ministry of Labor and Social Affairs

The recent proposals of the Federal Ministry of Labor and Social Affairs which develop a new Family Allowance program to correct many of the deficiencies in the present safety net should be broadly supported. They would:

1. Combine the existing Child Allowance (CA) benefit and other social programs with the SA program into a unified Family Allowance (FA), thereby reducing fragmentation and administrative duplication in the system. Also, the CA benefit would no longer be provided to high-income families, rather than being given to all families with children as is now the case—a most important step toward social equity.

2. Provide a more responsive system in the law establishing the program. (In previous social programs, actual payment amounts were specified in the laws themselves, which made it difficult for programs to adapt to changing economic and budgetary realities—the proposed law would specify only the benefit formulas so that payment amounts would change automatically with changes in the estimated poverty level.)

3. Focus assistance on the poor (formulas are such that subsidy amounts are reduced, then eliminated, as incomes increase). Again, this is a marked contrast to the present system where all households receive substantial subsidy regardless of their income level. As shown earlier in this report, there is more variation in Czechoslovakia's income distribution than is often assumed; i.e., some families are much more in need of support than others.

4. Provide, for the first time, work incentives in the assistance formula (if a beneficiary of the present SA program gets a job, he loses one Crown in assistance for every new Crown earned on the job—in the proposed program, each new Crown of earned income results in a less than one-to-one reduction in his assistance payment).

Integrating the Housing Allowance Program

The HA program can, and should, be easily incorporated within the FA program framework. The overall FA for a family would be the sum of the CA, the HA, and the SA it is entitled to receive, each determined by its own formula. As in the current proposal, the CA would be determined first. The HA would then be calculated, based on the sum of the CA and all other sources of income. Finally, the SA would be calculated using the sum of the CA, HA, and all other sources of income as the base. Even though the

components are calculated separately in this sequence, eligible families would receive only one combined FA payment each month.

The Importance of Improved Surveys

Over the next few years, a major effort should be made to expand and improve the surveys used to determine the poverty line and standard rents. The equity and effectiveness of the FA program will depend on the quality of the database. As the market system evolves in Czechoslovakia, it is likely that substantial variations in prices will develop over the nation's terrain; i.e., different poverty lines and standard rents will have to be established for different cities, and they will need to be adjusted on a reasonably regular schedule as prices change.

The current family budget surveys are an excellent base from which to begin. However their sample sizes will have to be increased to reliably capture the variations that are expected. Recurrent sample household surveys will be useful for many other purposes in monitoring economic and social change, ranging from changes in labor force characteristics to trends in housing conditions. Although the point is not often given prominence, such surveys are an essential part of the institutional infrastructure required for a successfully functioning market economy.

Chapter 1

**STATE RENTAL SECTOR REFORM AND
HOUSING ALLOWANCES**

Through the end of 1991, housing sector reform in Czechoslovakia has moved forward on some fronts—the transfer of responsibility for state-owned housing to local governments, restitution of housing from the state to previous private owners, and some revisions to the legal structure—other problems have not received so much attention. As in other Eastern European countries, one area with severe problems is the state rental sector.

CHARACTERISTICS OF THE STATE RENTAL SECTOR

This sector still plays a dominant role in the housing stock, accounting for about 25 percent of all housing (even after the restitution process which will restore private housing taken by the state back into private ownership). The Czechoslovak state rental sector is characterized by:

- Rents which far below those needed to cover building maintenance; strong occupancy rights by tenants;
- Many buildings in poor condition, with a large backlog of deferred maintenance, repair, and rehabilitation;
- Large subsidies, both on-budget—in the form of grants to the OPBHs (state housing management companies)—and off-budget—in the form of foregone rents.

Resolving these problems requires that the rental sector move towards a more market-oriented basis. Some of the problems outlined above can be addressed by more efficient management and operation of state rental housing and reform of tenants rights—making state tenants more responsible for and involved in the operation of their housing.

However, though these changes will help reduce the costs of running state rental housing, it is certain that higher rents will also be needed to eliminate the large deficits that plague the current system.

The rental sector in 1988 accounted for about half the housing stock; state and private rentals accounted for 34 percent and cooperatives 19 percent. Although restitution is placing some of the state rentals in private hands, most of the units remain in the rental sector because of the strong occupancy rights held by sitting tenants. Most of these rental units are concentrated in urban areas—especially the capital cities of Prague and Bratislava—where they make up as much as 60 percent of the housing stock.

Through the end of 1991, rents in rental units in Czechoslovakia were set according to Directive No. 60/1964, *Directive of the Central Body for Local Management Development on Payments for Using an Apartment and Payments for Services Related to Using an Apartment* (March 26, 1964).² The directive sets rents with variation by quality level and equipment contained in the unit, but does not adjust rents for location within a settlement or among cities and towns of different sizes. Rents are a fraction of their probable market levels and have been consistently less than the amount necessary to cover even operating costs.³ The state has made up the deficit through direct subsidies to the state-owned management companies (OPBHs). The local governments who have been responsible for state-owned housing since May 1990 have been forced to continue these direct subsidies, paying them from general revenues or from commercial rents (which have been largely decontrolled). Even with these subsidies, however, the stock has steadily deteriorated and some rental buildings are in a such poor condition that their structural integrity may soon be compromised.

A small number of private rentals do exist, but their rents are also governed (in theory) by the 1964 rent directive. In practice, it is likely that sitting tenants continue to pay the low rents prescribed by law, but that new rentals and sublets or units rented to foreigners have rents far higher than the legal limits. (Many of these sublets are informal and contravene the occupancy rules for the units, but there appears to be little risk of enforcing action being taken against offenders.)

Using data from the 1988 Microcensus and the 1989 Family Budget Survey updated through the end of 1991, it was found that most households paid between 2 and 4 percent of their total incomes for rent (see Table 1.1). In comparison, households in the United States and Western Europe often pay between 20 and 30 percent of their incomes for housing. The table also shows how these below-market rents not only

² A translation of the directive can be found in *Czechoslovakia Program: Background Papers*, a compilation of papers from The Urban Institute's work in Czechoslovakia.

³ Data for 1990 show that, in Czechoslovakia, total state-owned housing property receipts (which include some commercial rents) cover only 49 percent of the operating and repair costs of these properties.

Table 1.1
Rents as Share of Household Income (1991)

Annual Per Capita Household Income	Households (percent)	Rent/Income (percent)	Average Rent (Kcs/m ²)
State Rentals			
Less than Kcs 24,000	27.3	2.79	2.59
Kcs 24,000 - Kcs 36,000	44.9	2.50	2.66
More than Kcs 36,000	27.8	2.10	2.73
Total	100.0	2.44	2.66
Cooperatives			
Less than Kcs 24,000	28.3	4.20	4.20
Kcs 24,000 - Kcs 36,000	45.0	3.35	3.79
More than Kcs 36,000	26.7	2.80	3.60
Total	100.0	3.41	3.80

subsidize households with low incomes, but also those with higher incomes who are not in need of any subsidy. (These issues are discussed more fully in Chapter 2.)

RENTAL SECTOR REFORM

Following the transfer of ownership of the state rental housing stock to local governments in May 1990, there was little other change in the sector until the end of 1991. Some local governments have moved to private management of their housing units and there have been some limited privatization efforts, but most cities have maintained the *status quo* until legal and policy picture concerning state rental housing becomes clearer. New laws and regulations concerning the sale of units and new ownership regimes are expected in 1992.

The task of moving the state rental stock onto a market footing is a serious challenge and will require more than clarifying the rules for privatizing state rental housing and its management. In many localities in Eastern Europe, officials responsible for state rental housing are considering selling these rentals (at prices which amount to

a give-away of the units) to the current tenants in order to rid themselves of this problem. This approach, however, involves a number of costs, including an inequitable distribution of the nation's wealth, the loss to the government of a valuable asset whose sale at more realistic prices could finance badly needed infrastructure investments, and the destruction of much of the rental sector.⁴ Despite these problems, these strategies are being considered—and in some cases, implemented—in towns and cities across Czechoslovakia where the problems of large operating deficits and the poor condition of the state rental units are pressing local housing officials.

A second approach, that of continuing low rents on a controlled basis, with local governments somehow finding the funds to continue the subsidies. It does imply that a continued large share of local government budgets will be required for state-owned rental housing—a difficult task when other issues, such as infrastructure, economic restructuring and development, the environment, are also demanding priority attention. Both of these options have the virtue of protecting sitting tenants from immediate adverse developments—higher rents or loss of their rights of occupancy.

However, neither of these approaches would generate a strong rental sector. Under the first, the rental sector would be largely eliminated. Future households who could not afford to buy units would be forced to rely on the private rental market—a market that is likely to grow slowly given current conditions in the housing sector. It is an open question whether new households or those relocating to pursue economic activities could afford the high rents in such a small rental sector. An additional problem with the simple privatization approach is that many families who initially become owners may lack the incomes to adequately maintain their units.

With continued low rents, the social rental sector remains but the stock will continue to deteriorate unless local governments are willing to provide much more in subsidies than this stock has been allocated in the past. Occupants will still continue to exhibit low mobility rates from state housing, however, because moving will mean the loss of their deep subsidies. Moreover, the existence of strict rent controls in the public sector will discourage new construction in the private sector, even with private sector units currently exempt.

Housing allowances can play a key role in a more thoughtful and measured approach to dealing with the state rental sector. Under such an approach rents gradually move to market levels. For the great majority of units this will be more than enough to cover fully operating and maintenance costs; services should actually improve. The management of social housing would be privatized and services improved—to give tenants something in return for their higher rents. In this strategy, poor families are protected from spending an excessive share of their incomes on housing through transfers from a housing allowance program. Those receiving the allowances, like other

⁴ See Struyk and Telgarsky (1991) for more detail on these issues.

households, would be free to move from one social housing unit to another or into private rental housing; the allowance would travel with them. Occupants would still be permitted to purchase their units—but now at or near their market values, which would be greater because of the higher rents and better conditions. This strategy has two benefits:

- Subsidies for housing are more carefully targeted to low-income households that truly need assistance—this can reduce the overall level of subsidy required for the state rental sector;
- It is more likely that units can be sold at prices closer to their true market value, since the higher rents faced by higher-income households will raise the purchase price which has an equivalent annual housing cost (including non-monetary benefits associated with homeownership).

Fortunately, the first steps being taken in Czechoslovakia are keeping this third option open. A schedule of rent increases have been announced that will move rents toward the level required for state rental housing to pay its costs. This will greatly improve the financial environment in which local governments can make their decisions about selling off units or privatizing management.

On January 1, 1992, the charges for services provided to tenants (such as janitorial services, trash collection, and other common area services) will increase to cover the actual cost of these services. This is expected to raise total rent payments by approximately 40 to 55 percent from their 1991 levels. The remainder of the rent payment, so-called "clean" rent (the equivalent of net rents in the United States) will then be increased by 100 percent in July 1992. This will increase total rent payments an estimated further 50 percent from their 1991 levels. The third component of the 1992 rent reform is the abolition of rent discounts for families with children. (These discounts ranged from 5 percent for one child to 50 percent for four or more children and were applied to the "clean" rent portion of the rent charge.) Thus, a family with four children would pay total rent in July 1992 about 160 percent higher than their rent paid in 1991. (Households without children would face a 100 percent increase.)⁵

STRUCTURE OF THE REPORT

Experience in the United States has shown, however, that an effective housing allowance must be integrated into the overall system of social benefits, paying close attention to the targeting and distribution of benefits. Thus, before looking at housing allowances in detail, the following two chapters provide necessary background. Chapter

⁵ These changes do not affect the administrative nature of rent determination in present law. A new draft regulation is being prepared which should allow more market freedom for rents, but it is unlikely that the new regulation will be adopted in 1992.

2 looks at the current relationships between household characteristics and housing in Czechoslovakia. The following chapter examines the fundamental objectives and tools of the social benefit system (in the context of the economic reform under way in Eastern Europe) and provides an overview of the current Czechoslovak social benefits system. Chapter 4 then describes the housing allowance program in detail and Chapters 5 and 6 present a description of the simulation model, the results of the model showing the impact of introducing a housing allowance program into Czechoslovakia, and evaluate the issues raised for the implementation of a housing allowance program and discusses other issues about the social safety net raised by the analysis.

Chapter 2

HOUSEHOLD INCOMES

The need for housing subsidies is driven by the inability of some households to afford payments high enough to support the provision of decent housing. Information on the distribution of household incomes, therefore, is a necessary basis for determining the amount of subsidy required under different program designs. This chapter presents data on the distribution of incomes in the CSFR in 1991. It points out variations in income by income-source (e.g., wages versus pensions), by location (urban versus rural, in both Republics), and by housing tenure (e.g., rental, cooperative, owner-occupied). Before reviewing these characteristics, however, we first describe the data base from which it was derived.

THE HAIS DATA BASE

To simulate the impacts of housing allowance programs, it was necessary to develop the Housing Allowances and Income Support (HAIS) model. The data base to support the model was created by combining information from the Microcensus of 1988 (data on social, income, and housing characteristics for a random nation-wide sample of 101,000 households) and the 1989 Family Budget Survey (data on incomes and expenditures for a sample of 5,500 households). A matching of characteristics on both files permitted us to attribute key income-expenditure relationships from the Family Budget Survey data to each of the records in the Microcensus. The next step was to use exogenous data on recent income trends to update household incomes to 1991 levels (see Annex A for a more detailed description of how the data base and the model were built).

SOURCES OF INCOME

Table 2.1 shows the distribution of households, grouped according to the primary income source of the head of the household. Eight groups are identified: (1) cooperative agriculture; (2) private agriculture; (3) wages—blue collar; (4) wages—white collar; (5) entrepreneurial activity; (6) pensions—household head not economically active (that is, 60 years of age or older); (7) pensions—household head economically active (under 60); and (8) other.

TYPES OF HOUSEHOLDS

The two wage earner categories are the largest, together accounting for two thirds percent of all households. The next largest group is non-economically active pensioners (23 percent), followed by those whose primary income source is cooperative agriculture (7 percent). Pensioners in the economically active age group make up 4 percent of the total.⁶ Entrepreneurs account for only 0.2 percent.

The Slovak Republic has a slightly larger share in the agricultural categories (8 percent versus 6 percent in the Czech Republic) and pensioners account for a modestly larger percentage in the Czech Republic. Overall, however, the distributions in the two Republics are similar.

As would be expected, the contrasts are more pronounced comparing urban and rural areas. Compared to the cities, rural areas have higher percentages in the agriculture groups (14 percent versus 3 percent) and the pension groups (32 percent versus 24 percent) and a much smaller share are white-collar wage earners (18 percent versus 38 percent). These data clearly re-emphasize, however, how small a role agriculture plays today in the CSFR workforce overall—14 percent is not a very large number and even in rural areas blue- and white-collar wage earners account for a much larger proportion (53 percent).

INCOME LEVELS

The estimated median annual income of all CSFR households in 1991 was Kcs 83,000 (Table 2.2), substantially higher than the defined poverty line; e.g., Kcs 50,400 for a married couple with one child (age 6). The median in the Slovak Republic (Kcs 86,000) was six percent above that in the Czech Republic. In marked contrast to experience typical in western economies, the rural median (Kcs 86,000) was well above that for urban areas (Kcs 81,000).

⁶ This would be a surprisingly large percentage in western market-oriented economies. It is explained in that the CSFR permits "double dipping"; i.e., does not severely penalize receiving income from work and a pension at the same time.

Table 2.1
Number Of Households By Primary Income Source

	Primary Income Source of Head of Household								
	Agriculture			Wage Earner		Entre- pren.	Non-EA Pension	Econ. Active Pension	Other
	Total	Coop.	Priv.	Blue Collar	White Collar				
Declared Households (thousands)									
Czech Republic									
Urban	2674	55	*	919	980	6	603	99	11
Rural	1130	161	*	396	215	1	301	54	2
Total	3804	216	*	1316	1195	7	904	153	14
Slovak Republic									
Urban	1011	39	*	341	412	2	177	38	4
Rural	688	101	*	245	105	*	185	49	1
Total	1699	140	*	586	518	2	361	87	5
Total CSFR									
Urban	3685	93	*	1260	1393	8	779	136	15
Rural	1818	262	1	641	320	1	486	103	4
Total	5503	355	1	1901	1713	9	1265	239	19
Declared Households (percent)									
Czech Republic									
Urban	100.0	2.0		33.7	40.8	0.2	17.5	3.7	0.3
Rural	100.0	14.2		35.1	19.0	0.1	26.6	4.7	0.2
Total	100.0	5.7		34.6	31.4	0.2	23.8	4.0	0.4
Slovak Republic									
Urban	100.0	3.8		33.7	40.8	0.2	17.5	3.7	0.3
Rural	100.0	14.7		35.6	15.3	0.1	26.9	7.2	0.2
Total	100.0	8.2		34.5	30.5	0.1	21.3	5.1	0.3
Total CSFR									
Urban	100.0	2.5		34.2	37.8	0.2	21.1	3.7	0.4
Rural	100.0	14.4		35.3	17.6	0.1	26.7	5.7	0.2
Total	100.0	6.5		34.6	31.1	0.2	23.0	4.4	0.3

* Less than 500 households
 Less than 0.05 percent

Although there were few of them, entrepreneurs had the highest incomes (median of Kcs 131,000, 58 percent above that for all households). Workers in private agriculture ranked second (Kcs 112,000) with those in cooperative agriculture close behind (Kcs, 107,000). The median for white-collar wage earners (Kcs 94,000) was only slightly above that for the blue-collar group (Kcs 92,000). Older pensioners had the lowest median (Kcs 33,000). It is of interest that the median for economically active pensioners (Kcs 91,000), while much above that for those who had retired, was not higher than the incomes received by full time wage earners.

Composition of Household Income

The bottom panel of Table 2.2 shows other sources of income received by each household type (on average) in addition to the primary source. Clearly, it would be a mistake to characterize a household's financial position by the income it receives from its primary source alone. All groups receive noticeable sums from all sources.

Take, for example, urban households headed by white-collar workers. That employment yields only 75 percent of their total income. Because some family members in some of these households are pensioners, they receive income from that source (6 percent) and they receive, again on average, an even larger share from other public assistance payments (14 percent). Households headed by those who work for agricultural cooperatives in the countryside receive only 53 percent of their income from that source. The household heads, and/or other family members, also receive wages from other jobs (14 percent) as well as sizeable amounts from pensions and other public assistance (23 percent). The last category shown, "other", includes interest and other income from investment. While the percentage received from such sources is not dominant for any group, all groups do receive some income in this way and the amounts involved are far from trivial.

HOUSING TENURE

The Occupied Housing Stock

The distribution of the 5.3 million occupied housing units in the CSFR in 1988 (from the Microcensus) is shown in Table 2.3. Nationally, 45 percent were owner-occupied (almost all of these were personally owned single family houses). Cooperatives accounted for 19 percent and rentals for just over a third of the total. Unfortunately the Microcensus does not differentiate between types of rentals, but data from the *Statistical Year Book* for 1988 indicates that about 1.4 million (78 percent) of the 1.8 million total in this category were government owned. Virtually all the rest were owned by employers who rent housing to their workers (the amount of private rental housing in the CSFR was then, and remains, negligible).

Table 2.3
CSFR Occupied Housing Units by Type and Location, 1988

	Total	Gov't Rental	Coop.	Personal Ownership		
				Single Family	Multi- Family	Other
Housing Units (thousands)						
CZECH REPUBLIC						
Urban						
Prahá	468.8	287.4	99.1	59.0	6.6	16.8
Other	2,125.6	952.7	511.6	579.2	18.7	63.4
Total Urban	2,594.4	1,240.1	610.6	638.2	25.3	80.2
Rural	1,064.7	160.9	49.8	827.3	8.3	18.3
Total	3,659.0	1,401.0	660.4	1,465.5	33.6	98.5
SLOVAK REPUBLIC						
Urban						
Bratislava	155.1	73.0	58.7	16.1	2.2	5.0
Other	833.8	309.6	264.7	233.0	11.3	15.2
Total Urban	988.9	382.6	323.4	249.1	13.5	20.2
Rural	653.8	32.9	12.1	599.1	2.0	7.7
Total	1,642.7	415.5	335.5	848.2	15.6	27.9
CSFR						
Urban	3,583.2	1,622.7	934.0	887.3	38.8	00.4
Rural	1,718.5	193.7	61.9	1,426.4	10.4	26.1
Total	5,301.7	1,816.5	995.9	2,313.7	49.2	26.5
Housing Units (percent)						
CZECH REPUBLIC						
Urban						
Prahá	100.0	61.3	21.1	12.6	1.4	3.6
Other	100.0	44.8	24.1	27.3	0.9	3.0
Total Urban	100.0	47.8	23.5	24.6	1.0	3.1
Rural	100.0	15.1	4.7	77.7	0.8	1.7
Total	100.0	38.3	18.0	40.1	0.9	2.7
SLOVAK REPUBLIC						
Urban						
Bratislava	100.0	47.1	37.9	10.4	1.4	3.2
Other	100.0	37.1	31.7	27.9	1.4	1.8
Total Urban	100.0	38.7	32.7	25.2	1.4	2.0
Rural	100.0	5.0	1.8	91.6	0.3	1.2
Total	100.0	25.3	20.4	51.6	0.9	1.7
CSFR						
Urban	100.0	45.3	26.1	24.8	1.1	2.8
Rural	100.0	11.3	3.6	83.0	0.6	1.5
Total	100.0	34.3	18.8	43.6	0.9	2.4

Table 2.4
Households by type of housing and Primary Income Source

	Primary Income Source of Head of Household								
	Total	Agriculture		Wage Earner		Entre- pren.	Non-EA Pension	Econ. Active Pension	Other
		Coop.	Priv.	Blue Collar	White Collar				
Percent Of Declared Households									
Urban									
Rental	100.0	1.4	0.0	33.1	38.1	0.2	23.0	3.7	0.5
Cooperative	100.0	2.6	0.0	38.4	44.3	0.2	12.0	2.1	0.4
Owner-Fam.House	100.0	4.8	0.0	32.1	30.0	0.2	27.5	5.2	0.3
Owner-Multi-unit	100.0	2.0	0.0	24.0	37.9	0.4	29.9	5.5	0.3
Other	100.0	2.0	0.0	36.4	44.0	0.1	14.1	3.0	0.4
Total	100.0	2.5	0.0	34.2	37.8	0.2	21.1	3.7	0.4
Rural									
Rental	100.0	13.2	0.0	43.1	22.5	0.0	17.3	3.4	0.5
Cooperative	100.0	36.4	0.0	34.7	21.1	0.0	5.9	1.7	0.3
Owner-Fam.House	100.0	13.7	0.0	34.4	16.4	0.1	29.1	6.2	0.2
Owner-Multi-unit	100.0	15.1	0.0	29.3	20.3	0.0	29.8	5.5	0.0
Other	100.0	13.8	0.0	33.5	40.9	0.0	9.3	2.1	0.4
Total	100.0	14.4	0.0	35.3	17.6	0.1	26.7	5.7	0.2
Median Household Income (1991 Kcs 000)									
Urban									
Rental	77	98	112	87	90	134	32	86	47
Cooperative	85	95	85	89	91	112	32	81	43
Owner-Fam.House	84	107	126	95	100	134	36	89	37
Owner-Multi-unit	76	112	-	85	95	112	37	85	60
Other	84	92	-	89	93	149	33	87	35
Total	81	101	112	89	93	129	33	87	43
Rural									
Rental	85	103	-	90	92	61	29	88	47
Cooperative	95	103	-	91	98	-	42	92	57
Owner-Fam.House	86	113	109	99	102	157	34	98	46
Owner-Multi-unit	80	103	-	101	99	-	39	123	-
Other	87	96	-	89	88	-	24	97	145
Total	86	110	109	97	100	136	34	97	48

The Czech Republic had a higher share in the rental category than Slovakia (38 percent versus 25 percent) and a correspondingly smaller share in owner occupied units (41 percent versus 53 percent). The contrasts in composition again are stronger, however, when comparing rural and urban areas. Most of the family houses (62 percent) are in the countryside. Owner occupied housing makes up only 10 percent of the housing in Bratislava and 13 percent in Praha. It accounts a somewhat larger proportion in smaller cities but, even there, rental housing is dominant.

Household Types and Incomes

Table 2.4 shows a surprising lack of variation in the types of households that live in the different tenure categories; i.e., no one type of household (as defined by the primary income source of the household head) tends to concentrate in only one type of housing. There are differences, but they are far from striking. In the cities, for example, wage earners make up 71 percent of the tenants of rental buildings and 62 percent of the owner-occupants; 27 percent of the renters, and 33 percent of the owner occupants, are pensioners.

Also, there is not much variation in incomes between housing types. In the United States, for example, the median income for home owners is 56 percent above that for renters, whereas in the CSFR the owner median is only 9 percent above the renter median in urban areas (Kcs 84,000 versus Kcs 77,000). Residents of cooperatives have about the same income level as owners in the cities but the highest median of all groups in the countryside (Kcs 95,000)

THE DISTRIBUTION OF INCOME

The conventional wisdom in the CSFR is that while incomes are low by world standards, they are more equally distributed. This is a fair characterization when the nation is compared to western market-oriented economies, but it does not mean that all households are tightly concentrated around the average. There is still substantial amount of variation in the CSFR income distribution; i.e., substantial numbers in very low income groups and significant numbers as well with very high incomes.

Figure 2.1 shows the percentage distribution of households by income level for urban and rural areas. The shapes of the curves are similar, although the curve for rural areas is shifted somewhat more to the right, consistent with the higher rural median noted earlier.

The urban distribution shows a sizeable group with very low incomes (almost 10 percent of all households in the Kcs 20,000-30,000 range). Percentages drop off somewhat in the Kcs 40,000-70,000 range then peak again in the Kcs 80,000-100,000 range. The distribution then gradually declines as incomes increase. Those with

incomes above Kcs 100,000 make up 32 percent (almost one third) of the total, while those with incomes below Kcs 60,000 make up 30 percent.

Figure 2.2 shows the distributions for different housing tenure groups nation-wide. The distribution for cooperative residents exhibits the most concentration, with a sharp peak in the Kcs 90,000-100,000 range. The distribution for family houses is much more spread out (i.e., larger percentages in both the lower and the higher income ranges) and the curve for the rentals falls in between.

Most significant for the purposes of this study is the distribution for renters (since that is the group whose subsidy needs we are attempting to assess). In western market-oriented economies, government-owned housing (which dominates the rental category in the CSFR) is reserved mostly for low-income groups. Clearly, in the CSFR, it is not. Sizeable numbers with high incomes live in rental units. While 41 percent of all renter households make less than Kcs 60,000, almost 360,000 (20 percent) make more than Kcs 100,000; 13,600 make more than Kcs 180,000.

Figure 2.1
CSFR Income Distribution
Urban and Rural

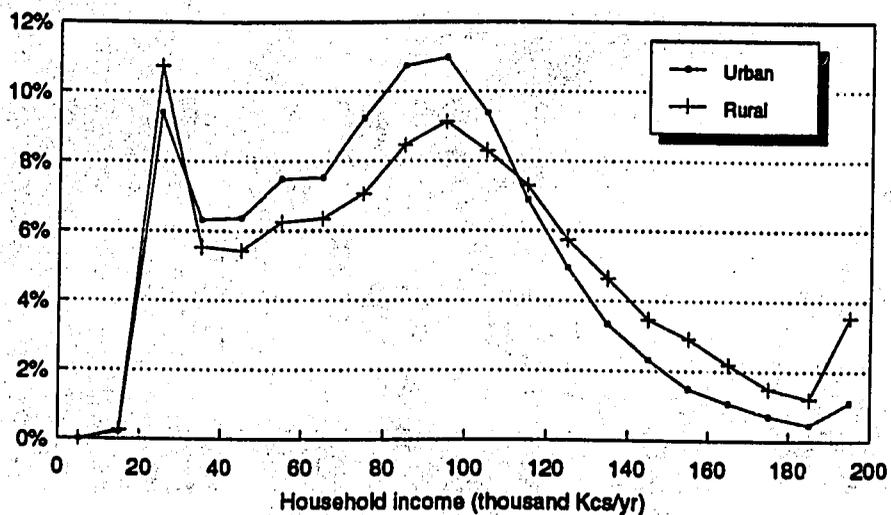
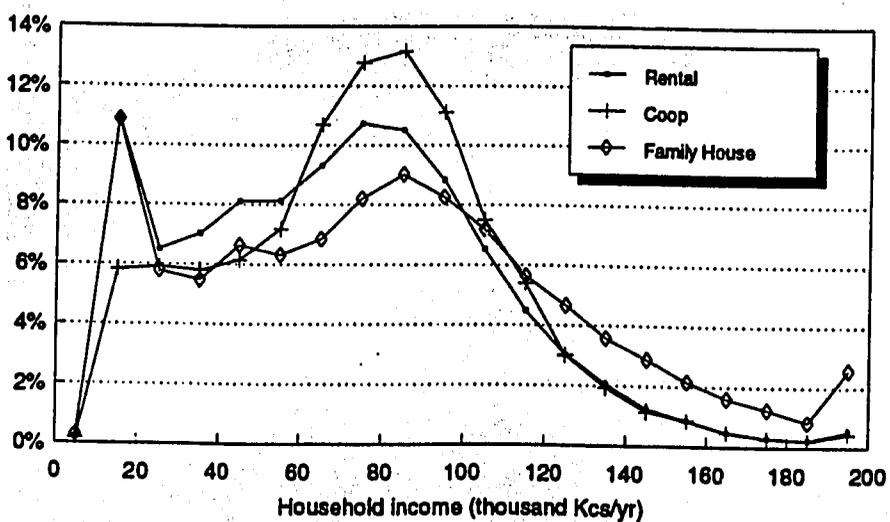


Figure 2.2
CSFR Income Distribution
By Housing Tenure



Chapter 3

SOCIAL BENEFITS SYSTEM: OBJECTIVES AND POLICY TOOLS

As the Eastern European countries move forward with economic reform, there is also a need to revise the social benefits system to match the changes happening elsewhere in the economy.⁷ However, the directions which economic reform takes in the productive sectors may not be the most effective in reforming the social benefits system. In reaction to the past regime of central planning, economic reform has largely been based on the principles of market mechanisms, decentralization, and democratization. In constructing an adequate and cost-effective social safety net, there is a need to balance these principles with an suitable framework that maintains appropriate incentives and overcomes market failures.

In addition to these overall concerns, there is also a need to scrutinize the role of social benefits in the reforming economy. In the previous system of central planning, wages were used primarily as a means of distributing income, not as a means of allocating labor. As a result, incentive problems were not a significant concern—unemployment did not exist—and benefits had generous replacement rates because the spread between the poverty line/subsistence income and average wages was small. Also, qualifying for long-term benefits (such as pensions and sickness/disability payments) was easy and benefits generous. Although nominally financed by taxes on employers, the soft budget constraint on enterprises made for a classic "third party" problem—firms could always get someone else, either the state budget or the banking system, to pay for their extra costs.

In a market-oriented economy, wages will vary more (as they reflect labor supply, demand, and productivity) and the need for social transfers outside of the system of

⁷ See Barr (1991) and Barr (1990) for a more thorough discussion of these issues.

wages will become more acute. But the option of unemployment and rising average wages implies that more attention will have to be paid to work incentives, replacement rates, and benefit levels if the cost of the social safety net is not to run out of control.

Objectives⁸

The social benefits system should have three key objectives:

- *Protection from poverty in an equitable manner.* The social benefits system should keep households out of extreme poverty, adapting to varying economic and household circumstances through timely changes in benefit levels. The system should ensure both horizontal equity (households in similar circumstances are treated equally) and vertical equity (households with lower incomes receive more support than those with higher incomes). Protection of the most vulnerable low-income households is also important for sustaining the political viability of the economic reform process and for allowing wages and the labor market to perform its allocative function.
- *Economic efficiency.* At the macroeconomic level, the cost of the system must fit within the state's budget constraint. The demands on the state budget during the period of economic reform is likely to create strong pressure to limit spending; the social benefit system can keep its costs in control by being well-targeted on those households most in need. At the microeconomic level, the system must provide adequate incentives for work and income growth. This implies that households should see higher total incomes when their earnings rise as a reward for greater earning effort; that is, the benefit reduction rate should be less than 100 percent.
- *Administratively practical.* The system should not place unnecessary burdens on persons applying for benefits or reporting changes in status, it should have safeguards to control fraudulent behavior by benefit recipients, and should have reasonable administrative costs.

Meeting all of these targets is not a simple task. Indeed, it will often be impossible to avoid conflicts between the various objectives and compromise will be necessary.

Policies

The two basic policy tools available for meeting these objectives are the income guarantee and the rate at which the benefit is paid out. The income guarantee sets the income floor which the social benefit system will ensure for a household. The income

⁸ See Annex B for a more complete discussion of the problems associated with constructing an optimal social benefits system.

guarantee is set according to the level of income which the state decides is necessary to maintain an adequate living standard while still fitting within the state's budget priorities. Thus, the income guarantee is likely to be higher than the subsistence income level (which is the minimum income required for household survival), but may not be as high as some more subjective "poverty line" based on a socially desired minimum living standard.

The rate at which benefits are paid—the benefit reduction rate for benefit programs like income support and housing allowances, the income replacement rate for unemployment insurance payments—is the other main policy tool. This rate influences the work incentive which the household faces. For example, with a benefit reduction rate of 100 percent in an income support program, households which are far below their income guarantee level have little incentive to take on marginal employment; any additional income they earn (up to the income guarantee level) is offset by lower benefits so that their total income remains the same. With a benefit reduction rate of 50 percent, additional earnings result in higher total household income equal to half the amount of the additional earnings. Similarly, in the case of unemployment insurance benefits, the higher the replacement rate, the less the reward for the unemployed person returning to work and the less the increase in the household's income.

Variation in the two policy tools have clear effects some of the policy objectives outlined above. Increasing the income guarantee improves the income of low-income beneficiaries, but raises the cost of the social benefit program and harms labor supply incentives. Raising the benefit reduction rate, conversely, has a negative effect on the achievement of an adequate income (for qualifying households) and on labor supply while reducing social benefit program costs.⁹ These differential effects are inherent in the contradictory objectives of the social benefit program and imply setting levels for income guarantees and benefit reduction rates is not simple.

Beside these two key policy tools, there are other policy decisions that also affect the effectiveness of the social benefits system:

- *Eligibility for benefits.* Eligibility for benefits can be linked to many different criteria: income, household social or demographic structure, location, employment, and so on. For reasons of efficiency, income is likely to be a key eligibility criterion. However, other more easily observed characteristics which are strongly linked to poverty (such as the number of children in the household) may make administration of the benefit program simpler. With some types of benefits, such as pensions and sickness benefits, how eligibility criteria are set can greatly influence the number of persons collecting the benefit. Easy qualification for these benefits increases the

⁹ Assuming the substitution effect is larger than the income effect for persons whose social benefit transfers are reduced.

level of payments made by the state while reducing the potential number of earners who contribute to the funding pool.

- *Benefit delivery.* The above discussion has mainly assumed that benefits should be delivered in the form of cash transfers. However, in some situations it may be more effective to make transfers in a non-cash or in-kind form. For example, food stamps or subsidized health services are often used to target certain kinds of assistance to households. However, because these benefits offer less choice to households than cash transfers, they are often valued less than their cash equivalent.
- *Income qualification.* If income is used as an eligibility criterion, which forms of income are counted is an important consideration. Ideally, all types of income available to the household should be considered, but the desirability of this approach has to be measured against the costs of verifying and enforcing accurate reporting of income by beneficiaries and the importance of various income sources in total household income.
- *Financing benefits.* Finally, the funding regime that allows the benefits to be paid has to be specified. Resources can be raised either by allocating a portion of general tax revenues or by using explicit social benefit taxes (which may be levied against workers, employers, or both). To avoid the "third party" problem described above, having both workers and employers at least partly responsible for financing benefits seems reasonable. Alternatively, reducing other social transfers or state expenditures can increase the pool of funds in the state budget available for financing the social benefit system.

With the addition of these other policy variables in designing benefit programs and the multiplicity of benefit programs—for example, income support/welfare programs, social insurance programs (such as unemployment insurance and disability and old-age pensions), and other contingent transfers (such as child allowance or other categorical grants)—the task of meeting the objectives of the social benefit system while avoiding overlaps and inconsistencies in coverage becomes all the more difficult.

In general, there are three important issues in designing the social benefit system which should be recognized:

- Social benefit transfers aimed at compensating for loss of earnings should be conditioned on the absence of substantial current earnings; the claimant should not be able to defraud the benefits system.

- Conditional social benefit transfers should be considered in the calculation of income used to determine income support requirements of low-income households; income support should be effectively targeted.
- A positive tax system (such as an income tax on household) can address a wider range of income equity issues than even an optimally-designed transfer system; benefits cannot be reduced below zero, while taxes can redistribute resources without such a structural limit.¹⁰

CZECHOSLOVAKIA'S SOCIAL BENEFIT SYSTEM

Czechoslovakia's social benefit system can be broken into four parts:

- Income support;
- Unemployment insurance;
- Pensions; and
- Social insurance.

A summary of the system is provided in Table 1.2 at the end of this section.

Income Support

There are two income support programs:

- Compensatory grants; and
- Poverty level benefit.

Compensatory Grants. Compensatory grants were introduced in 1990 to cushion the shock of price increases after price controls were lifted from most foods and energy prices were moved to world levels. The grant for food price rises is Kcs140 per person per month. Every person is eligible to receive the grant. The grant to offset higher energy costs is Kcs80 per month paid to all pensioners and dependent children. Employers pay the grants to employees and their dependents and are reimbursed by the Federal Government. The self-employed and other non-employees must apply for the grants through their local welfare office.

Poverty Level Benefit. Poverty level benefit is an income maintenance program designed to bring households with very low incomes up to the poverty line. The poverty line is calculated based on the demographic structure of the household; for a family of four with 2 children aged 6 to 10, the poverty line would be Kcs4,200 per month. The amount of the benefit is equal to the difference between the household's income and the

¹⁰ High taxes, however, may have redistributive limits based on disincentives for earning income.

poverty line. Thus, the benefit reduction ratio is 100 percent; if the household income increase by Kcs100, the benefit (in theory) is reduced by Kcs100 and total household income remains the same.

In practice, the benefit does not work in such a straightforward manner. Because of past policies which forbid unemployment, the combination of wages and other social benefits meant that very few households actually qualified for the benefit—only 126,000 households in 1990 (2.4 percent of all households). With such small numbers of participants, the income support system has been operated in an *ad hoc* fashion. Local welfare officers (representing both republic ministries and local governments) have the right to decide whether a family requires assistance and what form the assistance should take—there is no standard means test for the benefit. In many cases, non-cash assistance is provided first: help in locating new or better-paying employment, clothing or food for children, and other in-kind support. Cash grants are used only if the household's income problems seem chronic. Clearly, as unemployment increases, the number of qualifying households will increase rapidly and the system will need to take a more systematic approach to distributing benefits if it is to adequately address the issue of poverty within the state's budget constraint.

Unemployment Insurance

The unemployment insurance system was started at the beginning of 1991 under Federal Law 1/1991. Upon becoming unemployed, the unemployed person registers with the local employment office. If alternative employment cannot be found in 7 days and the person was employed for 12 months in the previous 3 years, the person qualifies to receive unemployment insurance. In most cases, benefits are paid for a period of 12 months.¹¹ To remain qualified to collect unemployment insurance, the beneficiary must be available for suitable employment. Refusal to accept employment can result in a 3 month suspension of benefits (although in practice this sanction does not seem to be widely applied.)

The replacement rate of the unemployed person's previous wages (averaged for the previous 12 months exclusive of bonuses) varies according to the circumstances of their unemployment, from 60 percent for those voluntarily unemployed to 70 percent for those registered in retraining programs. (Unemployed graduates of universities and secondary schools and other new entrants to the labor force receive a fixed benefit.) There is no maximum or minimum benefit level.

¹¹ Once unemployment benefits are exhausted, the household is supposed to rely the income support benefit to maintain its income. In fact, this limit on unemployment benefit has yet to be fully tested. With the system only beginning to operate in 1990, the average beneficiary has only been collecting benefits for 3 to 5 months. Only in 1992 will it be clear whether those who have been on unemployment benefits for a year will be cut off or whether they will be further extended.

An alternative to unemployment benefit is also available to employers to encourage them to hire new employees from among the unemployed. The grant is paid in three installments and equal to 12 months worth of unemployment benefit for each unemployed person hired and kept employed for 12 months. There has been little experience with the grant yet and its effectiveness at creating employment is not known.

Pensions

There are three main groups of pensions in the Czechoslovak social benefits system:

- Old-age/retirement pension;
- Disability pensions (for both total and partial disability); and
- Other pensions (widows, widowers, and orphans).

Old-Age Pensions. Eligibility for old-age pensions varies according to sex, age, occupation, and number of children (for women). Retirement ages range from as low as 53 (for women with 5 or more children) to 60 (for men in occupations without special occupational risks). Pensions are based on the 5 best earning years in the 10 years previous to retirement and on the occupational category of the retiree. Supplements are provided for persons with lengthy employment records and for those who continue to work beyond their eligibility date and defer drawing their pension. (See Table 2.1.)

Early retirement is allowed if: the person has worked for 25 years or more; is within 2 years of the regular retirement date; and the person's employment is ended because of restructuring by the employer. Early retirees can be employed, but their wages plus pension cannot exceed their reference earnings used in calculating their pension.

Regular retirees are allowed to remain employed without penalty as long as they are employed under short-term contracts and their earnings do not exceed Kcs22,000 annually. If wages exceed this limit, the pension is deferred and a 4 percent supplement is added to future pension benefits for each year of deferral. Exemptions to this regulation are provided for persons in occupations with labor shortages (such as physicians, shift work, and low-paying jobs).

Disability Pensions. Persons may qualify for disability pensions under four different criteria:

- Poor health prevents employment;
- Employment cannot be continued without unacceptable worsening of health;
- Person's skills do not match employment which can be undertaken without worsening health; or

- Persons's who are "sensory-impaired," crippled, or otherwise handicapped so as to unable to work.

To be considered for a disability pensions, the applicant must have worked a minimum number of years, ranging from 1 year at age 20 to 5 years at age 28. The eligibility for these pensions is determined by a local committee of physicians which makes initial and follow-up examinations. The committee can also recommend rehabilitation or retraining in place of a disability pension. Although the law does not place any restrictions on work by those receiving disability pensions, the committee is empowered to withdraw pensions from those who are able to find work and support themselves (although in practice this happens only rarely).

Other Pensions. Of the other pensions, the widow's pension is the most significant. A married woman or woman divorced from her husband and receiving alimony receives 60 percent of the husband's pension or potential disability pension (if he dies before retirement). The woman can continue working without limit beyond the first year of the pension only if she has dependent children. Otherwise, she can only continue working (without forfeiture of the pension) if: she is disabled; she is over age 50; she has had 2 children and is over age 45; she has had 3 children; or her husband's death was related to a hazardous or special (Category I) occupation. In this case, if her combined wages and pension exceed Kcs1,500 per month, the pension is reduced by 50 percent of the amount over Kcs1,500.

Social Insurance

There are a number of programs which fall under the social insurance category:

- Sickness benefit;
- Family care benefit;
- Maternity allowance;
- Birth grant;
- Parenthood allowance; and
- Child allowance.

These benefits are generally all available to households that have members who are employees. The employer provides the benefit and is reimbursed by the Republic Government. In the past, with unemployment not allowed, all households in practice were covered by these benefits. Currently, as unemployment grows, it appears that those who are unemployed and collecting unemployment insurance can continue to receive child allowance but cannot collect the others (which are primarily wage replacement benefits for special circumstances).

Sickness and Family Care Benefits. These benefits replace wages foregone due to sickness affecting the employee or by absence from work caused by sickness or

problem in the employee's family. These benefits have a maximum of Kcs162 per day and a limit to the number of consecutive days for which it can be collected (although it is not clear if there are other annual or periodic limits which also apply).

Maternity Allowance, Birth Grant, and Parenthood Allowance. The Czechoslovak social insurance system includes several benefits which encourage households to have children. New mothers are eligible for 28 weeks (37 weeks for single mothers) of paid leave following the birth of their child. Households also receive a one-off grant following the birth of each child. In addition, one parent can take leave from their employment (with a small monthly stipend in place of wages) for up to 3 years (7 years for a handicapped child). Following this leave, the employer is required to take the employee back at a similar level of employment as when the person went on leave.

Child Allowance. Working households receive a monthly payment ranging from Kcs200 for one dependent child to Kcs1,740 for 4 dependent children (with Kcs350 for each additional qualifying child). Dependent children are classified as those under age 15 (or under age 26 if still in school).

**Table 3.1
CSFR Social Welfare System**

Program	Eligibility	Benefit/Coverage	Notes
1. Welfare Benefits			
Poverty Level Benefit	Households with after-tax income less than the sum of: Per person per month: Kcs900 - under age 6 Kcs1,000 - ages 6-10 Kcs1,200 - ages 11-15 Kcs1,300 - ages 16-26 Kcs1,200 - adults Plus per month: Kcs500 - household of 1 Kcs650 - household of 2 Kcs800 - other households	Benefit paid is difference between poverty level (as defined at left based on household size and composition) and after-tax income Benefits may be granted either in cash or as in-kind transfers	The poverty line is defined by federal legislation; new poverty levels were being considered by the Federal Parliament at the end of 1991 Program is administered by Republic Ministries of Labor and Social Affairs through local offices Local governments also provide income support benefits
Compensatory Grant (Food)	All households	Kcs140/month/person	Paid by employers, rebated by Federal Government
Compensatory Grant (Energy)	All pensioners All dependent children	Kcs80/month/person	Self-employed and other non-employees must apply for grant through local welfare office
2. Unemployment Insurance Benefits			
Basic Unemployment (person available for work)	Employed 12 months in previous 3 years Current employment income must be less than: Kcs400/month (CR) Kcs800/month (SR)	60% of previous average wage for 12 months	No earmarked unemployment insurance tax on employers or employee Benefits paid from Republic budgets

Table 3.1 (continued)
CSFR Social Welfare System

Program	Eligibility	Benefit/Coverage	Notes
2. Unemployment Insurance Benefits (continued)			
Unemployment (due to restructuring)	Must have been employed 12 months in previous 3 years	65% of previous average wage for first 6 months	No maximum monthly payment
	Current monthly employment income must less than: Kcs400 (CR) Kcs800 (SR)	60% of previous average wage for following 6 months	Average wage based on previous 12 months' wages Refusal to accept employment can result in 3 month suspension of benefits
Unemployment (recent school graduates)	Recent graduates of university and secondary schools	Kcs1,440/month (secondary), Kcs2,000/month (university) for 12 months after graduation	Graduates account for about 15% of all unemployed
Unemployment/Retraining	Person enrolled in eligible re-training program	70% of previous average wage for duration of re-training program (maximum 12 months)	Only about 1% of unemployed were in re-training programs at the end of 1991
3. Pensions			
Old-Age Pension	25 years employment (including education, national service, maternity leave, and registered unemployment since age 18) Women: age 58 (no children); age 56 (1 child); age 55 (2 children); age 54 (3-4 children); age 53 (5 or more children) Men: age 60; age 55 for Category I occupations	Average monthly earnings (AME): 100% of first Kcs2,500 33% of next Kcs3,500 10% of next Kcs4,000 Pension levels: Category I: 60% of AME Category II: 55% of AME Category III: 50% of AME	AME calculated based on average gross taxable earnings in 5 best years of previous 10 years Pensioners can earn up to Kcs22,000 annually in wages without penalty; above Kcs22,000, higher rates of tax are applied

Table 3.1 (continued)
CSFR Social Welfare System

Program	Eligibility	Benefit/Coverage	Notes
3. Pensions (continued)			
Old-Age Pension (continued)	<p>Occupational categories:</p> <p>Category I: miners, pilots, sailors, and metal, chemical, and nuclear workers</p> <p>Category II: occupations with health risks</p> <p>Category III: other occupations</p>	<p>Supplements:</p> <p>2% for each year worked over 21 years in Category I</p> <p>1.5% for each year worked over 21 years in Category II</p> <p>1% for each year worked over 26 years in Category III</p> <p>Minimum monthly pension: Kcs1,440 (individual) Kcs2,400 (couple)</p> <p>Maximum monthly pension: Kcs3,800 (Category I) Kcs2,900 (Category II) Kcs2,800 (Category III)</p>	
Other Pensions	<p>Pensions are also provided for: handicapped and partially-handicapped persons; widows and widowers; and orphans</p>		
4. Social Insurance Benefits			
Sickness Benefit	All eligible contributors	<p>70% of daily wage for first 3 days (maximum Kcs126/day)</p> <p>90% of daily wage for following days (maximum Kcs162/day)</p>	Paid by employer; rebated from Republic Government

Table 3.1 (continued)
CSFR Social Welfare System

Program	Eligibility	Benefit/Coverage	Notes
4. Social Insurance Benefits (continued)			
Family Care Benefit	All eligible contributors	70% of daily wage for first 3 days (maximum Kcs126/day) 90% of daily wage for following 4 days (maximum Kcs162/day) Maximum 13 days for single persons	Paid by employer; rebated from Republic Government
Maternity Allowance	All eligible female contributors	90% of daily wage (maximum Kcs162/day) 28 weeks (married mothers) 37 weeks (single mothers)	Paid by employer; rebated from Republic Government
Birth Grant	All household with at least 1 eligible contributor	Kcs3,000 per birth Kcs5,000 supplement for birth of 3 or more children	
Parenthood Allowance	All households with 1 parent working at least 75% of full-time and dependent children	Kcs900 per month for 3 years from birth (7 years for handicapped child)	Parenthood allowance cannot be received at the same time as maternity allowance
Child Allowance		Monthly benefit: 1 child: Kcs200 2 children: Kcs650 3 children: Kcs1,210 4 children: Kcs1,740 Additional child: Kcs350	Children up to age 15 are classified as dependent children (up to age 26 if the child is in school)

Chapter 4

HOUSING ALLOWANCES¹²

Housing allowances are payments provided directly to households for the purpose of assisting them in paying their rents. Because participation in the program is conditioned upon the household having a low income, allowances provide protection to those households hurt most by the rising rents in the transforming state rental sector. The allowance is a tenant-based, not project-based subsidy; the subsidy moves with the tenant, introducing competition among landlords to provide better quality housing and services. Housing allowances are used to subsidize housing in Western Europe, Canada, and the United States.

There are five objectives a housing allowance system should seek to achieve:

- Protection of low-income households.
- Integration of the state and private rental sectors into a single, competitive market.
- Use of the price mechanism to allocate housing services, reducing demand for overhousing and increasing incentives for present renters to purchase units.
- Reduce rental sector subsidies and target remaining subsidies on low-income households unable to afford higher rents without assistance.

¹² This chapter summarizes the material found in Hegedus, Struyk, and Tosics (1991).

Improve rental stock quality by through improved maintenance financed by higher rents rather than arbitrary state subsidies.

Designing a Housing Allowance Program

The housing allowance program must define who is eligible to participate in the program, how their subsidy would be calculated, and how program incentives would affect program participants.

Participation

Eligibility would be determined by the household's income. The program could be limited to either renters in state housing, all renters, or all renters plus occupants of cooperative housing (who presently are more like renters than owner-occupiers). Though the private rental market in Czechoslovakia is small and still rent-controlled, when there is more market freedom it will be even more desirable to have equal eligibility for those renting in the private and state "markets". This is essential for equity reasons and for fostering competition in the housing sector. The program would be an "entitlement" program—any renter household who meets the program income limits and the minimum rent payment condition (described below) could apply for and receive assistance.

Subsidy Calculation

The formula for computing housing allowance payments is of the "housing gap" type. Subsidy payments are designed to fill the gap between what a household can reasonably pay and the cost of an adequate unit. The formula used here is simple so that both administrators and participants can clearly see the incentives included in the program.

The housing allowance payment, A_h , is given by

$$A_h = MSR - (r_h * Y)$$

where r_h is the maximum share of income to be devoted to housing and Y is total household income. Based on the experience of other countries, values of 15 to 30 percent (the latter including utilities) for r_h are typical for middle income households. Y should include all sources of income (first and second economy earnings, as well as transfers from the state). Incomes are typically recertified annually, leading to an annual adjustment of the allowance payment. However, dramatic decreases in income during the year (for example, due to unemployment) can be taken into account by recertification of income at the household's request.

MSR is the "Maximum Social Rent," the rent sufficient to rent a adequate quality unit in the market. The adequate quality unit must conform to some minimum set of

quality conditions and be of a suitable size for the participant household (based on the demographic composition of the household). The MSR should vary between different urban locations, but it may be too difficult to set different MSRs within an urban center. The MSR may also include other housing-related costs, such as building services and utilities.

MSRs are normally based on data about the actual distribution of rents in each housing market. In a free-market setting, the MSR must be set high enough so most participants have a good chance of renting a unit for no more than the MSR. Participants are permitted to rent units with rents higher than the applicable MSR; if they do, they pay all rent above the MSR. In Czechoslovakia, with all rents currently controlled, the MSR will be related to a specific quality level of rents. However, when the market for rental housing is freed, it will be possible to use the process outlined above.¹³

To ensure that households will tend to live in minimally adequate housing, a minimum share of income for housing may be established; this minimum is usually set at about 5 percent of income.¹⁴ However, with households able to keep the difference between actual rent paid and the allowance, it is important to create some pressure for households not to live in very poor quality housing.

Subsidy payments equal the MSR when the household has no income, and subsidies decline as income rise. The benefit reduction rate for additional income, r_h , is low and should not be a strong disincentive to reporting additional income or to incremental work effort. The allowance is completely phased out when Y equals MSR/r_h (when A_h equals zero). No subsidies are paid at higher income levels.

Incentives for Participants

The housing gap formula described above includes four clear incentives to participants.

- By forcing households that occupy too-large units to pay the full cost of rents above the MSR, overhoused participants will have a strong incentive to move to more smaller units.

¹³ Setting the MSR during the transition period to a free market in rental housing poses a special problem. If regulated rent levels are used, the housing allowance will be insufficient to allow participating households to afford private rental units. If private rents are used, the subsidy will be overly generous to those in state-owned rental units (where rents will likely still be somewhat controlled).

¹⁴ This approach is used rather than trying to set out minimum standards because of the greater administrative ease in enforcement and because of the likely shortage of units (at least in the short term) that would meet all the quality standards specified. While rents remain administratively controlled at below-market levels, this incentive measure is not likely to be required.

- Participants will have a strong incentive to shop for the best rental deal—adequate units with rents below the MSR leave the household with extra cash (remember that the allowance is determined independently of rent actually paid).
- Participants are likely to increase their housing consumption because total income (regular income plus housing allowance) rises.
- Program applicants may wish to understate their incomes and overstate their household sizes in order to increase their allowance.

Issues Concerning Implementation of a Housing Allowance Program

Actually implementing the program discussed above raises a number of issues:

- Introducing the program;
- Technical problems of administering the housing allowance program; and
- Rental housing policy in relation to housing allowances.

In general, it is assumed that program parameters and rules would be established by republic housing policy officials and the respective Ministries of Labor and Social Affairs. Actual administration could be carried out either by local governments or district offices of the Ministries. In any case, however, it is assumed that those administering the program would be strictly bound by centrally-determined rules and procedures.

Introducing Housing Allowances

Without any real private market in rentals to speak of, it is difficult to predict future free-market rent levels. In the short run, it seems certain that the rental market will be in disequilibrium: rents, though increasing, will remain controlled and the supply of rental housing will remain largely in the hands of local governments (except for rentals to foreigners and high-income households outside the official schedule of rents). Once rents are high enough to provide incentives for widespread private rental housing, there will be a transition period during which the supply of private units should expand and the need for further rent increases and rent controls diminishes as market equilibrium is reached. Through the short- and medium-term, however, the need to rapidly increase rents (to move the rental sector to a market basis) in combination with falling real incomes (as economic restructuring proceeds) is likely to push the share of housing in income to unacceptably high levels for many households.

For the housing allowance program to be effective in countering this widespread problem during the transition, it is important that households be fully informed about the entire program and schedule of rent increases. This is essential to remove fear of the unknown and to give adequate time for making adjustments to those households who will

need to move to smaller units when rents are raised. In practice, it is likely that rent increases of a similar magnitude to those announced for 1992 (about 100 percent higher than 1991 rents) will be needed each year for the next 3 to 5 years if rents are to reach a level that includes both the real operating costs of the housing plus some reasonable capital recovery on the initial investment.

The transition scenario described above makes it sensible to include all renters in the housing allowance program and to move to market rents as a basis for setting the MSR only when rents have been decontrolled and a significant share of the rental stock is in private hands.

Another transition problem is whether or not to include occupants of cooperative housing in the housing allowance program. In their present form, households in cooperatives seem to be closer in nature to renters than owner-occupiers (in the sense that they cannot easily recover the capital that they have invested in their housing as can an owner-occupier). Thus, until cooperatives are transformed into organizations with ownership structures and property rights more similar to condominiums, they should be treated more like rental units and included in the housing allowance program.¹⁵

Technical Problems

Measuring household incomes. Obviously a key program parameter is the income of the applicant household. The reported household income determines both eligibility and, if eligible, the size of the household's allowance payment. Thus, program procedures should encourage full reporting of applicant incomes. Types of information typically used to verify incomes include income tax reports, income reports from employers, or social insurance payment records. Households applying for allowances would give their consent for the welfare office to obtain the necessary data. Still, there remains concerns about measuring other sources of income and changes in household earnings. Where housing allowances are used, the problem is recognized and steps taken to minimize it. This issue needs detailed attention as implementation of the program proceeds.

Another area requiring attention is the household's wealth. There are low-income households who will have substantial assets (particularly among the elderly), such as savings or property. One approach to solving this problem is to calculate the imputed income from these assets using the rate of interest available on savings accounts at

¹⁵ In some countries, homeowners are also eligible for housing allowances. However, in the current Czechoslovak context, where owner-occupiers must rely on a combination of highly-subsidized grants and financing and their own sources of cash, a housing allowance is not a suitable instrument for addressing the problems of home ownership. Rather, more fundamental reform of the system of housing finance is required in order to make financing more readily available, but on terms that reflect real financial costs.

commercial banks. In implementing the housing allowance program, it must be determined if eligibility tests need to take wealth as well as income into account.

Beyond investigating incomes at the time of application and recertification, penalties should be assessed against participants misreporting their incomes. Participants should be clearly informed of such penalties, which might include: repayment of overpayments (with interest); ineligibility for the program for a period of time; and fines or other penalties. As the revised tax system comes into use in 1993, households will become more familiar with reporting income and fewer attempts will be made to hide income. Overall, under-reporting can be minimized through careful checking of applicant's incomes (which requires rigorous training for case workers) and strong penalties for cheating.

Household size. Applicants have incentives to overstate the number of persons in their household to claim a higher MSR unit size and receive a higher allowance payment. Under the present administration of state rentals, where record-keeping and monitoring of unit occupancy has been lax, it would be easy to cheat in this area. Again, procedures must be devised to discourage misreporting.

Setting the MSR. Program administrators will initially have to set a MSR for units of different sizes in relation to household size. While rents remain controlled, the MSR will be derived from the rent control schedule. Once market rents are established and prevalent, MSRs will need to be updated on a regular basis and reflect different housing markets (certainly between urban and rural areas and between regions, if not within larger urban areas).

One approach to using market rents to set the MSR is as follows. The MSR is set for each housing type at a specific reference point in the rent distribution of units, such as the median rent level, which meet the program's minimum housing quality standard. Choosing the reference point depends on many factors. In general, a higher reference point (and higher MSR) is chosen if a large share of households qualify and program participation rates are high or if a program aim is to move households in low-quality units to higher-quality units. Because reducing benefits is difficult once participants have begun receiving them, a wise policy is to set the MSR initially toward the lower end of the range thought to be reasonable; after some experience with the program is developed, the MSR can be adjusted upward if necessary.

To establish the MSR based on market rents, an annual or bi-annual market survey will be needed to data on rents, utility payments, dwelling quality, size, and other attributes for several locations.¹⁶ (As noted above, in the first years of the housing

¹⁶ This survey could be expanded to include a sample of homeowners and could be used in monitoring overall market trends and the housing circumstances of different types of households—an important tool for monitoring the overall effects of housing policy.

allowance program, a different basis for setting the MSR will be needed until rents are decontrolled and a private market is established. Another transition method for establishing MSRs could be to use sales information on units being purchased to develop estimates of underlying rental values implied by the sales prices.)

Paying for housing allowances. Research in Hungary (Hegedus *et al.*, 1991) and the results presented in Chapter 6 show that—within the state-owned rental sector—housing allowances are "self financing," meaning that the increase in rental revenues exceeds the cost of the allowance payments. In the longer term, however, the allowances may not pay for themselves because of growing numbers low-income households renting units from private landlords will become participants while rents to the state will stop increasing.

Financing of the program is probably most appropriately provided through the republic government budgets, as the allowance is part of the social safety net and will redistribute income, both between communities as well as within them. Local government may have a role to play in assisting with the administration of the program, particularly as local government already plays a key role in housing. Moreover, they, as owners of the state rental units, will be the recipients of much of the increased rental revenue.¹⁷

Relation to Broader Housing Policy Issues

Tenant protection. As noted previously, tenants in Czechoslovakia enjoy extraordinary protection against losing their units. Failure to pay rent can (in principle) subject the tenant to being removed to lower quality "substitute housing". In practice, however, the question of provision of substitute housing has not been resolved and attempts at eviction in the past have generated few results apart from lengthy court cases. The higher rents associated with the move to market-oriented rents will increase the incidence of rent arrears. Coping with this problem within the housing allowance program implies establishing a humane policy that deals with the issue in the larger context of all tenants in arrears.

One possible solution is to head off the problem before it appears. When higher rents come into effect, each tenant has a period (say, 4 to 6 weeks) to declare that he cannot pay the higher rent. He is then given a period of 6 to 12 months from the date of the increase to find a more suitable unit. (The local government would provide

¹⁷ Some sharing of the cost of the program between central and local government may be warranted because of the increased revenues to local government. However, this issue may be more effectively dealt with in the larger context of intergovernmental fiscal relations by adjusting the structure of transfers from the republic to local governments.

assistance in finding an adequate substitute unit.) If at the end of this grace period, the tenant has not moved, eviction proceeding would be initiated by the local government. The local government would also be responsible for making up the rent arrears to private landlords or management companies. To be a workable solution, the local government must be willing to act quickly to help the household find new housing and carry out evictions as necessary. Failure to do so will quickly lead to increasing numbers of non-paying tenants and growing financial costs for the local government.

Privatization of management. Rents will be increased several-fold over the coming years and tenants are sure to demand improved services in return. It is not clear that the OPBHs can meet this challenge, even with the increases financial resources that come with higher rents. Competition—which can include both the OPBHs and private firms—seems to provide the best opportunity for delivering quality services for reasonable costs. Real competition in the rental market should allow tenants to move out of poorly-run buildings. However, the current tightness in the rental housing market implies that other forms of choice must be offered to the tenants in order for them express their dissatisfaction with poor services.

One option is to allow competition by management firms for the right to manage state-owned rental units. Including the tenants in the decision-making process for selecting and retaining management companies would create incentives for managers to improve services and keep costs down. The management company would be paid a fee (established in advance of the competition) and revenues in excess of acceptable expenses and the fee would go to the local government (as owner). These funds could be used to rehabilitate or replace housing in poor condition or be used for other purposes (such as infrastructure improvements or environmental clean-up).¹⁸

Social segregation. The housing allowance program is designed to permit participating households to occupy housing units of adequate quality. However, this does not mean that they will be able afford the best-quality or best-located units. Thus, it is possible that over time greater income segregation among buildings and neighborhoods could evolve. As the allowance program is implemented, spatial distribution trends should be monitored so that action can be taken to correct inequities that appear. For example, program administrators could establish a higher MSR for certain areas of its city to prevent segregated housing patterns from developing.

¹⁸ This proposal is explained in detail in Struyk, Mark, and Telgarsky (1991).

Chapter 5

**HOUSING ALLOWANCE AND INCOME SUPPORT
(HAIS) MODEL**

The Housing Allowance and Income Support (HAIS) Model was developed to allow Czechoslovak policymakers to evaluate the effects of future changes in economic conditions and program parameters on the size and scale of housing allowance, unemployment insurance, and income support subsidies. This section outlines the data used to produce the model results and the structure and operation of the HAIS Model.

HAIS DATA FILES

The HAIS data files were constructed using the 1988 Microcensus and 1989 Family Budget data files.¹⁹ The files were then updated to reflect household conditions as of the end of 1991. These steps are described below.

The Microcensus is a 2 percent random sample of all households in the CSFR; it contains approximately 101,000 observations. The file includes data on the demographic, social, and income characteristics of households as of the end of 1988. Unfortunately, the Microcensus contains only limited information about the housing occupied by the household interviewed; there was no information on rent and utility charges paid by households. Without this data, it is not possible to accurately calculate whether a household would qualify for a housing allowance and how much that allowance should be.

¹⁹ The data files for the 1988 Microcensus and the 1989 Family Budget survey were provided through the kind cooperation of the Central Statistical Office of the CSFR.

The Family Budget survey does contain such information. The survey covers approximately 5,500 households, but is not selected randomly as is the Microcensus. The Family Budget survey contains information on the demographic and social characteristics of households, their incomes and expenditures, and housing situation (such as tenure, size of unit, and expenditures on rent and utilities). To create the HAIS data set, it was necessary to match the housing information from the Family Budget survey to similar households in the Microcensus.

The data for both files was read into the Institute's VAX 4300 mainframe as ASCII files downloaded to a PC from floppy diskettes and converted into SAS data sets.²⁰ With the assistance of two visiting statisticians—Jiří Dlouhý, of the Federal Ministry of Labor and Social Affairs, and František Hajnovič, of VUSIEAR (a Slovak statistical institute)—familiar with the data files, the 1988 Microcensus income data was scaled to match 1989 levels. The housing information from the Family Budget survey was then attributed to records in the Microcensus.

To do this, a set of key variables was used to group households in both files. Records from the Family Budget survey were then matched randomly with Micro-census households having the same values for the key variables. Because of the large number of possible permutations arising from using more keys, use of many keys resulted in more accurate matching, but fewer records actually being matched between the two data sets. For example, use of all 6 characteristics thought to be important for grouping households only matched 40 percent of the records in the Microcensus with similar households in the Family Budget survey. Use of only 2 keys allowed all records in the Microcensus to be matched, but with considerably less accuracy in terms of the characteristics left out as matching keys. Through a series of trials, a matching algorithm was developed which matched as many households as possible using all 6 keys, then matched the remaining unmatched records using 5 keys, and so on dropping an additional key each time until all records were matched. Table 5.1 as the next page shows the matching keys used and the success rate for each matching pass.

The Microcensus contains six occupation categories—the 4 shown in Table 5.1 plus pensioner households with economically-active persons (EA Pensioner) and a residual "other" household type. In order to match the two data sets, households in these categories had to be assigned to one of the four Family Budget survey occupation categories. The Czechoslovak statisticians devised the following methodology for this transformation of Microcensus occupations:

- If the household occupation was EA Pensioner and the household head was aged 60 or older, the household was reclassified for the purposes of

²⁰ There was a minor problem in copying the original data file and 11 records were corrupted in the process. These records were dropped from the data set and appropriate adjustments to the scaling factors for the relevant region were made.

Table 5.1
Matching Pattern for Constructing HAIS Data File

Pass Number	Keys	Records Matched (percent of total)
1	Housing Type; Income Quantile; Household Size; Sub-Region; Occupation; Age of Household Head	40,126 (40%)
2	Housing Type; Income Quantile; Household Size; Sub-Region; Occupation	23,108 (23%)
3	Housing Type; Income Quantile; Household Size; Region	34,215 (34%)
4	Housing Type; Income Quantile; Household Size	3,870 (4%)
5	Housing Type; Income Quantile	190 (<1%)

Notes

<i>Housing Type</i>	Rental (4 categories); Cooperative; Other
<i>Income Quantile</i>	15 per capita income quantiles
<i>Region</i>	5 regions (Prague; Other Czech; Moravia; Bratislava; Other Slovakia)
<i>Sub-Region</i>	12 sub-regions (6 Czech; 2 Moravian; 4 Slovak)
<i>Occupation</i>	Blue-Collar; White-Collar; Agricultural; Non-Economically Active Pensioner
<i>Age of Household Head</i>	Less than 30; 30-39; 40-49; 50-59; More than 59

matching as a Non-Economically Active (NEA) Pensioner.

- If the household occupation was EA Pensioner and the household head was under age 60, the household was randomly reclassified to the other three categories with the following probabilities: Blue-collar, 48 percent; White-collar, 43 percent; and Agricultural, 9 percent.
- If the household occupation was Other, the household was randomly reclassified to the other categories according to the following probabilities: Blue-collar, 36 percent; White-collar, 33 percent; Agricultural, 7 percent; and Pensioner, 24 percent.

The reassignment of household occupations is a temporary measure only for the purpose of matching the two data sets. The original household occupations from the Microcensus were retained for use in creating the HAIS data files.

Once the Microcensus and Family Budget survey data files were combined, their data reflected the situation of households in 1989. It was then necessary to scale the income and relevant expenditure data to account for changes between 1989 and the end of 1991.²¹ The scaling methodology was developed by the Czechoslovak statisticians and attempted to account for changes in the period to:

- earnings;
- average and minimum pensions;
- new social benefits (such as the compensatory grants for energy and food price increases);
- prices related to housing (mainly energy costs).

This updated master HAIS data file for 1991 (which contains approximately 101,000 records analogous to the 1989 Microcensus file) was then aggregated into two sets of working HAIS data files—a detail set (each with between 3,500 and 4,500 records) and a summary set (each with about 1,000 records). Each set contains a data file for the CSFR, the CR, and the SR. The summary data files allow alternative policy sets to be evaluated relatively quickly (in about 15 minutes) while the detail data files provides more accurate forecasts in return for longer computing time (about one hour). The variation in forecasts between the two data sets in tests has been relatively small—less than 5 percent variation for both program costs and number of participating households.

The aggregation of the 1991 master HAIS data file into "cells" with identical characteristics was carried out by combining individual household records from the 1991 master HAIS data file over the following variables:

- Per capita income quantiles (15 in the detail set; 5 in the summary set);
- Housing category (Rental, Cooperative, Other);
- Household size (1 - 5 or more);
- Number of dependent children (0 - 3 or more);
- Number of economically active persons (0 - 3 or more);
- Number of non-economically active persons (0 - 2 or more)
- Occupation of household head (Blue-collar, White-collar, Agricultural, NEA Pensioner, EA Pensioner, Other)

(See Annex A for a listing of the structure and derivation of the HAIS data files.) Thus, each record in the HAIS data sets represents a summation of all records from the master data file that match each unique combination of the above variables. Finally, the HAIS data sets were converted from their SAS format to the dBase III form used by the HAIS Model.

²¹ No changes were made to the demographic or housing type distribution for the period 1989-1991 as these were judged to be so small as to be insignificant for the purposes of the HAIS Model.

H AIS MODEL STRUCTURE AND OPERATION

The H AIS Model is divided into three distinct modules: (1) specification of assumptions under which the model evaluates the base data; (2) evaluation of the model, construction of the forecast database, and tabulation of results; and (3) output of reports showing model assumptions and results.

Model Assumptions

The H AIS Model is structured to provide the greatest flexibility for the user in specifying the economic conditions and policy decisions which affect the housing allowance, unemployment insurance, and income support programs. The first sub-menu allows the user to specify forecasting parameters under each of the following categories that affect which households qualify for benefits and how much support they receive.

Macroeconomic conditions (Figure 5.1). The model requires estimates of future price inflation (total change in prices from the base period to the forecast period) and changes in real earnings for each occupation type to forecast future incomes. Also, forecasts of nominal changes in other non-earned income (pensions, social benefits, and other income) are required for income forecasting.

Unemployment and unemployment insurance (Figure 3.2). Future household incomes will be strongly influenced by the spread and depth of unemployment. The model uses estimates of future unemployment rates for each of the occupational categories. The model also requires an estimate of the distribution of the unemployed between the short-term jobless (who receive unemployment insurance benefits) and the long-term unemployed (who have exhausted their benefits).

The characteristics of the unemployment insurance program are also allowed to be varied in the model. The average replacement rate and minimum benefit are specified as inputs, as is the average participation rate in the program. (There are currently several different replacement rates for unemployment benefits in Czechoslovakia, but they are clustered quite closely. The average rate called for in the model—used for clarity and simplicity in building the model—should be specified to approximate the several rates in use.

Housing sector conditions (Figures 5.3 and 5.4). The input screens for conditions in the housing sector are lengthy because of the complexity of the current rent structures in Czechoslovakia. Despite their length, they are still only approximations of the actual rent regime. Base rents for each category of state rental housing and coops are set for both "living" and "non-living" (i.e., service) space. Other fees (related mainly to the equipment in apartments and building services such as janitors, elevators, trash

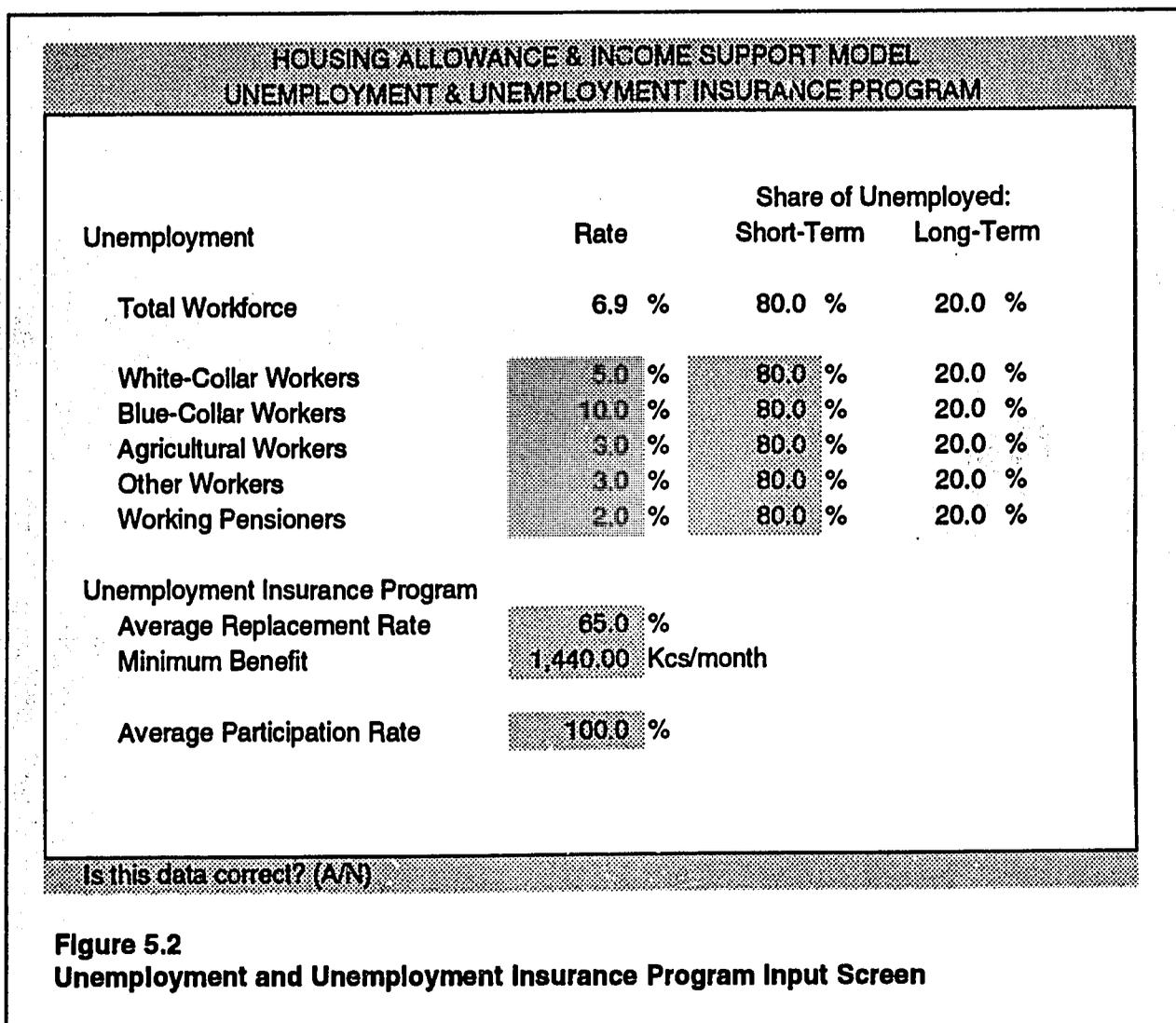
HOUSING ALLOWANCE & INCOME SUPPORT MODEL PRICES, WAGES, AND OTHER SOCIAL BENEFIT PROGRAMS	
Time Period of Analysis	
Base Period	31.12.91 (DD.MM.YY)
Forecast Period	01.01.93 (DD.MM.YY)
Price Inflation	10.0 %
Real Earnings Growth	
Total Labor Force	-5.9 %
White-Collar	-5.0 %
Blue-Collar	-8.0 %
Agriculture	-2.0 %
Other	-2.0 %
Working Pensioners	-2.0 %
Average Change in Other Social Benefits and Income	
Pensions	0.0 %
Universal Benefits	0.0 %
Social Insurance	0.0 %
Other Income	0.0 %
Is this data correct? (A/N)	

Figure 5.1
Macroeconomic Conditions Input Screen

removal, and the like) are specified on a per unit basis. Other service charges specified on a per square metre basis (not used under the 1964 rent law) are also allowed as part of the rent formula.²²

The 1964 rent law also specifies rent reductions based on the number of children in the household; these are explicitly set out in the model (allowing for forecasts where they might be changed or abolished). Future increases in utility costs (electricity, gas,

²² Note that rents in Czechoslovakia are still set under national law; there is no significant private rental sector with market determined rents. Thus, the rents used in the model are those specified in the rent law. As the private rental sector develops, the HAIS Model will need to be adapted to account for the private rental market.



heat, and fuel) over the model baseline can also be estimated if they are included in the housing cost considered in calculating the housing allowance.

Housing allowance program (Figure 5.5). The fourth set of inputs to the HAIS Model concerns the parameters for the housing allowance program. First, the universe of eligible households is specified—rentals and/or cooperative apartments.

Second, the data for calculating the maximum social rent (MSR) is specified. The quality category of rental housing selects which schedule of rents from the housing sector conditions rent data is to be used in calculating the MSR. Floor space allowances (with both living and service space components) are set to determine the adequate amount of floor space for each household in calculating the MSR. Also, the model requires inputs

HOUSING ALLOWANCE & INCOME SUPPORT MODEL		
HOUSING CONDITIONS & HOUSING ALLOWANCE PROGRAM		
Living Space Rent (Annual)	Base Rent	Increase
Category I	26.00 Kcs/m ²	0.0 %
Category II	18.00	0.0 %
Category III	14.00	0.0 %
Category IV	11.20	0.0 %
Cooperative	20.00	0.0 %
Service Space Rent (Annual)	Base Rent	Increase
Category I	12.0 Kcs/m ²	0.0 %
Category II	10.0	0.0 %
Category III	10.0	0.0 %
Category IV	8.0	0.0 %
Cooperative	10.0	0.0 %
Service Charges (Annual)	Base Charges	Increase
Category I	0.0 Kcs/m ²	0.0 %
Category II	0.0	0.0 %
Category III	0.0	0.0 %
Category IV	0.0	0.0 %
Cooperative	0.0	0.0 %
Is this data correct? (A/N) (Enter 'U' to update base rent data.)		

Figure 5.3
Housing Sector Conditions Input Screen 1

for the inclusion or exclusion of utility costs within eligible housing costs and the setting of cost allowances for inclusion with the MSR.

Finally, the model must set the parameters for evaluating the eligibility of households for housing allowance payments: the share of income to be devoted to eligible housing costs; the minimum share of income to be devoted to housing (to discourage occupancy of sub-standard housing); and the participation rate in the program.

Income support program (Figure 5.6). The inputs required for this portion of the model are derived from the current Czechoslovak system, which sets a minimum household income (the "poverty line") based on the ages of household members and the total number of members in the household. The model allows for varying the income standards applied against each of these categories, effectively raising or lowering the

poverty line against which income support needs are measured. The model also allows the income support program to index the poverty line to inflation.

Once the poverty line is set, the model specifies the benefit reduction rate and the participation rate of the income support program. The model also allows the user to include or exclude various classes of income from the pool of eligible income used in assessing the income support needs of households.

Household income ranges (Figure 5.7). A last set of parameters must also be set in order to evaluate the model and produce reports. As the model is evaluated and the effects of unemployment are attributed to households, the distribution of household

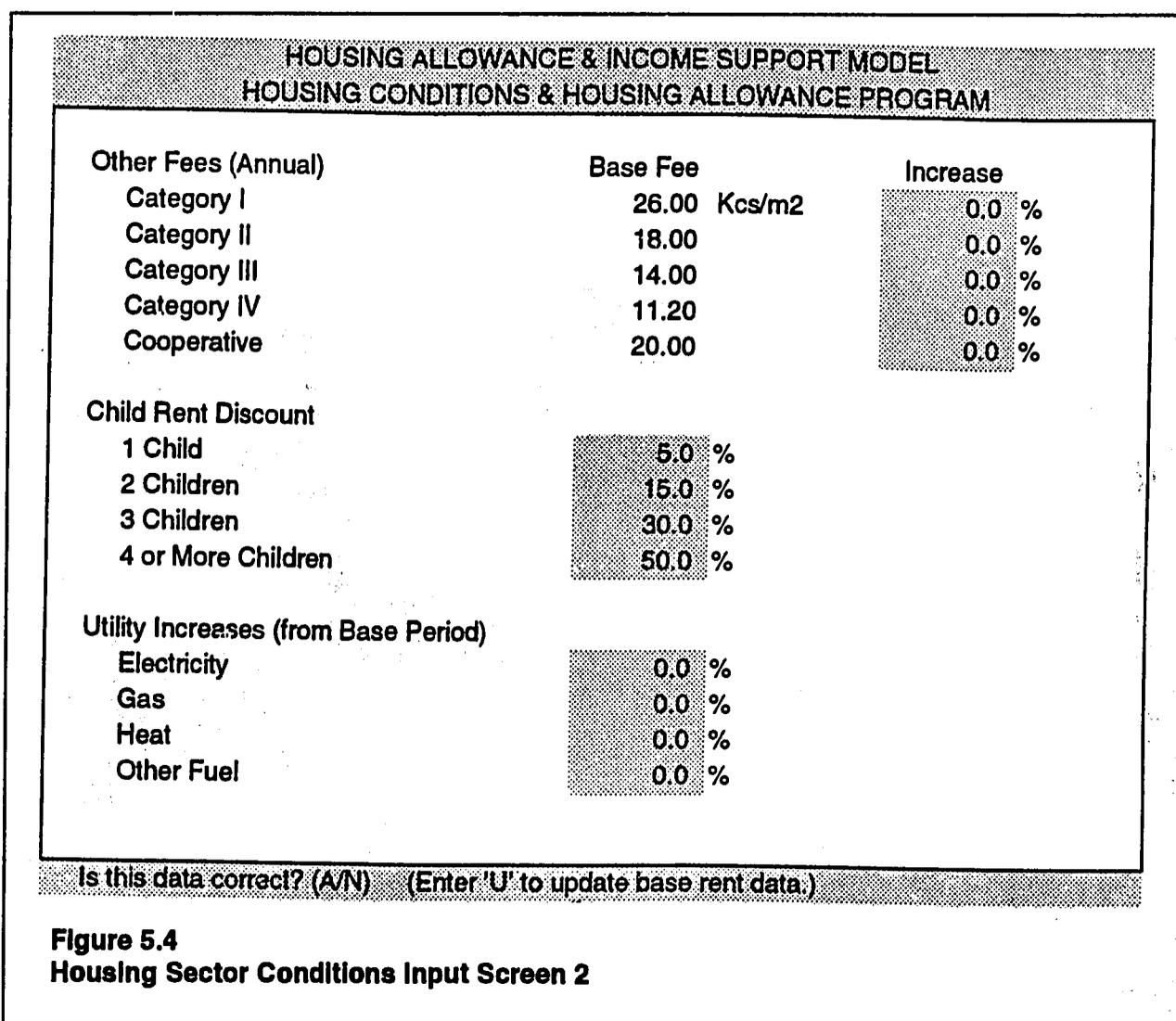
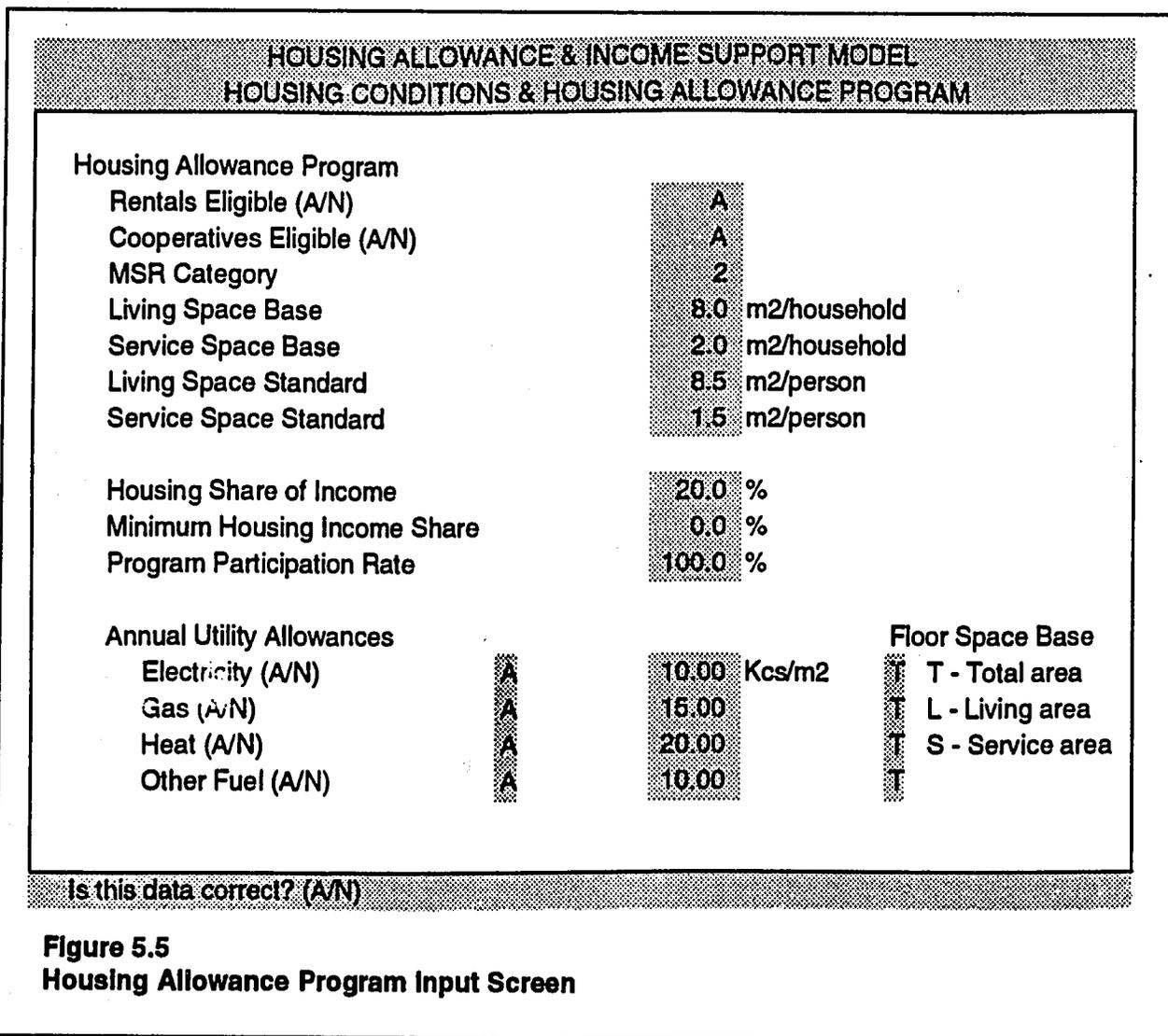
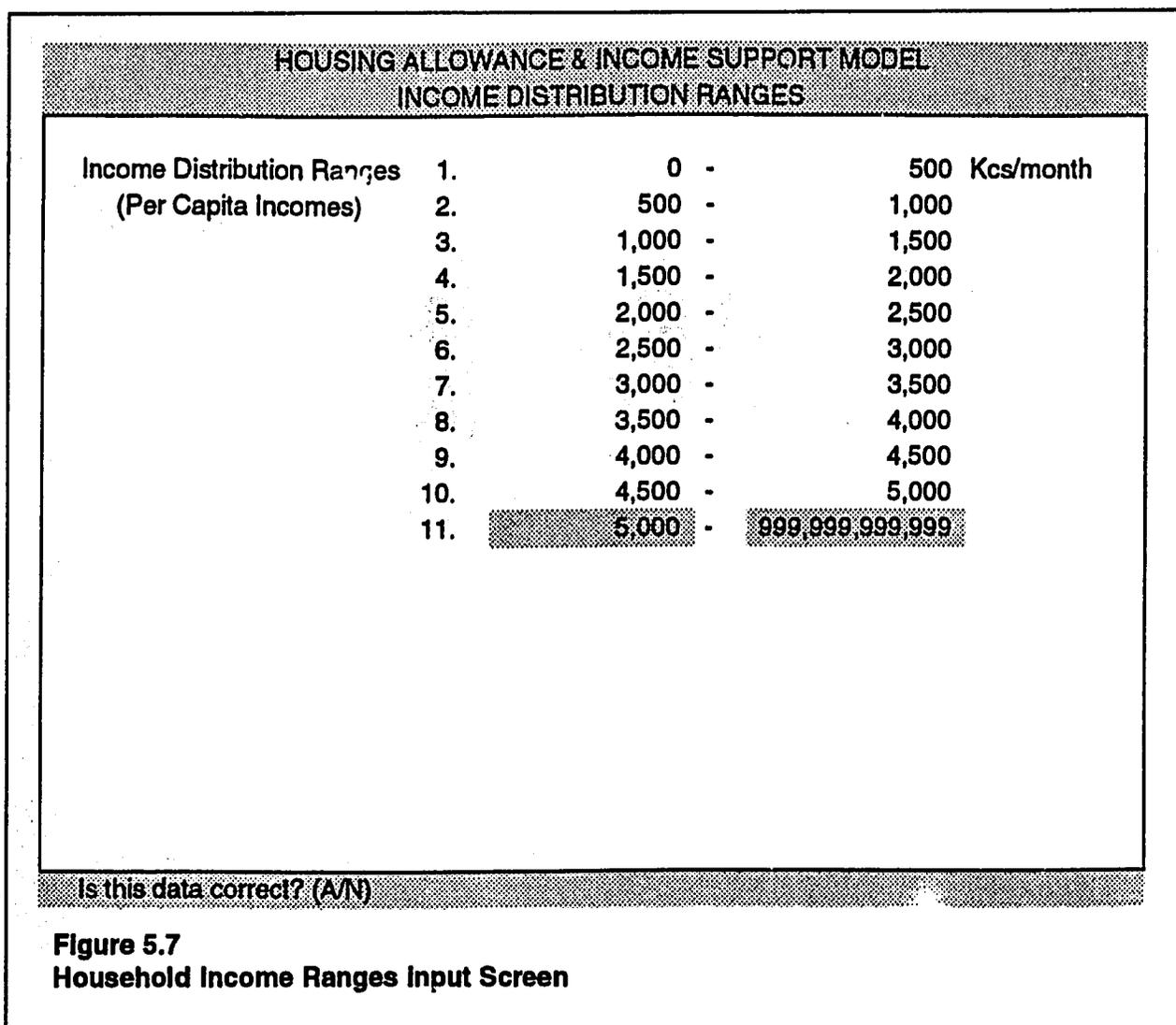


Figure 5.4
Housing Sector Conditions Input Screen 2



incomes changes. The model results include a tabulation of households and benefits paid according to the pre-benefit income (i.e., income not including unemployment insurance, housing allowance, or income support payments). This menu allows the user to specify the distribution over which the pre-benefit income is reported. Any set of non-overlapping income ranges can be selected and income can be considered on either a household total or per capita basis.

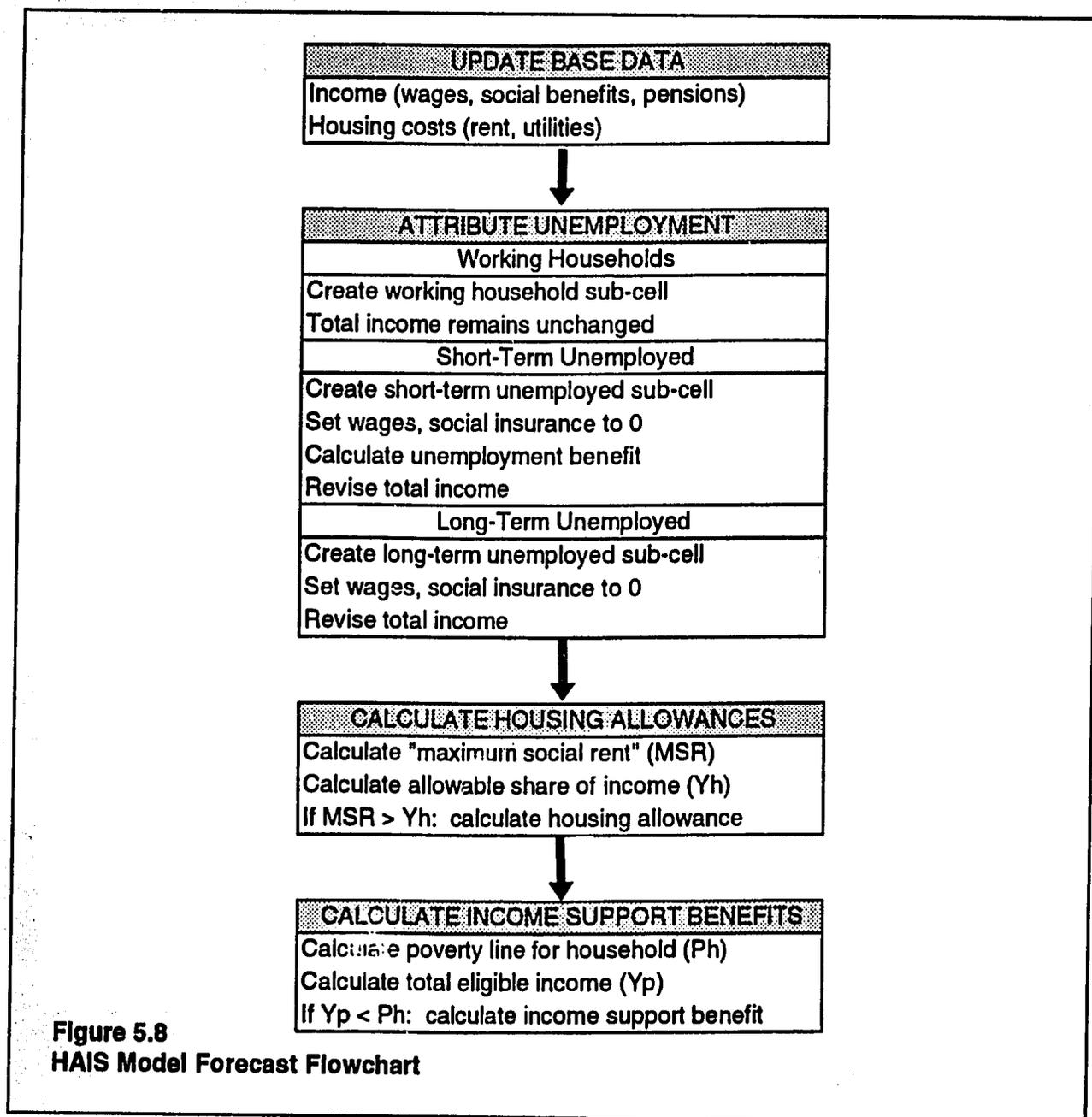
Once all of these inputs have been specified, the HAIS Model is then ready to proceed with the evaluating the base data and producing a forecast.



- Calculate income support payments.

The HAIS Model can carry out this evaluation for any of the data files outlined above—detail and summary data sets for the Federal, Czech, or Slovak Republics. This section looks at the logic and operation of the model in each of the evaluation modules.

Update income and housing costs. The forecast begins by taking the relevant base data file and revising household total incomes by updating earnings, pensions, and social benefits by the parameters specified in the model. Housing costs are also revised according to the inputs supplied to the model about predicted increases in rents and utility costs.



Unemployment and unemployment insurance benefits. Once incomes and housing costs have been brought up to date for the forecast period, the HAIS Model then simulates the effects of predicted unemployment on households. A data cell representing households with positive earnings, N_i , is divided into three sub-cells— working households, N_w ; short-term unemployed households (those receiving unemployment insurance benefits), N_s ; and long-term unemployed households (those who have

exhausted their unemployment insurance benefits), N_i —in proportion to the unemployment rate, u , and shares between short- and long-term unemployed (s and l , respectively) specified in the model parameters for the relevant occupational group.²³ Thus, the number of households in each sub-cell is given by

$$N_w = N_i * (1-u)$$

$$N_s = N_i * (1-(u*s))$$

$$N_l = N_i * (1-(u*l))$$

The working households retain the same average level of earnings; earnings for the short- and long-term unemployed households are set to zero, as are social insurance benefits (for which the unemployed are not qualified).²⁴ Unemployment insurance benefits, B_u , are then calculated for the short-term unemployed based on their earnings prior to becoming unemployed

$$B_u = W_e * r_u$$

where W_e is the average wage prior to unemployment and r_u is the replacement rate. If the unemployment benefit calculated is less than the specified minimum benefit, the minimum benefit is applied to the households. The results are then scaled according to the number of eligible households and the participation rate for the program. Total household incomes are then recalculated for each sub-cell.

Housing allowances. To determine if households then qualify for a housing allowance, the standard floor space allowance, F_i , and associated MSR for each cell is calculated as follows

$$F_i = \sum((N * f_j + b_j)$$

$$MSR = \sum(r_j * F_j) + \sum(c_k * F_k)$$

where N is the number of persons in the household, f_j is the space standard per person for each space type, b_j is the space standard per household for each space type, r_j is the

²³ Because the base data is derived from surveys carried out in 1988 and 1989, there are no unemployed households in the base data. (At that time, able-bodied persons were required by law to be employed.) Thus, the model does not have to deal with existing unemployment in the base data and only households in the NEA Pensioner and Other occupational categories (if they have no employment related earnings) might not be affected by the forecast unemployment.

²⁴ The HAIS Model does not attempt to sort out the effects of unemployment on multi-earner households—households are either working or unemployed. The original data files specify which households have multiple earners, but not how their earnings are distributed between earners.

net rent unit cost for each space type, c_x is the unit cost for other eligible housing-related costs (such as service charges, fees, and utilities).

A household qualifies for a housing allowance if MSR exceeds the maximum share of income to be devoted to housing (as specified by the housing allowance program). In other words, the housing allowance, A_h , is equal to

$$A_h = MSR - (r_h * Y)$$

where r_h is the maximum share of income to be used for housing and Y is total household income. If the calculated value of A_h is negative, the household receives no housing allowance subsidy. The model may also impose a minimum share of income which must be devoted to housing (in order to assure households are living in housing units of minimally acceptable quality). If actual eligible housing costs are below this minimum, no housing allowance subsidy is paid. The results are then scaled according to the number of eligible households and the participation rate for the program. After total housing allowance payments are determined, total household incomes in each sub-cell are again recalculated.

Income support benefits. Finally, the model determines which households still qualify for income support benefits. First, the poverty line, PL , for each household cell is calculated as

$$PL = \sum(N_i * m_i) + g_n$$

where N_i is the number of persons in the household in each age category, m_i is the minimum income per person in each age category, and g_n is additional minimum income related to the size of the household.

The maximum eligible income, Y_{max} , under which a household would still qualify for the income support benefit is given by

$$Y_{max} = PL / r_y$$

where r_y is the benefit reduction rate. Thus, the income support benefit is payable to households where eligible household income, Y_e , is less than Y_{max} and is equal to

$$B_y = PL - (r_y * Y_e)$$

If Y_e is greater than Y_{max} , no income support benefit is paid. The results are then scaled according to the number of eligible households and the participation rate for the program and total household incomes are updated a final time.

HOUSING ALLOWANCE; INCOME SUPPORT MODEL - Version C21.03
 RUN: FFX00001 DATE: 30.01.92

TIME: 17:47:09

BENEFITS REPORT
 TOTALS FOR MONTH: 01.92

Household Type/Group	Kcs thousands							
	Total Households	Pre-Benefit Income	UI Households	UI Benefit	HA Households	HA Benefit	IS Households	IS Benefit
ALL HOUSEHOLDS								
Total	5,503,038	36,482,271	366,293	1,096,072	4,828	79	157,692	74,184
HOUSING TYPE								
Rental - Category I	1,461,981	9,558,205	99,068	296,399	2,299	34	46,389	23,469
- Category II	330,221	1,782,996	21,291	53,703	818	9	10,713	4,535
- Category III	46,738	157,291	1,797	3,462	536	13	4,071	1,230
- Category IV	10,911	47,930	699	1,723	162	3	246	95
Cooperative	1,006,283	6,732,432	68,911	221,972	1,013	21	35,536	18,843
Owner-Occupied	2,646,904	18,203,418	174,527	518,812	0	0	60,736	26,013
HOUSEHOLD SIZE								
1 person	1,180,698	3,318,856	77,368	121,290	4,140	70	9,775	2,759
2 persons	1,484,149	8,750,737	94,133	223,256	514	6	39,067	12,554
3 persons	993,007	7,672,261	63,945	230,990	168	3	47,330	16,989
4 persons	1,264,278	10,670,323	88,983	345,762	6	0	39,270	30,787
5 persons or more	580,906	6,070,095	41,864	174,774	1	0	22,249	11,094
OCCUPATION TYPE OF HOUSEHOLD HEAD								
Blue-Collar	1,901,347	13,837,476	190,135	636,834	716	29	76,793	42,387
White-Collar	1,712,861	13,027,366	85,643	303,890	867	27	38,023	15,571
Agriculture	356,515	3,250,743	10,694	40,250	2	0	3,978	1,935
NEA Person	1,265,120	4,232,417	79,206	114,098	2,808	16	32,578	10,734
EA Pensioner	239,408	1,941,048	0	0	5	0	2,352	1,197
Other	27,787	193,222	615	999	430	6	3,968	2,360
PER CAPITA MONTHLY HOUSEHOLD INCOME								
0 - 500	139,493	192,392	139,493	485,224	49	1	53,293	39,884
500 - 1,000	106,436	244,618	102,138	388,148	941	39	25,678	15,154
1,000 - 1,500	214,888	950,694	33,370	81,946	3,838	40	78,348	19,115
1,500 - 2,000	1,149,048	6,395,371	35,460	59,936	0	0	373	30
2,000 - 2,500	1,416,839	9,125,534	32,589	47,256	0	0	0	0
2,500 - 3,000	991,407	7,391,001	14,864	21,435	0	0	0	0
3,000 - 3,500	141,389	1,727,140	7,078	10,233	0	0	0	0
3,500 - 4,000	807,187	7,106,878	1,201	1,744	0	0	0	0
4,000 - 4,500	494,976	3,096,572	11	17	0	0	0	0
4,500 - 5,000	35,412	174,914	10	17	0	0	0	0
5,000 -	5,963	77,156	80	116	0	0	0	0

Figure 5.9
 Sample Report Format

H AIS Model Reports

Once the forecast derived from the model parameters and the base data has been completed, the H AIS Model computes totals for the number of households and the amount of benefits paid for each program (unemployment insurance, housing allowance, and income support) over the following categories:

- household employment status;
- housing type;
- number of persons in household;
- occupation type of household head;
- household income.

The model also calculates the changes in eligible housing costs (compared to the base data) faced by households.

Reports are then produced detailing the assumptions used as inputs to the model and summarizing the totaled results described above. (A sample report is shown in Figure 5.9 on the opposite page.)

Chapter 6

HAIS MODEL SIMULATION RESULTS AND POLICY CONCLUSIONS

Using the HAIS model described in Chapter 5, a series of simulations were carried out to examine the effects of introducing a housing allowance in Czechoslovakia. A series of economic scenarios were developed and then simulations carried out using varying program parameters for both the housing allowance program and the income support program to observe changes in the numbers of eligible households and total benefits paid. This chapter summarizes the results of these simulations.²⁵

ECONOMIC SCENARIOS

Three scenarios were developed to estimate economic conditions in Czechoslovakia over the coming year. The scenarios make predictions about inflation, real earnings growth, and unemployment for the beginning, middle, and end of 1992 (see Table 6.1). (Note that these scenarios are the best estimates of the authors and are meant only to be illustrative of conditions under which housing allowances might be implemented. They do not reflect official forecasts by the Czechoslovak government.)

The scenarios project that prices will increase by about 10 percent through 1992, with real wages falling by about 4 percent during the same time period. Unemployment is projected to continue increasing, reaching 10 percent by the end of 1992, with the highest concentrations of unemployment in blue-collar labor markets. In addition, the share of unemployed who have exhausted their unemployment insurance benefits—or are not eligible for benefits, as in the case of formerly employed pensioners—is forecast to grow from about 5 percent at the beginning of 1992 to 25 percent at the end of the year.

²⁵ Complete output tables from the simulations can be found in Annex B of this report.

Based on the announced rent reforms, rents are estimated to increase by 50 percent at the beginning of 1992 and rise a further 50 percent at mid-year. In addition to the scheduled rent increases, higher rent increases of 200 to 400 percent over 1991 levels were considered under the end-of-1992 economic scenario to make a preliminary assessment of the effects of moving rents to free-market levels. (As yet there is little data or evidence upon which to make any accurate assessment of what free-market rents might be in Czechoslovakia. However, it is certain that rents will have to rise many-fold from their current levels.)

HOUSING ALLOWANCE PROGRAM ANALYSIS

Within the framework of these economic scenarios, different benefit reduction rates for the housing allowance program were simulated. For the purposes of this report, other parameters for establishing the MSR—the standard floor space allotment, inclusion of utilities and cost allowances—were not extensively studied, although the HAIS Model does allow all of these factors to be varied. For the set of simulations under discussion, the following standards were employed in designing the housing allowance:

- **Floor Space.** MSRs were derived assuming standard units of 15 square metres per household plus 10 square metres per person; a family of 4 would have an MSR based on a floor area of 55 square metres.

Table 6.1
HAIS Simulation — Economic Assumptions
 (Percent change since end of 1991)

	Economic Scenarios		
	January 1992	July 1992	January 1993
Price Inflation	0.0	5.0	10.0
Real Earnings Growth	0.0	-2.0	-4.0
Unemployment Rate (percent)	6.9	8.5	10.0
Share of unemployed receiving UI	95.0	85.0	75.0
Rents	50.0	100.0	100.0

- **Utilities.** The MSR included all utility costs and unit cost allowances were derived based on data in the baseline data file.

Three sets of simulations were carried out. The first two used the rent schedules in effect to calculate the MSR, the first using a housing quality standard of Category II units (without central heat) to set the MSR, the second using Category I units (with central heat) as the basis for calculating MSRs. The third set of simulations examined the effects of substantially higher rents (increases of up to 400 percent over 1990 levels, which might begin to approximate future market rent levels) at the end of 1992. This third set was carried out using a housing allowance benefit reduction ratio of 15 percent.

Table 6.2 shows the main results of the first set of simulations for the planned rent increases in 1992 with benefit reduction rates (i.e., the share of income to be allocated for housing costs under the housing allowance program) ranging from 20 to 10 percent. There are several important points to be observed in the table:

- **Number of Eligible Households Is Very Sensitive to Program Parameters.** The number of eligible households rises tremendously when the benefit reduction rate is dropped from 15 percent to 10 percent. This reflects the relative "flatness" of the Czechoslovak income distribution, with a large share of households clustered close to the median income. With this distribution, the decrease in the benefit reduction rate greatly increases the number of eligible households, although many of these households would receive only a marginal benefit (as seen by the sharp drop in the average level of benefit paid to each household).
- **Need for Allowance Program Will Emerge by End of 1992.** For benefit reduction rates of 15 percent and higher, the number of eligible households after both the January and July rent increases remain small (less than 1 percent of households in rental units and cooperatives). Note, however, that by the end of 1992, as unemployment increases and households begin to exhaust their unemployment insurance benefits, the number of eligible households almost doubles compared to mid-1992. This implies that while the immediate need for a housing allowance program (or other support program) to protect low-income households from the rent increases is small, by the end of 1992 the problem will be much more pressing.
- **Low Costs Compared to Increased Rent Revenues.** The direct costs of the housing allowance program (i.e., actual subsidies paid, not including operating and administrative costs) are relatively small and are overshadowed by the increase in rents on social housing units. For example, a housing allowance program with a benefit reduction rate of 15 percent would have an annualized cost of Kcs45.23 million in July 1992 if

Table 6.2
Housing Allowance — HAIS Simulation Set 1
(Category II Housing Quality Standard)

Scenario Simulation Period	Rent Increase Over 1991	Allowance Housing Cost Share	Eligible Households		Total Annual Allowances (Kcs '000s)	Average Monthly Allowance (Kcs)
			Number	Percent of Coops & Renters		
January 1992	50 percent	20 percent	352	0.01	216	51
		15 percent	4,829	0.17	972	17
		10 percent	176,539	6.18	66,036	31
July 1992	100 percent	20 percent	17,075	0.60	27,276	133
		15 percent	25,723	0.90	45,228	147
		10 percent	331,154	11.59	247,944	62
January 1993	100 percent	20 percent	39,176	1.37	63,660	135
		15 percent	49,664	1.74	101,292	170
		10 percent	349,996	12.25	323,388	77

Note: Simulations assume 65 m2 unit for a family of four and utilities included in housing costs.

rents were increased by 100 percent from their 1991 levels. However, the annualized increase in rents—assuming half of the rental stock remains in public ownership—totals Kcs1.77 billion.²⁶ Thus, the housing allowance program, even with very large increases in rents, is a very efficient means of delivering assistance. Large operating subsidies for social housing units—the result of low, controlled rents—can be eliminated, reducing the amount of subsidy for housing from the public sector budget.

Table 6.3 shows how the benefits from housing allowances in the first set of simulations are distributed according to various household characteristics. The table shows a picture consistent with the points made above. As unemployment increases and becomes more persistent, there is a shift in the composition of beneficiaries.

²⁶ Similarly, the third set of simulations shows that if at the end of 1992 rents were increased by 400 percent over their 1991 levels, the annual direct cost of the above housing allowance program would total Kcs1.94 billion, while annual rents on social housing would total Kcs7.01 billion.

Table 6.3
Housing Allowance — Distribution of Benefits
 (percent)

	All Households	Eligible Households		
		January 1992	July 1992	January 1993
Households (number)	5,503,038	4,829	25,723	49,664
Housing Type (percent)				
Renters	33.62	79.02	63.40	61.65
Cooperatives	18.29	20.98	36.60	38.35
Owner-Occupants	48.10	n/a	n/a	n/a
Total	100.00	100.00	100.00	100.00
Household Size (percent)				
1 Person	21.46	85.73	29.54	22.28
2 Persons	26.97	10.64	17.48	17.48
3 Persons	18.04	3.50	20.99	21.76
4 Persons	22.97	0.12	24.24	29.26
5 Persons or more	10.56	0.02	7.76	9.22
Total	100.00	100.00	100.00	100.00
Employment Status of Household (percent)				
Employed/NEA Persons	n/a	98.86	20.84	10.72
Unemployed (UI Eligible)	n/a	1.01	9.07	4.05
Unemployed (Not UI Eligible)	n/a	0.12	70.09	85.23
Total	100.00	100.00	100.00	100.00
Occupation of Household Head (percent)				
Blue-Collar	34.55	14.83	47.83	48.97
White-Collar	31.13	17.95	34.78	40.08
Agriculture	6.48	0.04	3.36	3.62
NEA Person	22.99	58.15	11.55	5.98
EA Pensioner	4.35	0.12	0.07	0.05
Other	0.50	8.90	2.41	1.29
Total	100.00	100.00	100.00	100.00

In the January 1992 scenario, there are negligible numbers of unemployed persons who are not eligible to collect unemployment insurance benefits. As a result, almost all of the households who are eligible for housing allowances are either working households or non-economically-active (NEA) persons (i.e., pensioners). Thus, the few persons who would need a housing allowance early on are mainly single persons with limited incomes, either because of minimal wages or pensions.

In the later scenarios, while there continues to be this small group of about 5,000 low-income households, the large majority of households that require housing allowances are those whose incomes have fallen sharply because of unemployment and the exhaustion of unemployment insurance (UI) benefits. About 2,000 households that are unemployed but receiving UI benefits are added to the pool of eligible households. The rest—18,000 households in July 1992 and 42,000 households in January 1993—have their incomes severely reduced by their loss of wages and UI benefits. Thus, at least in the initial stages of the rent increase process, the main group which requires protection is not pensioners and others on fixed incomes, but those who lose their incomes through unemployment.

The results of the second set of simulations, using Category I rents to calculate the MSR, are shown in Table 6.4. Because the rent rates used to calculate the MSR are higher under this set of simulations, the number of eligible households and total benefit paid is higher in each case. The points noted above for the first set of simulations also hold true here—the number of households in need of assistance to meet their housing costs rises as unemployment persists, but the direct costs of the housing allowance program are more than offset by the increase in rents from the social rental stock. The third point, the sensitivity of the number of eligible households to the housing allowance program parameters, shows up even more strongly than in the first set of simulations. Lowering the standard for the share of income to be devoted to housing from 15 percent to 10 percent increases the number of eligible households in January 1992 almost 50-fold—from 6,400 to 300,000. (It should be noted, though, that many of these households may only be eligible for a small housing allowance and may not, in practice, make the effort to apply for the subsidy.) The distribution of benefits is similar to that described above, with pensioners initially forming the majority of eligible households and the unemployed accounting for a larger share later.

In the third set of simulations, which look at the effects of moving toward market-level rents at the end of 1992, show that more than a fifth of all households in rental and cooperative units would be eligible for a housing allowance if rents were increased by 300 percent over their 1990 levels. Even if a rent increase similar to that imposed in 1992 were to be carried out in 1993, the number of eligible households would more than double. The large number of eligible households imply that developing the administrative system for implementing a housing allowance program (or a similar housing support program) should be an important priority for Czechoslovak housing and social welfare policymakers.

Table 6.4
Housing Allowance — HAIS Simulation Set 2
 (Category I Housing Quality Standard)

Scenario Simulation Period	Rent Increase Over 1991	Allowance Housing Cost Share	Eligible Households		Total Annual Allowances (Kcs '000s)	Average Monthly Allowance (Kcs)
			Number	Percent of Coops & Renters		
January 1992	50 percent	20 percent	399	0.01	324	68
		15 percent	6,435	0.23	2,472	32
		10 percent	300,008	10.50	143,064	40
July 1992	100 percent	20 percent	21,770	0.76	40,044	153
		15 percent	140,638	4.92	82,380	49
		10 percent	574,391	20.11	469,944	68
January 1993	100 percent	20 percent	45,115	1.58	92,784	171
		15 percent	164,246	5.75	155,496	79
		10 percent	568,619	19.91	553,704	81

Note: Simulations assume 65 m2 unit for a family of four and utilities included in housing costs.

The distribution of eligible households in the third set of simulations is concentrated among pensioners, with working, low-income households accounting for an increasing share as the magnitude of the rent increase rises. With rent increases of 200 percent, pensioners make up 66 percent and working households account for 11 percent of eligible households. Pensioners and working households total 48 percent and 29 percent, respectively, of qualifying households when rents are increased by 400 percent. A disproportionate number of these households are small, with single persons accounting for 46 percent and 2-person households making up 23 percent of eligible households.

The analyses presented above are meant to be illustrative of the kinds of information that the HAIS Model can supply. Designing a viable housing allowance program for Czechoslovakia will require Czechoslovak policymakers to test the effects of alternative parameters for benefit reduction rates, floor space standards, housing quality, and utilities allowances. The policymakers can then make informed judgements about the desired balance between the housing allowance program coverage and cost.

Table 6.5
Housing Allowance — HAIS Simulation Set 3
 (Market Rent Estimates)

Scenario		Allowance Housing Cost Share of Income	Eligible Households		Total Annual Allowances (Kcs '000s)	Average Monthly Allowance (Kcs)
Simulation Period	Rent Increase Over 1991		Number	Percent of Coops & Renters		
January 1993	100 percent	15 percent	164,246	5.75	155,496	79
	200 percent	15 percent	347,660	12.17	454,956	109
	300 percent	15 percent	621,474	21.76	1,039,500	139
	400 percent	15 percent	884,521	30.97	1,943,784	183

Note: Simulations assume quality category I, 65 m2 unit for a family of four, and utilities included in housing costs.

INCOME SUPPORT PROGRAM ANALYSIS

In addition to looking at the impacts of introducing a housing allowance program in Czechoslovakia, the HAIS Model was also used to assess outcomes of alternative income support program designs. The current program of poverty level benefit—in principle—provides for a guaranteed household income at the poverty line with a 100 percent benefit reduction rate. Thus, households are supposed to be assured of an income which at least reaches the poverty line, but lose a crown of income support for each additional crown of income earned. This situation implies households will have very little incentive to increase their efforts to achieve higher incomes, as any additional income earned below the poverty line is offset by a lower level of support. As described in Chapter 3, in practice the program is less comprehensive, with very low numbers of households actually participating and benefits determined in an *ad hoc* fashion by local welfare officers. Two sets of simulations were carried out to examine the following issues:

- How will the number of eligible households change with rising and more persistent unemployment?
- What are the cost effects of maintaining the proposed poverty line and lowering the benefit reduction rate to increase the work incentives under the program?

- Are there alternative guarantee levels and benefit reduction rates that provide better work incentives with costs similar to those forecast for the current system?

The simulations used the economic forecasts described above for July 1992 and January 1993 and assumed a housing allowance program in place with a housing cost to income ratio of 15 percent. In addition, all household income (including social transfers and other income) was used to calculate household eligibility for the poverty level benefit.

Table 6.6 on the next page shows the results from the first set of simulations. The table shows that under the current poverty line, approximately 100,000 households would be eligible for assistance at the beginning of 1993. At this level of participation, the program would have an annual direct cost (excluding administration) of Kcs1.83 billion.²⁷ This amount is only about half of what was spent in 1990 on the categorical compensatory grants to counter the effects of higher food and energy prices.

The table also shows the effects of maintaining the income guarantee level while lowering the benefit reduction rate to improve the work incentives of the program. As the benefit reduction rate drops, the qualifying income level for the program increases. For example, for a family four with a benefit reduction rate of 100 percent, only such households with monthly incomes of less than Kcs6,400 would be eligible for support. If the benefit reduction ratio is reduced to 50 percent while the income guarantee level remains the same, four-person households with incomes below Kcs12,800 per month would now be eligible for income support. With Czechoslovakia's income distribution (which is highly clustered about the median), lowering the benefit reduction rate greatly increases the number of eligible households. Thus, dropping the rate from 100 percent to 50 percent makes almost half of all households eligible in July 1992. (The number of eligible households under similar parameters declines in January 1993 because of the effects of inflation which increases the incomes of marginal households enough to keep them out of poverty; the poverty line is assumed not to be adjusted for inflation of 10 percent or lower.) Even dropping the benefit reduction rate to 70 percent increases the number of eligible households four-fold while almost tripling direct program costs. Clearly, improving the work incentives of the program while keeping costs in line will require some downward adjustment of the income guarantee level.

The second set of simulations tested the results of some alternate combinations of lower income guarantee levels and lower benefit reduction rates; the outcomes are

²⁷ Note that the estimated number of participants is lower than the reported number of participating households in 1990. However, the forecast program cost is almost 70 times higher than reported outlays. A likely explanation is that local welfare officers are dealing with cases that would not qualify under the income limits assumed in the model, but are mainly providing non-cash assistance such as job placement, clothing or food for children, or other in-kind support.

Table 6.6
Poverty Level Benefit - HAIS Simulation Set 1

Simulation Period	Income Guarantee Level*	Benefit Reduction Rate	Eligible Households		Total Annual Benefits (Kcs m)	Average Monthly Benefit (Kcs)
			Number	Percent of All Households		
July 1992	100 percent	100 percent	58,267	1.06	866	1,238
	100 percent	90 percent	110,782	2.01	1,152	866
	100 percent	80 percent	194,261	3.53	1,807	775
	100 percent	70 percent	393,658	7.15	3,478	736
	100 percent	60 percent	1,474,003	26.79	7,562	427
	100 percent	50 percent	2,740,899	49.81	19,060	579
January 1993	100 percent	100 percent	99,921	1.82	1,833	1,529
	100 percent	90 percent	147,549	2.68	2,192	1,238
	100 percent	80 percent	229,606	4.17	2,940	1,067
	100 percent	70 percent	428,409	7.78	4,598	894
	100 percent	60 percent	1,286,607	23.38	8,346	541
	100 percent	50 percent	2,354,150	42.78	19,413	687

* Income guarantee level is given as a percent of the proposed poverty level (less the household allowances which are covered through the housing allowance program). For a family of four, the proposed income guarantee is approximately Kcs6,400 per month. The housing allowance benefit reduction rate is held constant at 15 percent.

shown in Table 6.7. Most of the alternate parameter sets manage to keep the number of eligible households to less than 5 percent of all households. Numbers of participating households and program costs rise dramatically only when the benefit reduction rate is reduced to 60 percent or lower without bringing the income guarantee level down sufficiently. In terms of keeping program costs in line with those forecast for a systematic application of the current system with the proposed poverty line, an income guarantee level of about 80 percent with a benefit reduction rate of 70 percent has the most similar program direct costs.

The different combinations of income guarantee levels and benefit reduction rates also influence the composition of eligible households. In the forecast for January 1993, the present proposed system—a 100 percent benefit reduction rate with an income guarantee level set at the proposed poverty line—about two thirds of the long-term unemployed (who do not receive unemployment insurance) receive benefit. The

Table 6.7
Poverty Level Benefit — HAIS Simulation Set 2

Simulation Period	Income Guarantee Level*	Benefit Reduction Rate	Eligible Households		Total Annual Benefits (Kcs m)	Average Monthly Benefit (Kcs)
			Number	Percent of All Households		
July 1992	100 percent	100 percent	58,267	1.06	866	1,238
	95 percent	90 percent	68,611	1.25	929	1,128
	90 percent	80 percent	116,679	2.12	1,086	776
	85 percent	70 percent	171,830	3.12	1,376	667
	80 percent	70 percent	139,661	2.54	1,024	611
	80 percent	60 percent	327,465	5.95	1,992	507
	70 percent	60 percent	147,676	2.68	974	550
	75 percent	50 percent	520,806	9.46	3,246	519
January 1993	100 percent	100 percent	99,921	1.82	1,833	1,529
	95 percent	90 percent	111,831	2.03	1,895	1,412
	90 percent	80 percent	159,347	2.90	2,030	1,062
	85 percent	70 percent	205,691	3.74	2,324	942
	80 percent	70 percent	184,580	3.35	1,876	847
	80 percent	60 percent	360,883	6.56	2,870	663
	70 percent	60 percent	192,895	3.51	1,731	748
	75 percent	50 percent	556,656	10.12	4,108	615

* Income guarantee level is given as a percent of the proposed poverty level (less the household allowances which are covered through the housing allowance program). For a family of four, the proposed income guarantee is approximately Kcs6,4000 per month. The housing allowance benefit reduction rate is held constant at 15 percent.

households account for 77 percent of all eligible households. In the case of a 50 percent benefit reduction rate with the proposed poverty level, about 40 percent to 50 percent of working and pensioner households and those households receiving unemployment insurance are eligible. In contrast, 93 percent of the long-term unemployed are eligible. However, the long-term unemployed make up only 5 percent of all eligible households; working and pensioner households account for 85 percent of the total. Thus, the price of increasing work incentive effects in the program is a reduction in the narrowness of the income targeting to those most in need.

A combination of lower income guarantee levels and lower benefit reduction rates improves the poor characteristics of each case above. Again, about two-thirds of the long-term unemployed qualify, though they now only account for 43 percent of eligible households. However, working and pensioner households only make up 18 percent of eligible households and represent less than 1 percent of the households in this category. In this scheme, work incentives are improved, but the support payments remain primarily with those in the poorest circumstances.

POLICY CONCLUSIONS

The above results suggest a number of policy conclusions about future directions for changing the Czechoslovak social safety net.

Need For a Housing Allowance. The combination of increasing and more persistent unemployment and increasing rents makes the need for a housing allowance program (or some of other form of well-targeted housing assistance) more pressing. By the beginning of 1993 (under the plausible economic assumptions outlined above), over 150,000 households (about 5 percent of all households living in rental or cooperative units) could be in need of some assistance in meeting their housing costs.

In the short term, the rent increases planned for the beginning of 1992 will not push many households into a situation of having to devote excessive portions of their income to housing. However, if the second round of rent increases comes into effect as planned in mid-1992, the numbers will jump and continue to increase as the unemployment situation worsens and households begin to exhaust their unemployment benefits. This implies that Czechoslovak policymakers should begin to act in early 1992 to decide on the form of housing support program desired and begin to develop the administrative apparatus to implement and manage the program. The simulations described above show that a well-targeted support program can provide assistance where it is most required without incurring the large costs that have characterized the categorical subsidy programs in the past. However, the need to select potential beneficiaries according to their income—a new process in Czechoslovakia—means that a great deal of work will be required to establish an effective administrative structure for the program.

Financial Feasibility of a Housing Allowance Program. If the parameters of the housing allowance program are set so as to target assistance to those most in need (rather than spreading the subsidy widely, even to households whose need is only marginal) the results show clearly that the net result is a *decrease* in the amount of subsidy devoted to the public sector rental stock. In the case of the planned rent increases through July 1992, the direct cost of the housing allowance program is only 3 percent of the amount of increased resources generated by the rent increase. Even if rents were increased by 400 percent over their 1990 levels at the beginning of 1993, the

increased rent stream is still 3.5 times larger than the direct costs of a housing allowance program where the standard share of income devoted to housing is set at 15 percent. Thus, a housing allowance program combined with a program of rent increases can greatly reduce the amount of subsidy required by local governments to operate and maintain their rental housing stock.

Reform of the Poverty Line Benefit Program. Finally, the HAIS simulations confirm the need to look closely at the current structure of the poverty level benefit, as Czechoslovak policy makers are now doing. In its current form, it provides assistance in a non-systematic manner, creating many openings for differential treatment of households in similar circumstances. In addition, the program has almost no positive work incentives; participating households only improve their circumstances if they are able to find additional employment that raises their income substantially above the poverty line.

The simulations carried out suggest that reforming the system is not simply a question of lowering the benefit reduction rate to improve work incentives. Such an approach greatly increases the cost of the program and, with currently proposed poverty line levels and a benefit reduction rate of 50 percent, would make almost half the households in the country eligible for some income support payment. This implies that a system which introduces a stronger work incentive (by lowering the benefit reduction rate) must also lower the income guarantee level to keep program participation and costs within budgetary limits.

A draft proposal prepared by the Federal Ministry of Labor and Social Affairs in January 1992 seeks to address some of these issues. The proposal envisages a family allowance which is composed of a child allowance (which may be either a universal grant for all dependent children or a means-tested grant for households with incomes below a certain level) and a social allowance (which is a means-tested income support grant). The social allowance is defined as a fixed grant for households with after-tax incomes below the poverty line, and a phased-out grant for households with after-tax incomes above the poverty line.

The proposal is a marked improvement over the current system in a number of ways. It provides strong work incentives for households below the poverty line since all additional income adds to total household income; there is no reduction in the grant for these households. For higher income households, the work incentive is weaker, as part of the grant is phased out, but still better than under the current system. However, there are some significant potential problems. First, the cost of the system could be very high, as the fixed grant may have to be quite large to provide adequate support to those households with very low incomes. Second, with a large fixed grant paid up to the poverty line, the phased-out grant paid to higher income households may reach quite far up the income distribution if a moderate work incentive is to be retained. These factors combined imply a potential for a very costly program (if a large proportion of households

are clustered about the poverty line) and some inefficiency in the distribution of benefits, as households near the poverty line will receive an allowance that raises their income substantially above the poverty line. Finally, the two-tiered structure of the program makes its effects and intentions less clear to beneficiaries, dampening the intended work incentive effects.

The relative importance of these effects depends crucially on how the parameters of the program are set. A fixed grant that begins to phase out sooner may alleviate many of the problems described above while retaining the strong work incentives the program seeks to foster. Further analysis using a modified version of the HAIS Model could resolve these questions about the relative costliness of various program designs.

Integrating Social Welfare Programs. Developing social welfare programs that each respond to particular problems should not happen in isolation. There are opportunities for coordination and simplification in both program design and administration. In the case of program design, if housing allowances are introduced, the portion of the current poverty line calculation which covers household costs should be revised to reflect the fact that housing costs for low-income households are now being met through a different program.

The family allowance proposal described above makes some initial steps toward creating a more integrated system of benefits by recognizing the interrelationship between the various benefit programs. However, the proposal could go further in explicitly defining these interactions. For example, although qualification for a social allowance is based on the "net financial (after tax)" household income, it is not clear whether this includes benefits and transfers from the state. If a housing allowance is instituted, housing allowance payments to the household should be considered as income to the household before the social allowance payment is calculated.

The need to systematize the payment of income support to ensure equitable treatment of similar households also implies for an administrative system like that described above for housing allowances that conditions the granting of support on the households' income. The need to verify income to confirm household eligibility suggests that the administration, forms and procedures, and income tests and verification for housing allowances, poverty level benefit, and other future income-conditioned programs can be coordinated. A single means test and set of forms for all programs can greatly simplify the task the household faces in obtaining benefits, reduce the administrative effort faced by social welfare officials, and bring about better coordination of benefits.

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ANNEX A**An Essay on the Social Safety Net**

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Introduction

This paper is intended to give some applied content to ideas of transfer program design which are generally well known. Three goals of an efficient transfer program are: i) to provide adequate income to program beneficiaries, ii) to minimize budget expenditures and iii) to minimize labor supply disincentive effects of program benefits. The three goals are not mutually compatible so that compromises must be made in trying to achieve the individual goals. The compromises are incorporated in setting the levels of two program parameters: the basic level of family income guaranteed by the program and the benefit reduction rate (or marginal tax rate) associated with increased earnings.

The paper has three main parts. Part 1 reviews the simplest case of the program design problem. Part 2 presents several of the realistic considerations that intrude when program design is evaluated in an actual economy. Part 3 has some observations pertinent to the Czechoslovak economy.

The Simple Case

To help frame the subsequent discussion, it may be helpful to review some basics in welfare program design. Initially, a very simple economy is presented. Consider an economy where family income (Y) is derived from only two sources: labor market earnings (E) and social assistance transfers (FSA). The transfers guarantee a basic income floor (G), and when there are earnings, benefits are reduced at a constant marginal rate (b) until the point is reached where transfers are no longer received (the break even point or E_0). There are income taxes (TY) for families, but these are levied only when family income exceeds the breakeven point. The income tax is levied at a constant marginal rate (t). Disposable income (YD) is the sum of earnings and social assistance payments less income taxes.

Equations to characterize this economy are as follows.

$$(1) \quad Y = E + \text{FSA}$$

$$(2) \quad \text{FSA} = G - bE \text{ if } E < E_0, \text{ otherwise FSA} = 0$$

$$(3) \quad TY = t(E - E_0) \text{ if } E > E_0, \text{ otherwise } TY = 0$$

$$(4) \quad YD = E + FSA - TY$$

Initially income is set at the guarantee level for families with no earners. Then as earnings increase above zero, family disposable income increases by $(1 - b)$ for each extra unit of earnings until the break-even point is reached. Above the break even point disposable income increases by $(1 - t)$ for each extra unit of earnings. In the figure b and t are not equal (b exceeds t), but they could have the same values.

The two parameters of this transfer payment system, G and b , can be set in any number of ways. Their potential range of variation would likely be as follows. G could be set anywhere from the poverty threshold downward while b could be set anywhere between zero and unity.

Variation in the two parameters have clearly identifiable effects on the achievement of the three transfer program objectives. These effects can be categorized as follows:

<u>Transfer Program Objective</u>	<u>Effect of an Increase in G</u>	<u>Effect of an Increase in b</u>
Income adequacy	positive	negative
Minimize budget expenditures	negative	positive
Minimize labor supply disincentive effects	negative	negative

In other words, raising the income guarantee (G) improves the income of low income recipients, but raises transfer program outlays and harms labor supply incentives (the income effect in a standard static labor supply analysis). Raising b , on the other hand, has a negative impacts on the achievement of income adequacy (for households with some earnings but less than E_0) and labor supply²⁸ while reducing transfer expenditures.

This simple example illustrates that changes in transfer program parameters have differential effects on the achievement of transfer program objectives. Differential effects are inherent in the contradictory objectives of the transfer programs themselves. Careful

²⁸ This presumes the substitution effect is larger than the income effect for persons whose social assistance transfers are reduced.

judgement must be exercised in setting the levels of the income guarantee and the benefit reduction rate.

A More Realistic Case

Moving from the previous simple example towards a more realistic situation involves many possible considerations. To keep the presentation manageable, just four new considerations will be added at this point.

(1) Many different transfers may affect family income. It is convenient to classify income transfers into three broad classes: i) social assistance transfers (FSA) which are conditioned on the level of family income and (perhaps) other qualifying conditions, ii) social insurance transfers (FSI) which cover foreseeable contingencies such as old age, unemployment and disability and iii) other contingent transfers (FOC) which are received irrespective of family income when categorical qualifying requirements are satisfied, e.g. presence of children in the family.²⁹

(2) Individuals as well as families are relevant economic units for receiving transfers. For most social insurance transfers the unit is the individual worker who establishes eligibility on the basis of work experience and receives the transfer when there is an interruption of earnings due to an insurable contingency. The contingencies include old age, unemployment, a work injury or the onset of disability (invalidity) from a non-work cause. Eligibility derives from labor market activity, and the benefit level reflects previous earnings, not family income.³⁰

(3) Benefits are received in-kind as well as cash benefits. Rent subsidies, food stamps and health benefits all are received in-kind and pose questions of valuation vis-a-vis cash benefits. Because in-kind transfers are restricted to specified uses, they may have lower value to the recipient than an equivalent amount of cash transfers. The issue of the proper valuation of in-kind transfers will not be pursued in this paper.

(4) Cash and in-kind transfers are financed by more than one kind of tax. In particular, many economies finance social insurance transfers with payroll taxes levied on employers and/or workers.

Explicit recognition of these four considerations complicates the design of an efficient social welfare transfer system, but the same three goals remain. A well designed

²⁹ This three part categorization is the same as used by Barr (1991). The definition of income in this paper also follows his usage in that assets as well as the current income flow are considered in assigning eligibility for social assistance transfers.

³⁰ There can be dependents' benefits, but both the basic benefit and the dependents' benefit are related to earnings not family income.

system must strive to provide adequate income to families, to minimize budget expenditures and to minimize labor supply disincentive effects. This more complex system must face issues of overlaps in the provision of transfers, gaps in program coverage and the compounding of marginal benefit offset rates and marginal tax rates.

A simplified system of equations to characterize this more complex situation is as follows.³¹

$$(1a) \quad Y = E + FSI + FOC + FSA$$

$$(2a) \quad FSI = FSI_0 = f(E \text{ lagged})$$

$$(2b) \quad FOC = FOC_0$$

$$(2c) \quad FSA = G - FSI - FOC - bE$$

$$(3a) \quad YT = E + FSI + FOC + FSA$$

$$(3b) \quad TY = t_y(YT - YT_0) \text{ if } YT > YT_0, \text{ otherwise } TY = 0$$

$$(3c) \quad TSI = t_e E$$

$$(4a) \quad YD = E + FSI + FOC + FSA - TY - TSI$$

A new variable in this second system of family income equations is taxable family income (YT) which is defined in (3a) as the sum of earnings plus the three types of transfers. It equals family income in (1a). Income is taxable when it exceeds a threshold level (YT_0). Two new parameters are the marginal income tax rate (t_y) and the social insurance tax rate on earnings (t_e).³² Both taxes have constant marginal rates.

Many more assumptions must now be made explicit in this equation system because there are many more variables. Some assumptions are admittedly arbitrary while others may be controversial. Note the following ones. First, social insurance benefits and other contingent benefits both are counted in determining the level of social assistance transfers. Second, income taxes are levied on transfer payments as well as earnings when

³¹ Since the number of variables in this equation system is larger it may be useful to provide a key. The first letters for variables identify the following categories: Y - family income, E - earnings, F - transfer payments, T - taxes, and G - the income level guaranteed by social assistance transfers. Subsequent letters are mnemonics to identify a particular subclass of these variables, e.g. FSA - social assistance transfers.

³² The social insurance tax rate (t_e) is the sum of the employer rate plus the employee rate. This presentation, in other words, assumes the employer payroll tax is shifted fully backward onto the money wages of workers. This assumed incidence is the most likely, and it also makes the presentation of marginal tax rates straightforward.

income exceeds the taxable income threshold (YT_0). Third, payroll taxes are levied on workers at a marginal rate (t_{s1}) that commences with the first dollar of earnings and continues without an upper limit. Alternative assumptions could be made in all of these areas.

Several considerations in this more complicated transfer system are unchanged from the simple system of the previous section. There still is a guarantee level for social assistance transfers (G). There still are budget issues, but here multiple types of transfers and taxes are recognized.³³ There still are benefit reduction rates and marginal tax rates that may affect work incentives. For low wage workers the net effect of increased earnings must now recognize the marginal payroll tax rate as well as the benefit reduction rate for social assistance transfers. Achieving the three transfer program objectives (income adequacy, minimum budget expenditures and minimum labor supply distortions) is more complicated because it must now be attempted within a more complex environment of taxes and transfers.

In this system which recognizes social insurance as well as multiple types of transfer payments, a discussion of benefit overlaps, benefit offsets and the targeting of transfer payments can be instructive. The discussion is premised with assumptions that social assistance transfers are to be targeted on families truly in need and need is reflected in the level of family income. It is also assumed that the objective of minimizing total budget outlays on transfer payments is very important.

The preceding assumptions allow us to make the following observations.

(1) Receipt of social insurance transfers should be conditioned on the absence of substantial levels of current earnings. Someone receiving an unemployment, disability or retirement transfer (based on past labor market activity) is presumably not at work because of the indicated condition. Nonwork status is given concrete meaning by the absence of earnings or by a low level of earnings. Having substantial earnings should cause a diminution of benefits or a reduction of benefits to zero.

Two enforcement issues are present here. The first is the definition of "substantial." A retiree may have some earnings but be subject to an earnings (or retirement) test. Earnings above a threshold then cause benefits to be reduced at some marginal rate until the point is reached where benefits are reduced to zero. If earnings are zero, the full social insurance entitlement is received. The second is the issue of claimant fraud. If someone receives a disability (unemployment) transfer premised on full disability (unemployment) they should not have earnings at the same time. The fraud issue is more complicated if an employer colludes with a worker or if a worker is self employed, but having a system with earnings crosschecks will reduce fraud.

³³ Social insurance trust funds could be added since social insurance taxes and transfers are explicit variables in the set of equations.

To monitor this system it is necessary to have individual identifiers for each person so that earnings records can be matched against lists of social insurance transfer recipients. Reducing benefits to those with substantial earnings will save on budget expenditures and target social insurance benefits more effectively. Note that the monitoring is done on individuals.

(2) Social insurance transfers and other conditional transfers should be considered in the calculation of countable income which is used to assign social assistance transfers to low income families. The determination of a rent subsidy, for example, must consider all social insurance transfers and other conditional transfers (children's allowances) as well as the current earnings of family members if it is to be most effectively targeted on the poor. Unemployment compensation and disability compensation should enter the countable income calculation. Making these offsets will substantially reduce total social assistance transfers.

(3) Use of the positive tax system, e.g., an income tax on families, can address a wider range of income equity issues than can social assistance transfers even when the latter have an optimal design. The ultimate lower limit on social assistance transfers is zero. Social assistance transfers cannot take away from family income if income is unusually high. An income tax with a broad definition of taxable income, on the other hand, can operate over the entire range of family incomes. Thus an income tax can "rake back" part of a children's allowance or any other transfer if the transfer is included in the definition of taxable income.

To summarize, three important issues in transfer program design have been identified. (i) The social insurance transfers should operate recognizing the interface between current earnings and the current receipt of transfers to ensure that both are not occurring simultaneously. (ii) The determination of social assistance transfers should recognize a broad definition of countable income in determining the level of such transfers. (iii) The key issue of vertical income equity is best addressed with an income tax. Transfers should be included in the measure of income which determines income tax liabilities.