The Effectiveness of Selected Housing Subsidies in the Czech Republic: How to Support Higher Income Households?

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In the first part of this paper, I will outline briefly the history of housing policy in the Czech Republic dating back to 1918. In the second part I will concentrate on empirical testing of the effectiveness of selected housing policy subsidies used in the Czech Republic at the end of the 1990s. As in other countries in Central and Eastern Europe, the considerable decrease in the financial affordability of housing in the Czech Republic after 1989 demanded that new social and housing policy instruments be introduced. The goals of the new programmes were, however, often defined in very generic terms, which – together with the missing data about the actual recipients of benefits – make the assessment very difficult. The choice of programmes for the purpose of an effectiveness analysis was therefore limited to rent regulation, tax relief on interests from construction savings scheme credits and mortgage credits, and the housing allowance.

1. State activities in the area of housing in the Czech Republic – a historical perspective

Regulatory intervention of the state in the area of housing has quite a long tradition in the Czech Republic. As early as the post-war period of the First Republic (1918 – 1939), state support of new housing construction was accompanied with measures aimed at tenant protection and housing market regulation. Based on the Acts on the Construction Traffic (adopted between 1919 and 1936) the construction of "small flats" (35 – 80 m^2) for low-income households was supported. The 1920 Act on Tenant Protection gave protection to tenants in lease apartments against sharp rent increases. In the years immediately following the adoption of the law, practically all rental flats were subject to this act; gradually – with the continued construction of new rental flats (especially since 1930), certain types of housing were exempted from the power of this act (e.g., flats in new blocks of flats constructed after 1924, flats in blocks of flats owned by legal entities, flats with four and more rooms, flats with tenants subject to a retirement tax on an income of CZK 100,000 and higher etc.). The Act concentrated on the protection of low-income groups of the population. However, the introduction of the act resulted in lower mobility of the population. In order for people not to loose the protection afforded by the act, they remained in flats they would have left under different circumstances. Moreover, as a result of the regulation of selected segments of rental housing, the difference between rent in the protected and unprotected flats increased tremendously. The average annual rent collected from the main room of an unprotected flat was, on average, two to three times higher than in a protected flat. This type of tenant protection was primarily a consequence of a housing shortage immediately following the war and a sharp increase in construction prices.

After 1948 housing policy was mostly shaped by the state. Mass production of flats using prefabricated construction parts predominated. This type of construction was the rule in most European countries after the WWII. In the Czech Republic, however, the expansion of this type of housing production was slightly delayed and it started when the shortcomings of the pre-fab construction were already known in other Western countries. Despite this, pre-fab housing construction was considered to be the only solution to the housing problems in the country, and this has brought and still brings today a lot of problems.

The state housing policy in this period was based on the principle that a flat is such an important good in the life of a person that the increase in construction, maintenance and management costs should be not reflected in household expenditures or else in rent increases. This necessarily resulted in the continually growing volumes of state subsidies for housing construction as well as for the operation, management and maintenance of the housing stock. Management based on redistribution of funds resulted in a rupture of basic economic principles and an increasing discrepancy between the actual costs of the housing stock operation and the volume of funds collected from rent. The extensive, state-funded housing construction (in the 1970s as many as 100,000 flats were constructed annually in the Czech Republic) was increasingly more confronted with limited resources, and therefore other types of housing construction (corporate and co-operative) gained in importance.

Housing construction was funded through special-purpose state subsidies, state contribution for co-operative housing construction and state contribution for individual housing construction (Lérová, 1983). Municipal housing construction merely entailed the construction of residential houses with rental flats which were managed by the "national committees" (or more precisely, housing management enterprises managed and funded by the national committees), and was fully funded through state subsidies. Corporate housing construction was abolished in 1981. At its time corporate construction was funded using the resources of the particular state enterprises involved and partially from the state budget and a long-term bank credit.

The "stabilisation co-operative construction" was organised by housing co-operatives, and the construction costs were covered using co-operative membership fees (on average approximately 18% of the total construction costs), state subsidies (on average approximately 56% of the total construction costs) and qualified bank credits with a 3% interest rate and 30-year maturity (on average approximately 26% of the total construction costs). Individual housing construction included primarily the construction of family houses, their extensions and outbuildings and, to a limited extent, also the construction of residential houses with individually owned flats. Individual construction was mostly funded using the resources of the constructors themselves, and was supplemented with contributions from organisations or national credits and loans provided by state banks with up to 30-year maturity and 2.7% interest rate.

State dwellings were allocated on local level. Despite the officially declared proclamation about the responsibility of society for ensuring housing for each single citizen, the allocation process was characterized by injustices, bribery and protectionism. In the case of state dwellings, the rent was fixed at the level of 1964 prices through a legal regulation, and thus no funds were created even for the most elementary maintenance. Huge subsidies to cover the costs of utilities resulted in wastage both on the production and consumption side. Unlike housing management enterprises, the budgets of housing co-operatives had to be in principle balanced, and thus the full cost of operation, maintenance and repairs were included in the payments for co-operative flats. People living in co-operative flats thus spent much more on housing than those living in state housing. Besides the one-time investment in the co-operative construction costs, these people had to pay monthly repayments on the state credit and contributions to the repairs fund.

Paradoxically, the cheaper state flats were allocated mostly to communistic nomenclature, leading employees of the state and the political apparatus, members of the armed and other forces etc. – the very same people whose incomes were higher due to the functions they held. The advantages of having a low rent in state flats were enjoyed by approximately one third of the population. Those who were not able to find housing in a state flat had to resort to co-

operative housing or individual housing. The housing co-operative construction also allowed undemocratic practices in flat allocation. The actual need for a flat, individual involvement of co-operative members in acquiring a flat and the length of their membership or personal property contribution no longer played the main role. Furthermore, the state also regulated the prices of construction work and materials.

The solution to the housing problem also included the effort to slow down the migration of the population to cities by creating a dense network of state-subsidised public transport which allowed daily commuting of the population from the countryside to urban centres. The ownership of "secondary housing" (cottages and summer houses) is a very specific aspect of housing in the Czech Republic. A large portion of people (especially in larger towns and cities) owned a cottage or a summer house in addition to their flat. This was a result of the fact that, first, this allowed people certain self-fulfilment and resulting personal satisfaction derived from working "on their own" piece of land, and, secondly, of the effort to escape at least a little from the unsuitable and unhealthy urban housing and environment.

2. State housing policy after 1989

The first housing policy strategy in the Czech Republic approved in 1991 stated that the administrative (directive) flat allocation system was insupportable, that it led to an artificial housing shortage and that it was necessary to introduce market principles in the housing. The role of the state was to be limited to setting the conditions for the creation of a housing market, and particular measures in the area of housing policy were to be created at the level of the Czech and Slovak Republics. The housing reform was to concentrate on the following areas:

a) new legal framework – transfer from administrative to contractual relationships, legal definition of the institute of ownership, including the owners' right to handle their property, creating a balance in the relationship between landlords and tenants (amendment to the Civil Code), restitution of housing stock expropriated by communistic regime to former owners or their descendants, creation of legal conditions for the privatisation of a significant portion of the housing stock and gradual rectification of housing prices.

b) decentralization– transfer of the non-restituted part of the state housing stock to the municipal ownership; municipalities were to implement local housing policy based on their knowledge of local conditions; rent deregulation allowing a limited annual increase of the rent until reaching the target situation given by the housing demand and supply in a given region. The rent price was to be set in view of the quality of a flat, location in a block of flats and geographical location, and the review of these features was supposed to be left within the power of local authorities. The basic rent rate was to be calculated based on the current market value of the housing stock and was to take into consideration housing stock operation, maintenance and management costs.

c) social network – funds saved as a result of the eliminated subsidies for rental flats were to be used exclusively to increase the rent allowances for those in social need; additionally, a maximum acceptable housing cost-to-income ratio was to be defined which, if exceeded, would entitle a household to a housing allowance. The housing allowance was to be provided to people in all types of housing depending on their social situation and was to take into account regional differences.

d) new housing support programmes – the abolition of the existing extensive, state-funded housing construction; support for new construction using advantageous credits and grants in view of the needs of individual regions; establishment of a housing savings scheme; support for the elimination of the deprivation of the housing stock

and defects of the pre-fab construction. The fragmented competences in the area of state housing policy should be concentrated at one department.

A modified housing policy strategy of 1993 emphasised the necessity of gradual transfer from state regulation to the housing market due to the limited economic possibilities of the state and the possibility of undesirable social shocks. However, the issue of rent regulation maintained its priority due to the continued gap between the actual rent prices and the quality of housing and the economic possibilities of tenants, a lack of funds acquired through rent collection for repairs and maintenance of the housing stock and the related lack of investment initiative in new construction. The strategy also mentioned the difficult situation of municipalities related to the transfer of the ownership of the housing stock which the municipalities attempted to resolve through a massive privatisation. The strategy explicitly stated that the home-ownership should not be favoured as the dominant legal form from the following reasons: lower mobility of owners and more difficult administration and maintenance of privatised residential houses. A sharp reduction in new housing construction as a result of the significant reduction in the financial contribution of the state and a bad situation on the credit market is also mentioned. In the social area, the absence of stimuli motivating tenants to seek housing adequate to their financial possibilities was criticised. The suggested solutions were as follows:

- in the area of rental housing the fastest possible growth of the rent to the level covering the full operating and maintenance costs of the real estate and later to the market level.
- in the area of new housing construction, the state was to participate in the construction, maintenance and modernisation of the housing stock through precisely defined programmes. Indirect financial participation was given priority, such as guarantees for credits or state interest subsidies.
- the housing allowance was to be income-tested and to motivate tenants to seek housing corresponding to their income situation.
- the necessity to concentrate the powers in the area of housing within the power of one specialised institution was mentioned again.

In the 1997 "Intentions and Measures of the Government in the Area of Housing" document it is stated that the tenure structure in the Czech Republic approximately corresponded to the European standard and there was no reason to prefer owner-occupied housing to rental housing. The report cautioned that the existing level of new construction was not sufficient in order to achieve simple reproduction of the housing stock, that housing costs (especially in rental housing) continued to be strongly deformed, that the rent was not high enough to cover the operation and maintenance of rental buildings. In order to correct mentioned problems, it was proposed:

- a more efficient use of funds accumulated by construction savings scheme that were not used to cover credits (the Czech Act on the Construction Savings Plans entered into force in 1993);
- to expand the entitlement to credit support in the case of mortgage credits (the system of mortgage credits was introduced in the Czech Republic in 1995) to some legal entities (municipalities, non-profit organisations); a proposition to increase the portion of households entitled to the mortgage credit to approximately 45% of households by applying a system of state guarantees, zero-interest loans and a new method of mortgage credit repayments.
- to establish non-profit housing associations under the assumption that these associations would supplement and gradually replace municipal activities especially in the area of housing construction;
- to transfer the state lands to the ownership of municipalities free of charge under the condition that these lands would be used for housing construction.

- to proceed faster with rent deregulation with the assumption of expanding range of recipients of the existing housing allowance. The housing allowance would balance out the expected rent increase in low-income households.
- to provide other modifications of legal relationships concerning rental and ownership housing and newly also the need to provide a methodical and information support to municipalities with respect to housing development.

The last housing policy strategy, approved by the government in 1999 (and updated in 2001) differs from the previous ones especially by placing a greater emphasis on the social aspect of the housing policy and a more comprehensive approach to housing. The housing policy objective was formulated as "creating such a situation when each household is able to find adequate housing with respect to space, quality and price". Major housing issues were identified as: deprivation of the housing stock, especially of high-rise blocks of flats; a lack of funding for proper care for the housing stock; shortcomings in the housing stock management (especially municipal housing); reduction in the housing stock (transfers of housing space to commercial space); a poor volume of new housing construction; low financial affordability of new housing especially for newly-established households; a gradually increasing housing cost-to-income ratio (deformation of the structure of housing costs since the net rent makes up only one third of total housing expenditures); insufficient subsidies aimed at the groups o population with specific housing needs.

It was proposed to address the above-mentioned issues by eliminating the existing system of rent regulation and by transferring to a new system of locally relevant rent, updating of legal regulations, strengthening the role of municipalities, establishment of the State Fund for Housing Development which would accumulate extra-budgetary funds and would provide guarantees and support in the area of housing, expansion of the support for mortgage credits to allow acquisition of older flats, support for greater use of construction savings scheme, support for first-time buyers, creation of a new rent allowance, support for "protected housing" for groups of the population with specific housing needs and concurrent creation of a system of social housing, solution of the issue of housing of socially inadaptable people, creation of a housing information system that would provide permanent and reliable overview of the structure of housing stock (register of houses and flats), increase in the availability of information about housing and research activities on housing issues.

The above-mentioned overview of housing policy plans was to outline how the housing priorities developed and changed in the Czech Republic during the 1990s. It must be emphasised that many objectives had not been fulfilled at all or only partially, a situation discussed a little at the end of the paper.

3. State housing expenditures in 2002

Following the trend in developed countries, housing support programmes in the Czech Republic have been discussed in recent years in relation to their **efficiency** and **effectiveness**. Efficiency is defined through the Pareto lens[1], effectiveness is understood as a degree to which the originally planned goals of a state intervention were met, i.e., whether the funds were targeted where they should have been targeted and whether help reached those who were

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[1] The goal is to allocate the limited resources in an optimal way so that their further redistribution may increase the utility of one (or more) entities only at the price of reducing the utility of another (or more) entities. In view of the fact that this optimum allocation is not achievable in reality, state interventions should strive to approximate such an optimum allocation as much as possible. Barr (1973:72) defines economic efficiency as follows: "Generally speaking, economic efficiency lies in how to best use the limited resources to satisfy human needs".

supposed to be helped. The welfare economy distinguishes between vertical and horizontal effectiveness. Vertical effectiveness measures whether funds (a housing allowance, a social flat) are actually allocated to those who need help (i.e., generally speaking, low-income households) and not vice versa. Horizontal effectiveness measures whether a programme does not exclude anyone who should be eligible.

Table 1 provides a calculation of the total volume of public housing expenditures in 2002. The expenditures are divided according to the purpose for which they were intended and also according to the office responsible for their allocation. In addition to the usually declared expenditures, the penultimate column in the table includes an estimate of a loss to the state budget following from the tax relief[2], loss to the state budget following from the tax exemption of housing savings scheme credits and an estimate of a hidden subsidy for tenants living in flats with regulated rent. The amount of this hidden subsidy was calculated as a difference between a potential equilibrium market rent price that is likely to be established after the abolishment of the existing rent regulation[3] and the current regulated rent price for 90% of the rental flats in the last Census 2001.

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[2] Any physical entity may deduct the interest paid on construction credits for housing from the tax assessment basis. The tax assessment basic may be reduced by an amount of no more than CZK 300,000 a year (~ 9.736 €).
[3] According to expert estimates this regulation pertains to 90 % of rental flats in the Czech Republic.

Table 1: Calculation of state housing expenditures in 2002

	2002 (thousands CZK)	*2002 (thousands CZK)*	*2002 (thousands €)*
	reality	reality + estimates	reality + estimates
Support for housing stock repairs (defects of prefab construction)	283,485	283,485	9,201
Prefab housing projects regeneration	79,795	79,795	2,590
Support for the construction of rental flats and technical infrastructures owned by municipalities	542,198	542,198	17,597
Support for the construction of community care homes	584,173	584,173	18,959
Support for the elimination of consequences of the floods	1,532,884	1,532,884	49,750
State premiums for mortgage credits for new construction	517,765	517,765	16,804
Ministry for regional development in total	**3,540,300**	**3,540,300**	**114,900**
SFRB – rental flats	6,000,000	6,000,000	194,729
SFRB – other	695,000	695,000	22,556
SFRB – total	**6,695,000**	**6,695,000**	**217,285**
Construction savings support (state premiums)	11,059,000	11,059,000	358,919
Property loss suffered by banks	1,211,000	1,211,000	39,303
Losses to the state budget following from the ability to deduct the construction credit interest from the tax assessment basis (as at 2001)	-	1,642,000	53,291
Losses to the state budget following from the exemption from taxation of the construction savings interest (as at 2001)	-	675,000	21,907
Hidden subsidy for tenants living in flats with regulated rent calculated as a difference between an equilibrium market price and an actual rent paid by the tenants (estimate as at 2001)	-	5,000,000 – 15,000,000	162,274 – 486,823
Ministry of Finance in total	**12,270,000**	**19,587,000 – 29,587,000**	**635,694 – 960,243**
The housing allowance	3,028,000	3,028,000	98,273
Ministry of Labour and Social Affairs in total	**3,028,000**	**3,028,000**	**98,273**
Total for MMR+SFRB+MF+MPSV	**25,505,300**	**32,850,300 – 42,850,300**	**1,066,153 – 1,390,702**
GDP in current prices	2,275,600,000	2,275,600,000	73,854,342
Percentage of housing expenditures in GDP (%)	**1.12**	**1.44 – 1.88**	**1.44 – 1.88**
State budget expenditures	750,760,000	750,760,000	24,365,831
Percentage of housing expenditures in the total state budget expenditures (%)	**3.40**	**4.38 – 5.71**	**4.38 – 5.71**

Note: MMR – Ministry for Regional Development,
SFRB – State Housing Development Fund,
DPS – community care homes,
MF – Ministry of Finance,
MPSV – Ministry of Labour and Social Affairs,
GDP – gross domestic product.
According to the Czech National Bank, the average CZK/EUR exchange rate in 2002 used in the calculation was: 1 EUR = 30.812 CZK.

Source: Ministry for Regional Development, Ministry of Finance, Ministry of Labour and Social Affairs, Family Budget Survey 2001, author's calculations.

It is clear from Table 1 that in principle four institutions are responsible for allocating state housing expenditures in the Czech Republic: the Ministry for Regional Development, the State Housing Development Fund, the Ministry of Finance and the Ministry of Labour and Social Affairs. Although the Ministry for Regional Development is directly responsible for the strategy and implementation of housing policy, the largest part of the total state subsidy is distributed by the Ministry of Finance[4]. In the Czech Republic it has not been possible yet to ensure elementary institutional conditions consisting in the creation of one centre responsible for fulfilling the basic goals of the housing policy that would bring together experts on

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[4] This applies even when we do not include in the total state housing expenditures the losses to the state budget following from the tax relief, losses from the exemption of the interest from constructing savings plans from the income tax and the hidden subsidy for tenants living in regulated rental housing.

housing policy with sufficient research support. The existing fragmentation of jurisdiction results in the fact that incompetent officials are often responsible for housing issues in individual departments, that measures adopted by individual departments are not sufficiently co-ordinated and crucial differences in opinion remain between individual departments, amplified by the political affiliation of individual ministers.

The total sum of state housing expenditures in 2002 reached CZK 25.5 billion, which comes up to 3.4% of the total state budget expenditures in that year and 1.12% of GDP in current prices. However, if we include also the hidden losses to the state budget following from the tax relief and tax exemption of savings plan credits and the hidden subsidy for tenants living in flats with regulated rent, the total volume of state housing expenditures rises from CZK 32.8 to 42.8 billion, which represents 1.44% to 1.88% of the GDP[5]. In order to estimate the hidden subsidy for tenants living in regulated housing we used a relatively complex model of equilibrium rent simulation[6]. Figure 1 captures the development of state housing expenditures as a percentage of GDP and the state budget expenditures in current prices between 1996 and 2002.

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[5] It must be noted that the total volume of state expenditures does not capture all the tax exemptions afforded to housing; their quantification is impossible or very problematic in view of the lack of data.

[6] In order to estimate the equilibrium market rent level, a simulation model of a "shock" rent deregulation was developed in the SPSS software using the actual *Family Budget Survey* (*FBS*) data file. The goal of this model was to estimate the rent level at which a sufficient number of tenants living in flats with regulated rent would move to own house/flat to satisfy the demands of households living in the market rental housing sector. First, the number of market rental flats in Prague and other regions of the Czech Republic was estimated. For each reporting household in the *FBS* living in a regulated rental housing sector, was calculated the amount of user costs such a household would need to acquire ownership housing of a comparable size and in a comparable location. Selectively increasing the current level of the regulated rent in individual regions of the Czech Republic, was assumed that if a household meets certain age and income criteria and the potential user costs of ownership housing become lower than the new regulated rent level, the household would leave the rental housing sector for the ownership housing sector. At a moment when the number of thus vacated flats equalled the total number of flats in the current market rental housing sector, the deregulation process would stop in the region and a new equilibrium rent price would be achieved, which would naturally be much lower than the today's overpriced market rent.

Figure 1: State housing expenditures in the Czech Republic between 1996 and 2002; percentage of GDP in current prices and percentage in the total state budget expenditures
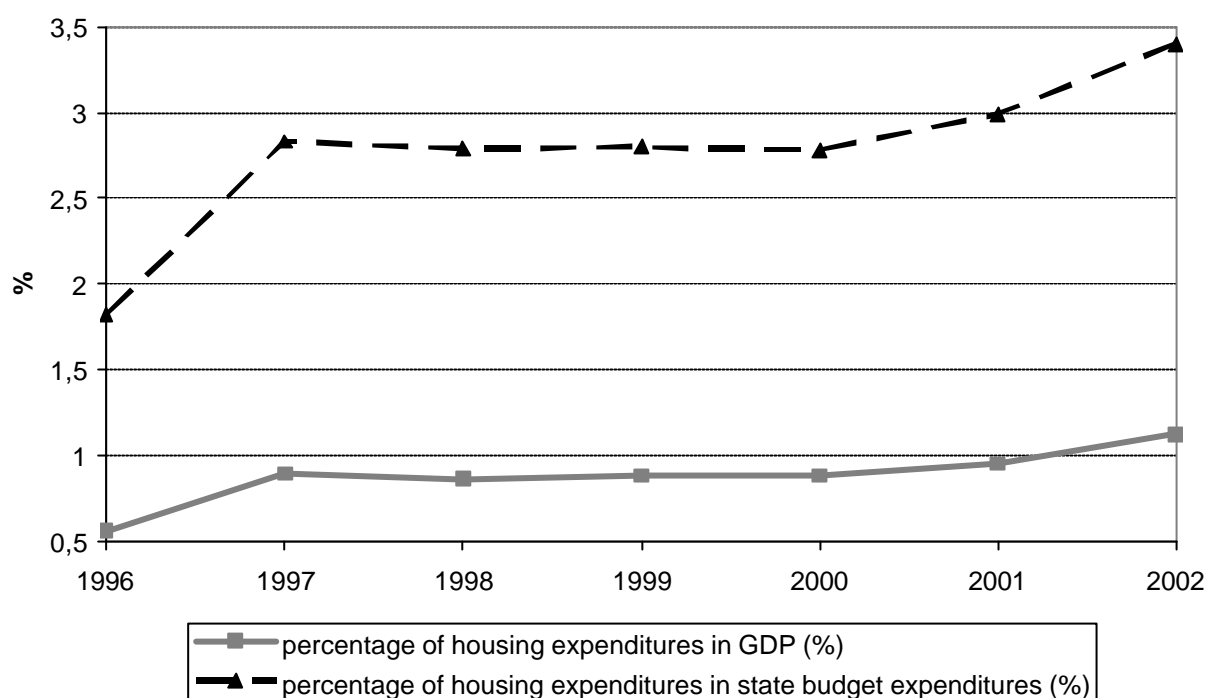
Source: Ministry for Regional Development, Ministry of Finance, Ministry of Labour and Social Affairs, Family Budget Survey 2001, author's calculations.

In the text that follows we shall concentrate on analysing the effectiveness of selected housing subsidies in the Czech Republic, or more specifically, the distribution of the subsidies among various income groups of households. The distribution of subsidies according to the total net household income and the household income per consumption unit were taken into account. The number of consumption units in a household depends on the number of its members and the age of the household members: for a head of a household the consumption unit equals 1.0, for children between 0 and 13 it equals 0.5 and for any other person in the household it equals 0.7.
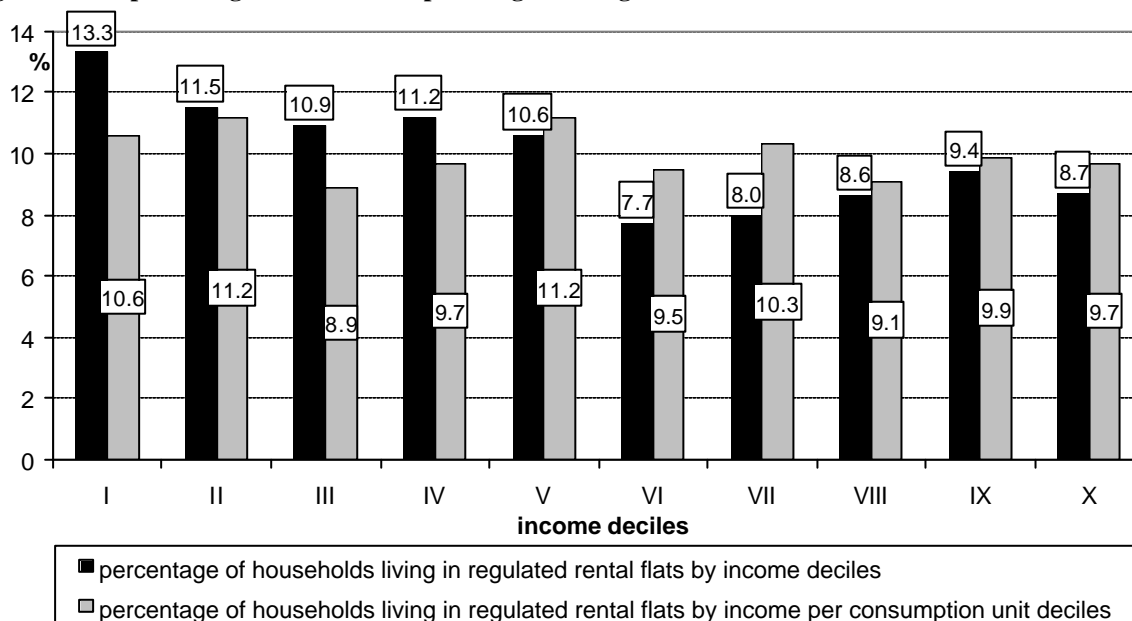
3.1 Rent regulation

Rent deregulation in the Czech Republic was launched at the beginning of the 1990s. The maximum price of a monthly rent has been gradually increased in view of the quality of a flat (four categories), size of a municipality and inflation coefficient. The local authorities had the possibility to adjust the rent in view of the local conditions through a special coefficient employed in the rent calculation; in reality, only a small portion of municipalities took advantage of this option. As a result, the limits of maximum rent per m^2 of floor space in a 1st category flat per month increased from the original CZK 2.50 in 1991 to CZK 37.07 in 2002 in Prague, CZK 24.76 in cities with a population over 100,000, CZK 18.31 in cities with a population of more than 50,000 and less than 99,999, CZK 16.42 in towns with a population between 10,000 and 49,999 people and CZK 15.23 in towns and municipalities with a population below 10,000. According to the *FBS* data file, the average rent in an average rental flat increased nominally by 673% between 1990 and 2001. If we take into account the general increase of the price level in the same period (measured using the consumer price index), the real increase of the average rent would amount approximately to 300%. In comparison with the course of rent deregulation, the prices of utilities were liberalised far more resolutely,

which resulted in a sharp increase of housing cost-to-income ratio and, compared to the EU countries, it resulted in an situation where the rent makes only one third of the total housing expenditures of an average household, the remaining two third of the total housing expenditures cover the utility payments. The rent regulation was abolished by the Constitutional Court in 2000 (in force as at 2002). Since 2002 there has been a "status quo"; no legislative regulation has been adopted that would modify the rent price, rents in flats with "regulated rent" generally remain at the level of 2001.

Just like other housing policy instruments, the existence of rent regulation could be justified by two reasons: inefficient functioning of a market and/or redistribution of means toward low-income households. The existing rent regulation in the Czech Republic is, however, completely unfounded. There is no reason for such a form of state intervention for the purpose of increasing the efficiency of the housing market functioning (when we compare the values of the usually used indicators of housing stock penetration[7], the Czech Republic does not suffer from a housing shortage compared to the old EU countries; the suspicion of an existence of a monopoly in the area of private rental housing is also unjustified).

Moreover, the effectiveness of the rent regulation is also very poor. Figure 2 shows the percentage of households living in the regulated rent housing sector in the total number of households in individual categories according to the total household income, or more precisely, total income per consumption household unit.

Figure 2: The percentage of households profiting from regulated rent


Source: FBS 2001. N = 3,291, n = 857.

As is clear from Figure 2, rent regulation is almost equally applied to "rich" and "poor" households. As many as 10% of the wealthiest Czech households (according to income per consumption unit ranking in the 10th decile of the income distribution) live in a flat with regulated rent and this percentage is not significantly lower than among the poorest households (according to the household income per consumption unit in the 1st decile of the income distribution – 10.6 %).

Figure 3 shows how the total hidden subsidy following from rent regulation is distributed; the total hidden subsidy is defined as a difference between the estimated equilibrium market rent price (see Table 1) and the current regulated rent price, again according to the total household

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[7] Most often the number of flats per 1,000 inhabitants.

income, or more precisely, total income per consumption housing unit. It is clear from the Figure that these were especially the wealthiest and medium-income households that profited from rent regulation in 2001. On the contrary, households with the lowest income benefited relatively the least from this form of state subsidy.

Figure 3: Distribution of the sum of the hidden subsidy among tenants living in regulated rent housing according to household income
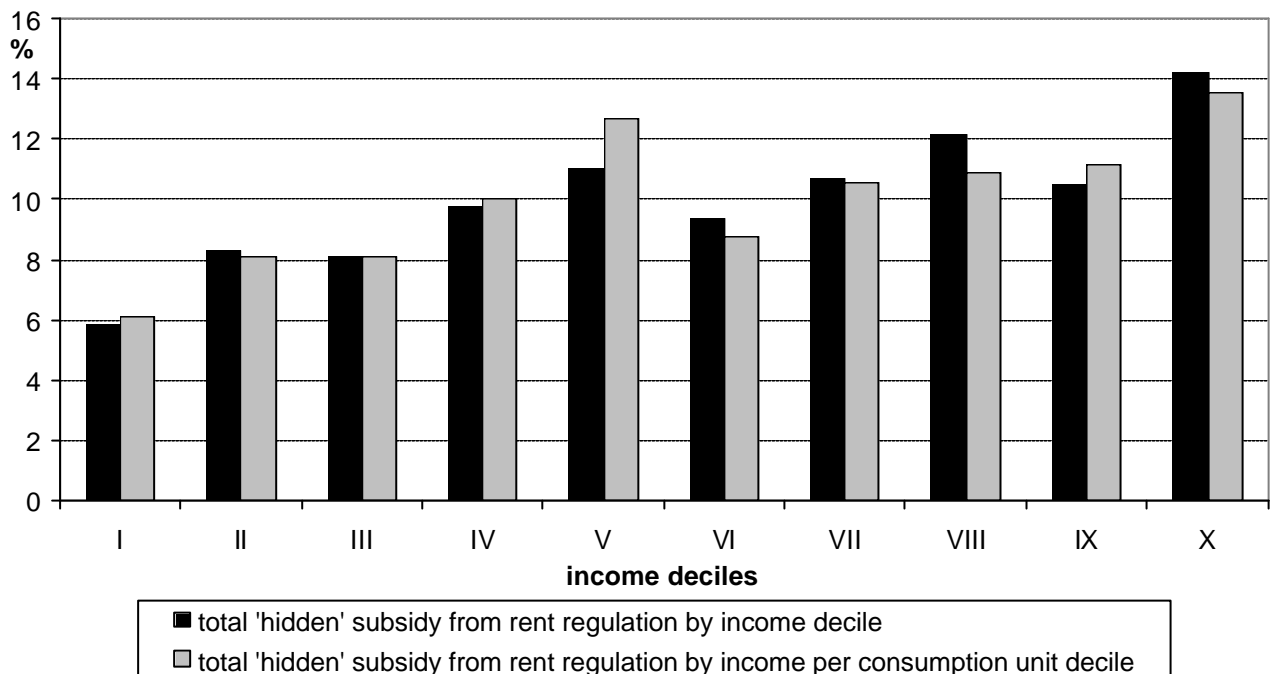

Source: FBS 2001, author's calculations.

3.2 Tax relief

The tax exemption on interest on construction savings plans, including state premiums, from the income tax, and the tax relief (up to the amount of CZK 300,000 per year) are the most common (with respect to the number of payers claiming this relief) fiscal subsidies in the Czech Republic. Furthermore, the following are exempt from the income tax:

- yields from mortgage bonds;
- income from the sale of a family house or a flat (including an ownership share), including related land, if the seller's place of residence was in such a family house or a flat for at least 2 years immediately preceding the sale;
- income from the sale of real estate, flats and commercial space provided that the period between the sale and the acquisition exceeds five years; and
- income from a transfer of membership rights in a co-operative housing provided that the period between the sale and the acquisition exceeds five years.

The hidden subsidy based on rent regulation applied today in the Czech Republic is by far not the only type of support that benefits households with the highest incomes. The distribution of fiscal subsidy following from the tax relief is clearly diverted to the benefit of the highest income taxpayers in the Czech Republic (Figure 4). The Figure captures an estimate of the distribution of the fiscal loss on the population of taxpayers submitting their own tax statement; the estimate for all taxpayers (including employees) is impossible due to the unavailability of data.

Figure 4: Distribution of the total fiscal loss to the state budget following from the tax relief, according to the income from economic activity (population of individuals submitting their individual tax statement, 2001)
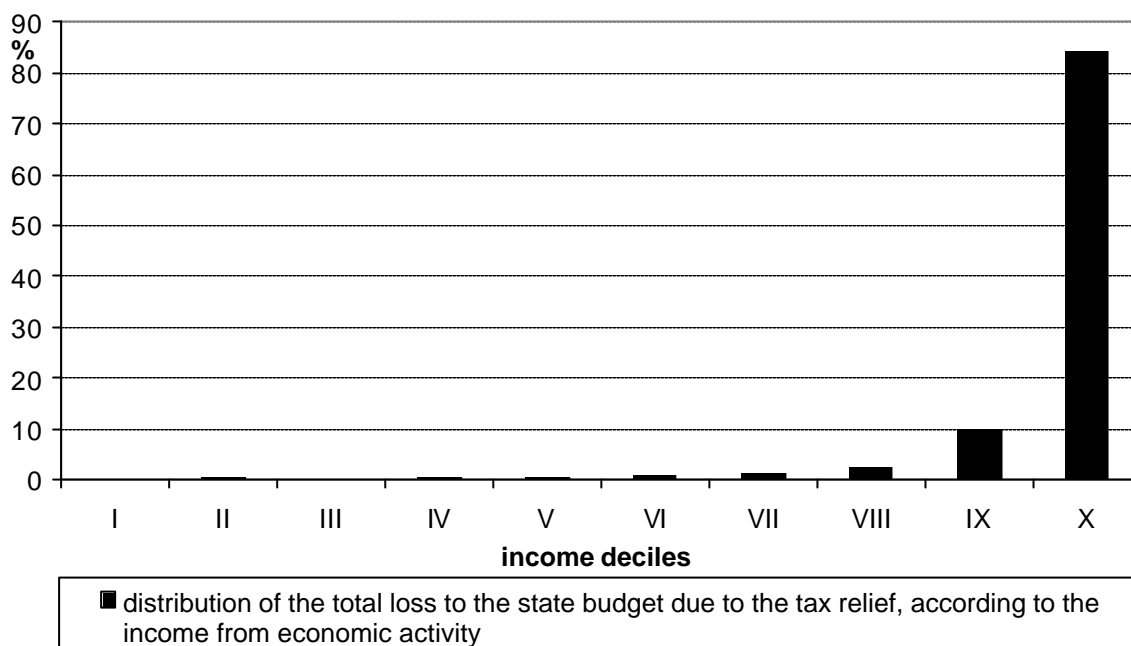
Source: Ministry of Finance of the CR

Figure 4 clearly shows that households with the highest income (households in the 10th income decile) benefit most from the tax relief, which is not really a surprising finding in view of the fact that these households meet the solvency criteria banks define for granting relatively high credits.

3.3 Housing allowance

The housing allowance is an income-tested social benefit paid out under the state social support system to low-income households. Both home-owners and tenants with household income lower than the family living minimum multiplied by the coefficient 1.60 are entitled to the housing allowance. The allowance amount (D) is calculated using the following equation:

$$D = HC - \frac{HC \times I}{LM \times 1.60}, \text{ where}$$

HC - normative family household costs,
I - disposable family income,
LM - family living minimum.

The household costs of a family are defined normatively and consist of an amount needed to ensure the necessary household costs (common household needs) which, in addition to the amount needed to ensure the subsistence and other basic personal needs, constitute the living minimum. The household cost amount is differentiated according to the size of a household and age of household members. The income corresponds to the net income of all persons with permanent residence in a given flat/house (sickness benefits and pensions, the parental allowance, subsistence allowance and a child allowance are all considered to be an income).

According to Mareš (2001), the low take-up is a major problem of the existing housing allowance, i.e., the number of actual applicants is much lower than the number of the eligible households. "Generally, the 'non-take up of social security benefits' or non-withdrawal of social benefits by people to whom they are intended is mentioned as one of the forms of efficiency crisis of the welfare state – this crisis lies in the fact that the welfare state does not meet its objectives." (Mareš 2001: 3). According to the data stated in the study, less than 40% of entitled households applied for a housing allowance in 1996. Similarly, approximately 60% of respondents in 1999 who were entitled to the housing allowance had not applied, were not applying, were not collecting or were not negotiating the housing allowance. Among reasons for this situation Mareš gives relatively general problems that pertain to all social benefits: values preventing people from becoming dependent on social benefits, rational calculation of the benefit in view of the costs related to the application, a lack of information, the effort to avoid stigmatisation, and a lack of skills (Mareš 2001: 12). However, there could be another very important and specific aspect in the case of the housing allowance and that is the bad targeting of the housing allowance and thus its low effectiveness.

Based on simulations using the *FBS 2001* data, Figure 5 shows the allocation of the total housing allowance payment due in 2001 among households according to their total net income or, more precisely, according to the total income per consumption unit under the assumption of 100% take-up of the housing allowance.

**Figure 5: Distribution of the total sum of housing allowances by household income**
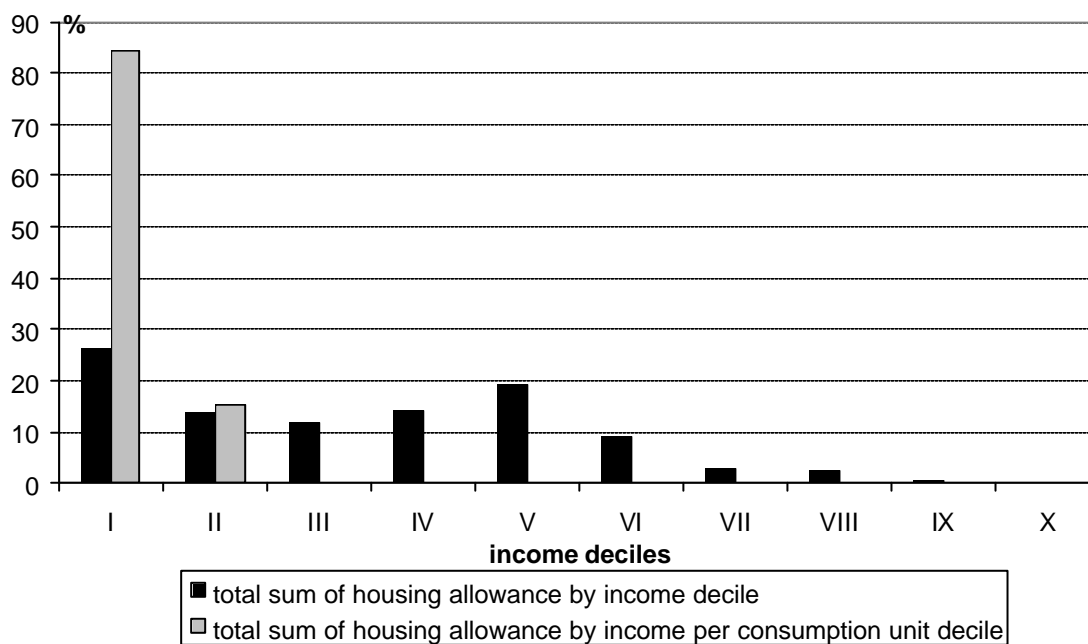
Source: FBS 2001. N = 3,293.

It is clear from the Figure that the housing allowance helps especially low-income households. The major failure of the Czech housing allowance is the fact that real housing expenditures do not enter the equation but instead only the flat-rate component of the living minimum covering the expected necessary housing costs is used. This failure is a very serious one, and it is probably one of the reasons why a large portion of Czech households does not apply for this social benefit although they are entitled. The housing allowance is provided to home-owners who usually spent a relatively small portion of their income on housing, as well as tenants whose family budgets are far more burdened with housing costs.

The distribution of the sum of potentially paid-out housing allowances among households with various degrees of housing cost-to-income ratio (1st decile corresponds to the lowest housing cost-to-income ratio, 10th decile corresponds to the highest housing cost-to-income

ratio) is shown in Figure 6. Figure 6 starts from the assumption that the take-up of the housing allowance is 100%.

Figure 6: Distribution of the total sum of the housing allowance by total housing cost burden measure
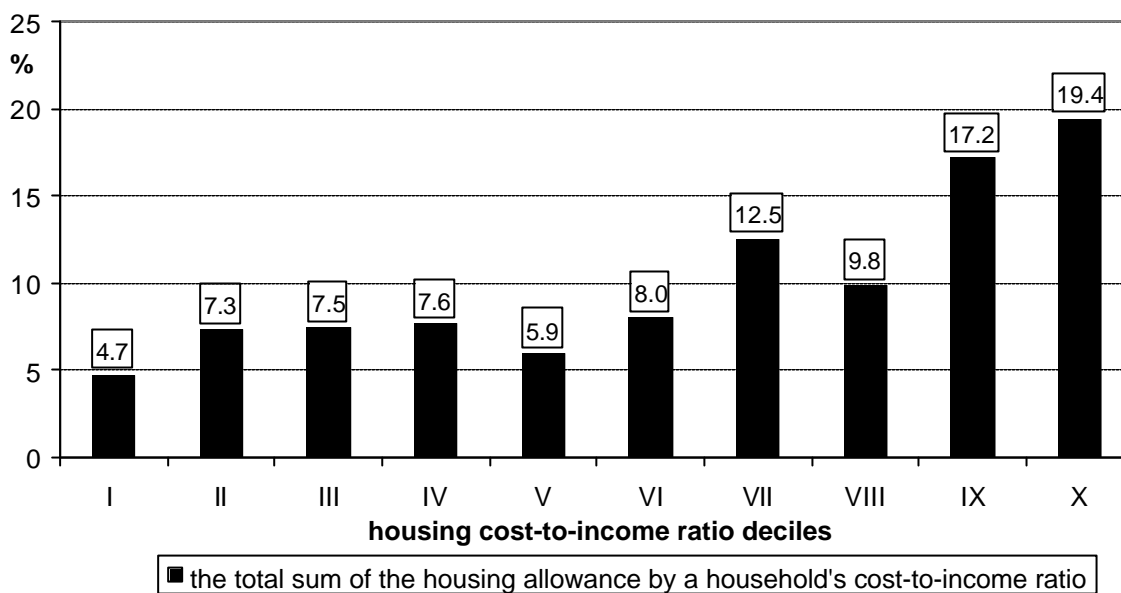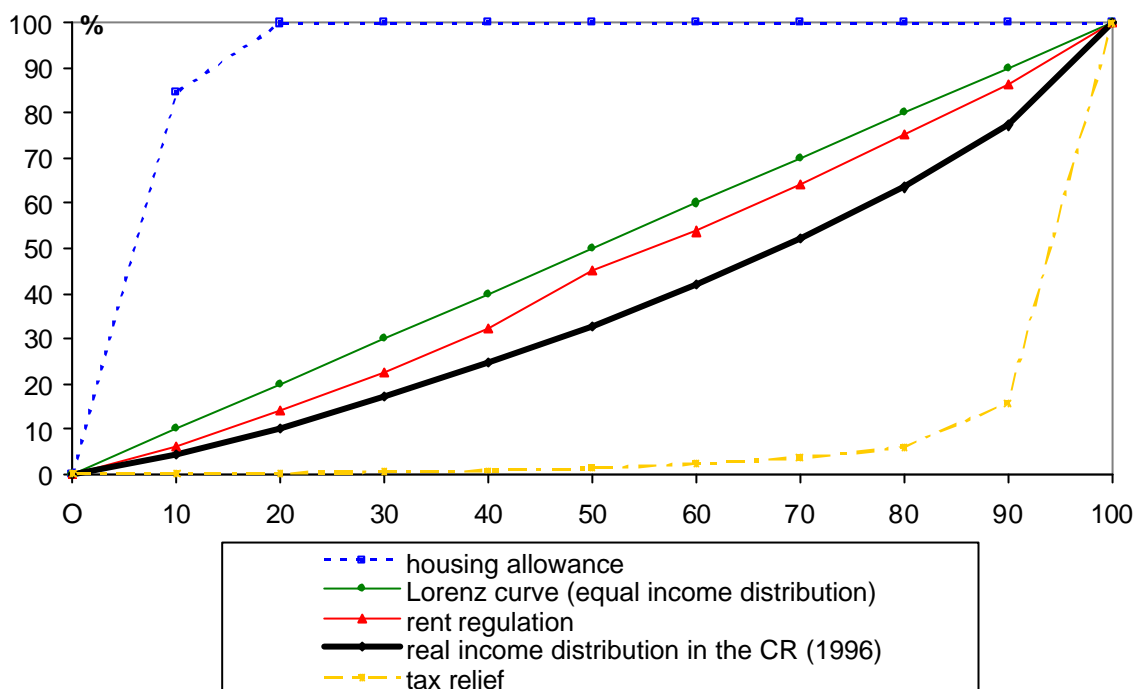

Source: FBS 2001, N = 3,293.

The targeting of the housing allowance on households with a higher housing cost-to-income ratio is disputable, since, for example, 5% of the total sum of the housing allowance would potentially be distributed among households with the lowest housing costs-to-income ratio (1st decile). The targeting on households with a high housing cost-to-income ratio is the main reason for introducing this type of support in developed EU countries. However, the Czech model supports also those with the lowest rent-to-income ratio. Moreover, the current housing allowance does not help at all households living in the market rental housing because they usually reach an income over the 1.6 factor of the living minimum (otherwise they would not be able to live in the market rental sector at all) but their rent expenditures and thus the resulting housing cost-to-income ratio can be much higher than in many low-income households.

3.4 Distribution of selected housing benefits in the Czech Republic

Figure 7 is the attempt to capture the distribution of selected housing subsidies in a Lorenz curve. In view of the fact that many subsidies are not income-tested and thus the income of applicants cannot be ascertained even from other alternative sources (as is the case, for example, with the tax deduction), we can only draw in the Figure the distribution of the housing allowance (according to the total net income per consumption unit and *FBS 2001* simulations), the distribution of an indirect subsidy following from the tax relief (according to the total gross income of a taxpayer, applies only to people submitting their own tax assessment basis and according to the Ministry of the Finance of the Czech Republic) and a distribution of the hidden subsidy following from rent regulation (according to total net income per consumption unit, for the lowest value of the interval of the hidden subsidy stated in Table 1 and according to *FBS 2001* simulation).

Figure 7: Distribution curve of selected state housing benefits

Source: FBS 2001, Mikrocensus 1996 (Vecerník), Ministry of Finance of the CR, own calculations.

The Figure clearly summarises the above-mentioned conclusions. Among the analysed housing policy instruments, the housing allowance is most targeted at the households with the lowest income; practically the entire volume of state funds paid out in the form of the housing allowance are divided among 20% of households with the lowest income. The curve capturing the distribution of the "hidden" subsidy in the form of rent regulation most approximates the curve of equal income distribution and therefore it is clear that low-income households and high-income households benefit from rent regulation almost equally. From the tax relief, on the contrary, benefit in particular households with the highest income; 90% of households divide among themselves less than 20% of the total volume of this indirect support, the remaining 80% of the support goes to 10% of households with the highest income.

4. Conclusions

Should we summarise the conclusions of these partial analyses of housing policy instruments in the Czech Republic and assess them in the context of the intentions and goals of the Czech housing policy described above, then:

1. rent regulation

Obviously, rent regulation is not targeted at the truly disadvantaged groups of the Czech population. In addition, there are socially disadvantaged groups of households that are, as a result of the continued dysfunctions on the rental market, actually excluded from the possibility to obtain subsidised rental housing because of unavailability of vacated flats with a rent under the market rent level. This is so due to:

- the occupation of a large part of flats with regulated rent by high-income households that, as the analysis has shown, benefit in absolute terms the most from rent regulation;
- a large black market with municipal rental housing where the rent is regulated, which results in considerable losses to the state budget due to untaxed illegal income;
- continued privatisation of rental flats at advantageous prices to the tenants, which reduces the number of potentially rentable "social" flats;

- the use of the criteria of permanent residence in the municipality for several years in case of an application for a flat with a regulated rent; this may have impact on the mobility of households and employment;
- application of other "non-social" criteria in municipal flat allocation (permanent employment, the obligation to pay debt after previous tenants, the "envelope method" employed in leasing flats[8]), which often serve as a solution devised by municipal offices to cover losses following from inefficient management of municipal flats.

There are no legislative provisions that would allow owners of regulated rental flats to increase a rent if a household income increases. The rules for social housing are not yet defined even at the conceptual level of the state housing policy. On the contrary, rent regulation in a large number of rental flats results in a sharp increase of market rents. The actual equilibrium market rent value could be significantly lower in many locations than today.

Rent regulation leads to excessive housing over-consumption, especially among the households of pensioners (Lux et al. 2003). It is only marginally and insufficiently that regulated rent reflects the varying quality of housing (division of flats into categories); as a rule, it does not take into account the location of a flat, the quality of the construction materials used (brick versus pre-fab) or the quality of the surrounding environment.

2. Targeted allocation and rental policy in social housing

We would hardly look for any housing sector in the Czech Republic that could be called social housing according to the standards used in the old EU member countries. Municipal housing, just as "regulated" rental housing in general, is largely occupied by high-income households and there is not proposal aimed at dividing the municipal housing stock into flats allocated for social housing and flats for commercial lease (or privatisation). Furthermore, there has been so far no proposal to define the cost rent and allocation rules for the allocation of social flats. In addition to the municipal housing and other "regulated" private rental housing, there is in the Czech Republic a fairly large sector of co-operative housing the nature of which changed significantly as a result of the application of the "transformation act" of 1994.

Social/affordable housing is not defined by the law and only some municipalities apply the principles of social housing when allocating vacated municipal flats (the criterion of a household income, time-limited lease agreements, regular inspections of incomes). At the central level there is no explicit and legally defined maximum household income that would entitle a household to obtain social/affordable housing (with the exception of newly constructed rental flats with a state subsidy), nor are there any rules governing state assistance in the construction or operation of social flats or rules how to set the rent. Usually, there are no unified point-awarding systems of social neediness even within one municipality.

3. Support for the construction of new social flats

A certain amount of "rental" flats was constructed based on a state subsidy programme titled Rental Flat Construction Support launched in 1995 and consisting in the ability of municipalities to obtain a subsidy for the construction of rental housing in an amount of CZK 320,000 (approx. 10,385 €) per housing unit and a subsidy of CZK 80,000 (2,596 €) per housing unit for the construction of the necessary infrastructure. Unfortunately, the conditions pertaining to the maximum costs per m^2 of floor space, income restrictions used for the

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[8] The "envelope method" means that in an auction of a flat, lease applicants submit envelopes with their bid and the highest submitted bid wins.

allocation of the constructed apartments, the size of the flat and the maximum rent level have not been defined clearly till 2003. Even the nature of the housing (rental housing) has been restricted only to a period of 20 years after which the flats may be transferred to the ownership of their users. In view of the benevolent conditions of the programme, financial shortage suffered by many municipalities and the time restricted rental nature of the housing, the programme has been abused in many cases to construct relatively large and very good quality housing which is not rental in nature but quasi-ownership and which was often allocated among the highest-income households. As late as 2003 were the conditions of the programme changed with the goal to minimise the above-mentioned abuses of state subsidies. Today, limits on the maximum floor space of the subsidised flats are defined and co-operative form is forbidden. Flats constructed with the state subsidy have to remain in the ownership of the municipality and have to be used for the purpose of housing based on a lease right. Only some income groups (lower-income people) may become tenants in such flats on condition that they do not own any other real estate intended for housing. The rent amount is defined at central level and corresponds approximately to the cost rent.

The supply-side subsidies should take a new form, already adopted at the European level. State contributions should be partial, targeted and, if possible, indirect. Operators/developers of potential new social rental flats should not be municipalities or the state, both displaying very low efficiency in construction and maintenance, but independent, principally private organisations facing all market risks (housing associations). A clear definition of conditions for the functioning of the social housing sector, especially the conditions for the provision of financial assistance from the public budgets concerning both the housing stock (the size and quality of a flat) and application for a social flat (income criteria, allocation mechanisms) are merely a necessary precondition for the success of any future supply support in the Czech Republic.

4. Housing allowance

The existing housing allowance suffers from some major shortcomings. Although the main recipients are low-income households, it does not automatically mean that these households prove the highest housing cost-to-income ratio. This fact is probably the main reason for the low take-up of the allowance. In addition, there are needy households that are completely excluded from any efficient help such as the housing allowance (people living in rental housing for market price). The current housing allowance seems to be inapplicable in the event of sharper rent deregulation connected with a greater regional differentiation of rent prices because the housing allowance is calculated based on flat-rate housing costs of a household and not on the actual housing costs of a household.

For an assessment of the efficiency of the housing allowance, we lack an analysis of its impact on housing prices, i.e., the assessment of the inflation pressures initiated by the housing allowance, which increase rent prices and housing prices. It could be expected that this impact is rather negligible unlike the greater affordability of mortgage credits. Furthermore, there is no evidence that the current housing allowance leads to the poverty trap, i.e., that it reduces the motivation of people to find cheaper housing or to increase their income.

5. Option to deduct from the tax assessment basis interest repayments (tax relief) and interest subsidy for mortgage credits

Households with the highest income are the main recipients of an indirect fiscal support in the form of a tax relief (as well as the interest subsidy of mortgage credits), and therefore the effectiveness is very low. The tax relief and the interest subsidy are not restricted or differentiated according to a household income, which contributes to their regressiveness.

This form of support increases, on the one hand, the financial affordability of housing, on the other hand, it has, thus far empirically unverified, impact on the increase of housing prices, which may balance out the effect of increased housing affordability. Despite this fact, it should be positively assessed the inter-linkage with the private capital market and an increased role of market housing financing (mortgage credits), which is surely a positive development in transition economies. The interest subsidy is directly linked to the development of interest rates in the economy, with respect to the fall of interest rates the subsidy was cancelled in 2003[9].

The assessment of the efficiency and effectiveness of the construction savings scheme is missing entirely from the analysed state programmes, which is today – due to the state premiums – the largest item among direct state housing subsidies (in 2003 the state paid out CZK 16 billion in the form of state premiums on construction savings scheme). On 1 January 2004 an amendment to the Act on the Construction Savings Plans came into force which should in the future (it pertains only to new contracts) result in a reduction of the financial demands placed on the state budget (the amendment introduced a reduction in the state premiums and a prolongation of the savings cycle in order to be entitled to the state premiums).

Literature:

Mareš P. (2001). *Problém necerpání sociálních dávek* [*The problem of the poor take-up of social benefits*]. Brno: VÚPSV.

Valentová B. (1996) 'Politika bydlení vCR vobdobí 1990 – 1995" [Housing policy in the Czech Republic 1990 – 1995] in: Potucek M., Purkrábek M., Háva P. "*Analýza událostí verejné politiky v Ceské republice, II. díl*", pp. 86-110. Praha: Institut sociologických studií fakulty sociálních ved UK.

Návrh státní bytové politiky Ceské republiky [*Proposal of State Housing Policy of the Czech Republic*]. Praha: Ministerstvo pro hospodárskou politiku a rozvoj 1991.

Východiska a zásady státní politiky bydlení vCR [*Starting Points and Principles of the State Housing Policy in the Czech Republic*]. Interní materiál. Praha: Ministerstvo hospodárství CR 1993.

Aktuální problémy státní politiky bydlení [*Current Problems of the State Housing Policy*]. Interní materiál. Ministerstvo hospodárství CR 1994.

Zámery a opatrení vlády voblasti bydlení [*Intentions and Measures of the Government in the area of Housing*]. Praha: Ministerstvo pro místní rozvoj CR 1997.

Koncepce bytové politiky [*Housing Policy Strategy*]. Praha: Ministerstvo pro místní rozvoj 1999.

Aktualizovaná koncepce bytové politiky [*Updated Housing Policy Strategy*]. Praha: Ministerstvo pro místní rozvoj 2001.

Lérová I. (1983). 'Úloha bydlení vsociálne ekonomickém rozvoji' [*The Role of Housing in Social-Economic Development*]. Praha: SNTL.

Lux et al. (2003). 'Standardy bydlení 2002/03: Financní dostupnost a postoje obcanu [*2002/03 Housing Standards: Financial Affordability and Attitudes towards Housing*]. Praha: Sociologický ústav AV CR.

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[9] This pertains to the interest subsidy provided for mortgage credits for new housing. The interest subsidy for mortgage credit for young people up to the age of 36 is today 1 percentage point and may be used to acquire older housing (at least 2 years from the official approval of a flat for use).