

Housing Standards 2002/2003: Financial Affordability and Attitudes Towards Housing

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Financial Affordability of Housing in CR

“Affordability is concerned with securing some given standard of housing (or different standards) at a price or a rent which does not impose, in the eyes of some third party (usually government) an unreasonable burden on household incomes.”

Financial affordability

- ◆ The indicator approach: housing cost/income
- ◆ The referential approach: some group of people (say, low-income families) should afford it.
- ◆ The residual approach: (min) residual income = total household income - housing costs

Issues

- ◆ Normative (vs. positive) definitions
- ◆ Low housing cost maybe due to low quality
- ◆ The latter two definitions imperfectly reflect actual living conditions, same for income
- ◆ Housing cost analysis does not take into account complexity of housing

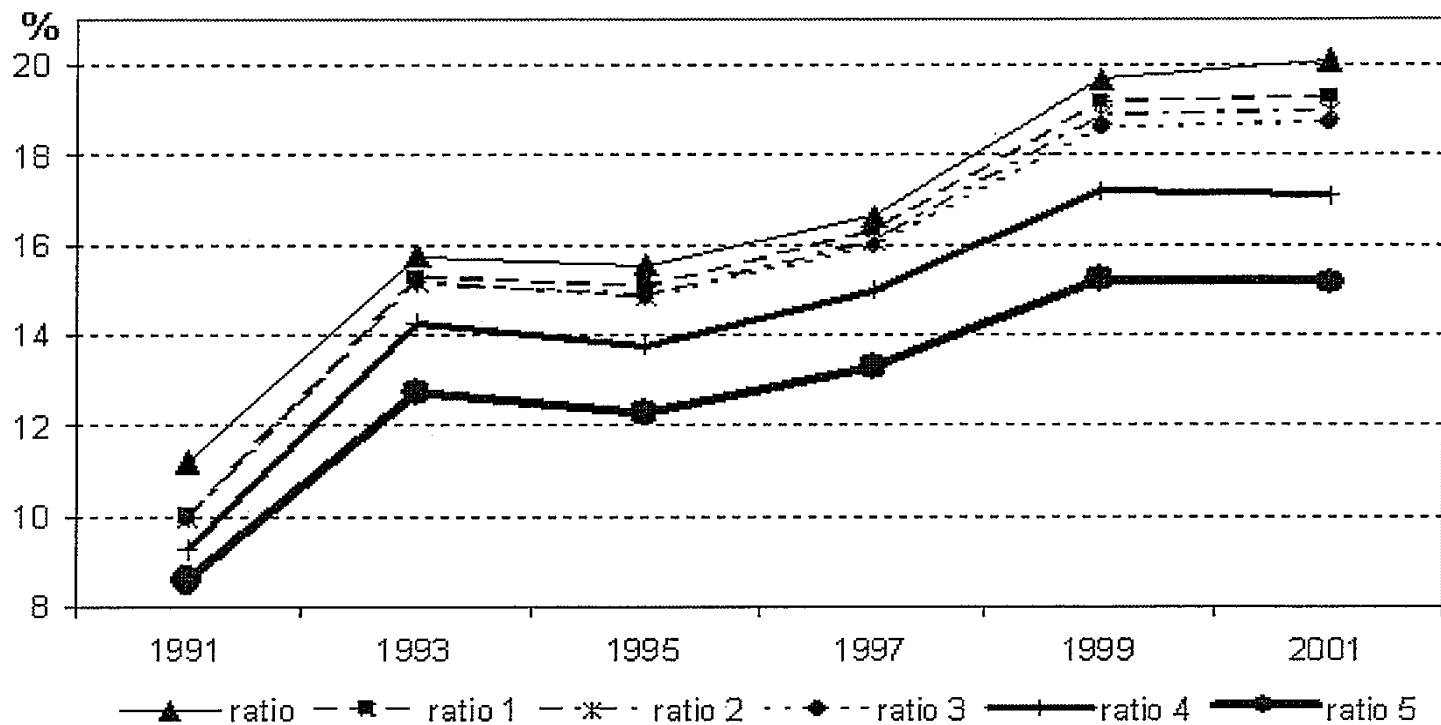
The housing cost burden measure

=monthly housing costs of a household
(rent, basic costs, total costs)/
total monthly income of a household
*100(%)

Rental Housing Affordability

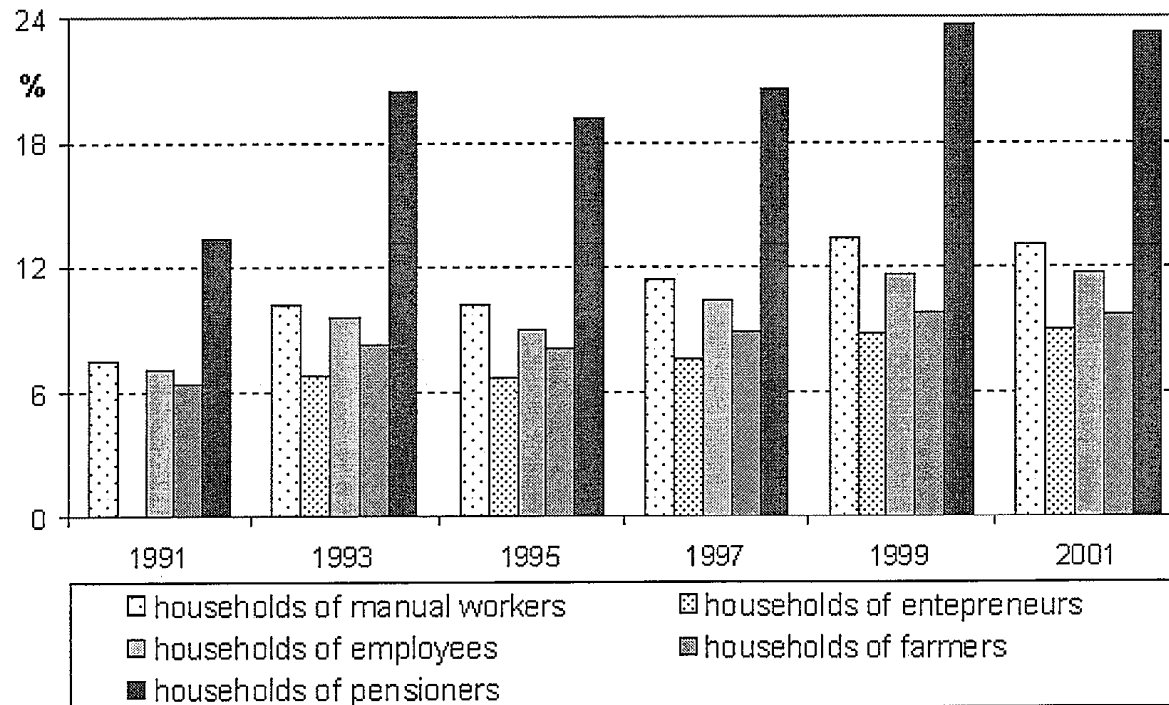
- large portion of households living in rental housing (in *FBS 91* more than 30%, in *FBS 95* 34.6%, in *FBS 01* 32.1% of households) declared that the rent amount paid per m² of the total floor space of the flat was higher than the maximum regulated rent (rent ceiling). By our opinion this happened because of bad administration of survey and the rent price was decreased for such cases to the value of rent ceiling;
- the costs of secondary housing (cabins, summer houses). As secondary housing is very popular in the Czech Republic but the survey does not distinguish between housing cost on primary and secondary housing, we had to compute average costs on secondary housing and decrease the level of housing costs by this value;
- the amount of the housing allowance. *FBS* does not specify a housing allowance as a special kind of income and we had to compute housing allowances according to applied eligibility criteria to be able to obtain net rent-to-income ratio;
- "overconsumption" of housing in compliance with the standard stating that the number of household members should correspond to the number of habitable rooms of a house/flat occupied by the household;
- the amount of undeclared income earned in the "grey" economy sector.

Rent/income



Source: FSB 1991- 2001, own computation.

Cost/Income for renters

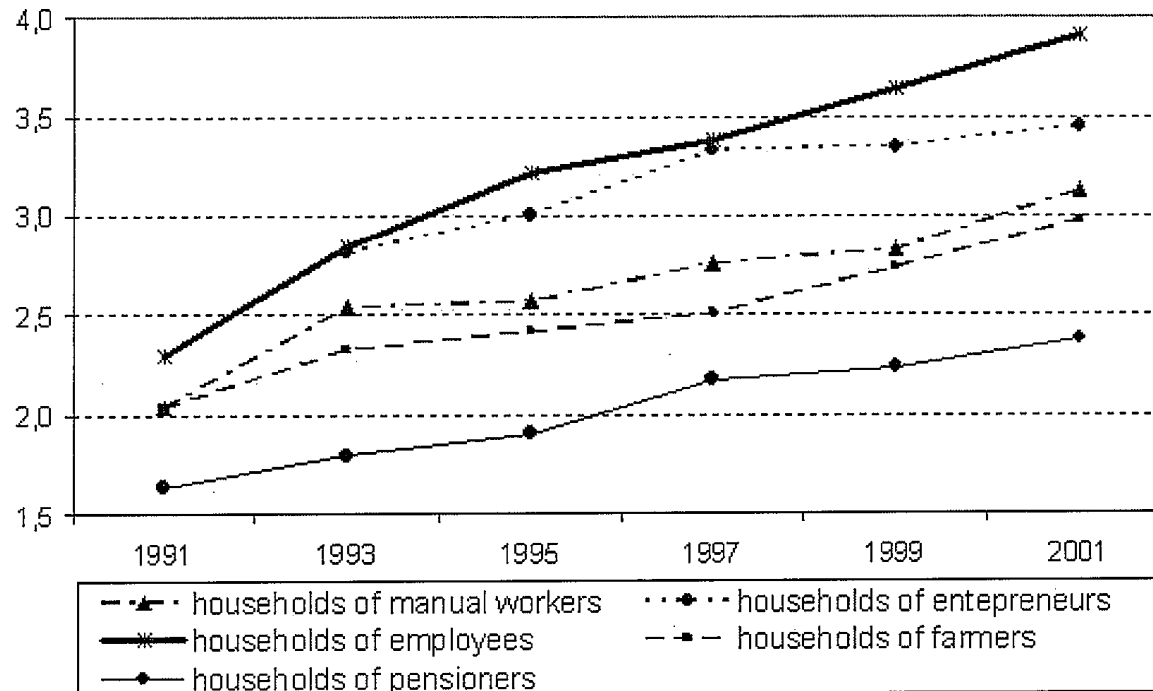


Source: FSB 1991- 2001, own computation.

Residual approach

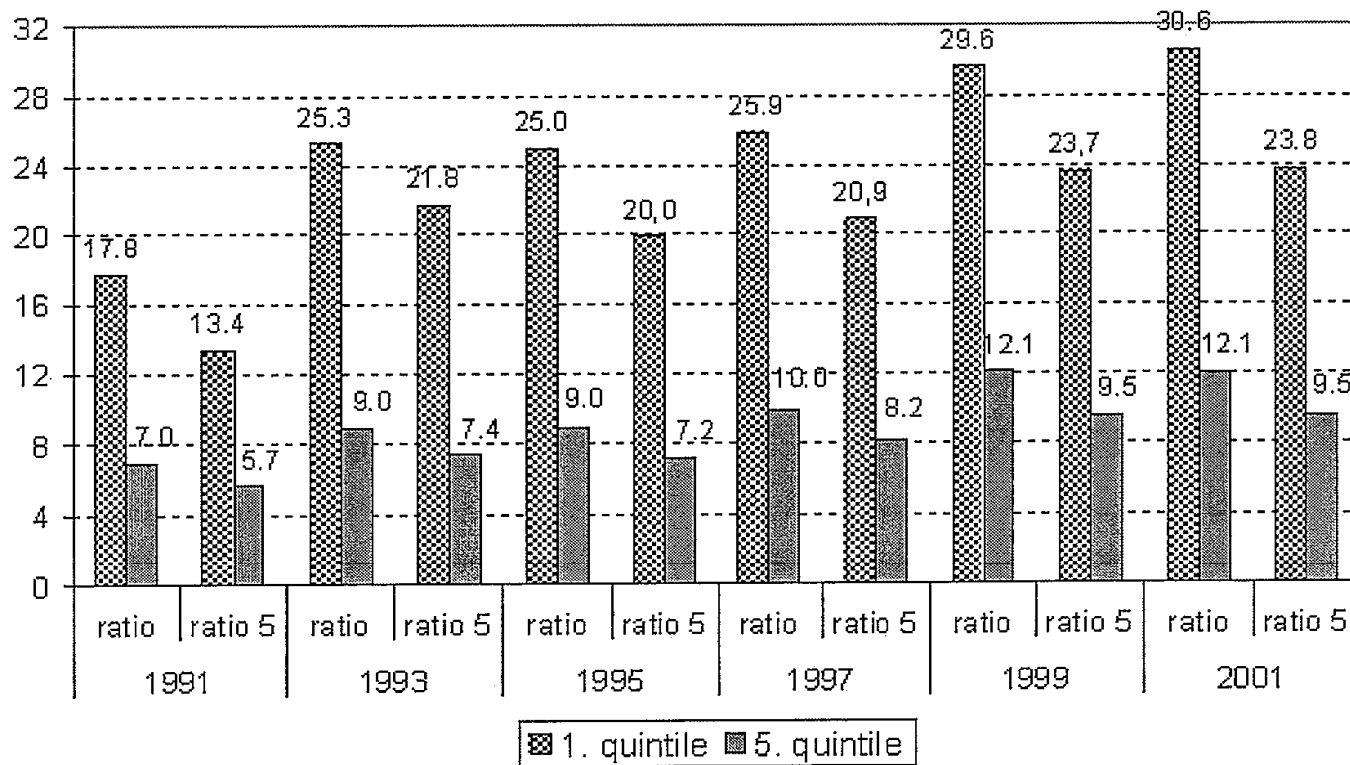
- ◆ Residual household income = total monthly net income - adj. basic housing costs
- ◆ Minimal residual income = the total amount needed to ensure nourishment and other basic needs of households
- ◆ Poverty index = 1 ... you are at the level of min. residual income

Poverty index



Source: FSB 1991- 2001, own computation.

Housing cost-to-income



Source: FSB 1991- 2001, own computation.

Other results

- ◆ Households of pensioners, singles, and single-parent families without an economically active head of the household most burdened
- ◆ Partly due to overconsumption

Affordability of existing ownership housing

- ◆ The affordability of ownership housing differs greatly for households who have not yet repaid their housing loans and households who have.
- ◆ The affordability of ownership housing oscillates depending on whether a household carries out major repairs, reconstruction, or rebuilding of their dwelling.
- ◆ If the existing housing becomes financially too burdensome, households living in their own house/flat can resolve this situation, in extreme cases, by selling their house/flat and moving to cheaper ownership housing or transferring to the rental housing sector.

Table 5: Average unadjusted and adjusted total housing cost-to-income ratio of households in owner-occupied housing sector

<i>Average total housing cost-to-income ratio</i>	<i>unadjusted</i>						<i>adjusted</i>		
	<i>1991</i>	<i>1993</i>	<i>1995</i>	<i>1997</i>	<i>1999</i>	<i>2001</i>	<i>1997</i>	<i>1999</i>	<i>2001</i>
Social status of the head of household									
manual worker	9.2	11.0	11.8	13.1	13.0	15.3	13.1	12.8	15.2
entrepreneur	-	10.6	11.3	15.7	14.5	17.0	15.5	14.2	16.6
employee	9.9	11.5	12.0	13.7	13.5	16.2	13.7	13.4	16.1
farmer	9.0	11.0	12.4	15.3	13.3	14.7	15.1	12.8	14.4
pensioner	13.7	18.4	16.9	17.9	19.6	22.1	17.8	19.3	21.7
Type of household									
two-parent families (head economically active)	-	11.6	13.7	14.1	14.3	17.3	13.9	13.8	16.8
two-parent families (head economically inactive)	-	17.4	16.1	17.4	17.4	19.5	17.3	17.2	19.3
two-parent families (economically active both the head and his spouse)	-	10.6	11.3	13.6	12.7	14.5	13.5	12.6	14.4
mixed two-parent families	-	9.6	11.1	12.8	10.9	12.0	12.8	10.8	12.0
single-parent families with dependent children	-	15.9	12.2	15.9	16.6	18.6	15.8	16.3	17.9
households of individuals – men	-	17.6	13.4	15.1	16.6	19.7	15.1	16.5	19.3
households of individuals – women	-	18.0	17.5	18.9	22.2	26.0	18.8	21.8	25.4
Age of the head of household									
18 – 24	6.7	9.5	10.2	13.5	13.2	22.6	13.5	12.4	22.4
25 – 34	11.0	12.6	12.7	14.8	13.7	16.5	14.6	13.3	16.2
35 – 44	8.4	10.1	11.6	13.0	13.1	15.8	12.8	12.8	15.5
45 – 54	9.1	10.8	12.1	13.9	13.1	15.1	13.9	13.0	15.0
55 – 64	13.1	16.3	15.3	15.8	15.6	18.2	15.7	15.5	18.1
65 and older	12.2	17.5	16.2	17.9	19.9	21.8	17.9	19.6	21.4
Size of municipality									
population of less than 9 999 inhabitants	10.2	12.4	13.2	14.7	13.9	16.4	14.6	13.7	16.2
population of 10 000 to 19 999	11.8	15.3	14.2	16.4	16.8	18.6	16.2	16.5	18.4
population of 20 000 to 49 999	10.9	16.4	12.7	15.3	16.5	19.2	15.2	16.1	18.8
population of 50 000 to 99 999	9.3	13.4	15.7	15.4	18.0	18.3	15.4	17.8	18.1
population of 100 000 and more	10.5	11.5	10.2	14.4	15.1	19.7	14.4	15.0	19.6
Prague	11.6	13.5	16.6	16.1	15.4	19.3	16.1	15.4	19.2
Total monthly net income of household									
1. quintile	14.1	18.0	16.3	18.0	21.6	24.5	17.8	21.0	23.8
2. quintile	11.9	16.5	15.7	15.9	17.0	19.4	15.8	16.6	19.2
3. quintile	10.9	11.6	12.2	14.2	13.9	16.7	14.1	13.7	16.5
4. quintile	8.2	11.0	11.7	12.4	12.6	14.3	12.4	12.5	14.3
5. quintile	7.6	9.4	11.2	14.7	11.0	13.1	14.7	11.0	13.1

Source: FBS 1991 – 2001, own computation.

Affordability of new ownership housing

- ◆ **price-to-income ratio:** the value of the ratio between the average price of new housing and the total net annual income of a household
- ◆ **lending multiplier (LM).** We obtain the *LM* value as a ratio of the total sum a household will pay in credit repayments to the total net annual income of a household. In British literature, the *LM* limit value equals three (if the *LM* value is greater than three, housing credit repayments are unbearably high for a household).
- ◆ **credit repayment-to-income ratio.** It is defined as the total monthly credit repayment granted for the acquisition of new ownership housing as percentage of the total net monthly income of a household.

Cost of 1m²

1991	1993	1995	1999	2001
4,919	6,859	17,528	26,902	30,180

Table 7: Price-to-income ratio (factor of the total net annual income that an average household with at least one economically active person would have to expend in a given year for the acquisition of a new flat of the same habitable floor space as that in which it currently lives)

	<i>Price-to-income ratio (%)</i>					
	<i>1991</i>	<i>1993</i>	<i>1995</i>	<i>1997</i>	<i>1999</i>	<i>2001</i>
Average for all households	2.88	2.99	5.82	6.19	6.67	6.78
Social status of the head of the household						
manual worker	2.88	2.96	5.87	6.23	6.70	6.96
entrepreneur	-	3.16	5.86	6.13	6.79	6.90
employee	2.83	2.88	5.41	5.86	6.25	6.20
farmer	3.25	3.50	7.17	7.64	8.77	8.57
Size of the household						
1-member household	3.95	3.86	7.68	7.83	8.48	9.12
2-member household	2.86	3.02	5.94	6.18	6.78	6.76
3-member household	2.69	2.84	5.31	5.86	6.27	6.40
4-member household	2.65	2.77	5.36	5.82	6.12	6.12
households with 5 or more members	2.77	2.95	5.94	6.03	6.34	6.55
Age of the head of the household						
age 18 – 24	3.33	3.31	6.26	7.32	6.99	7.55
age 25 – 34	2.84	3.01	5.55	6.04	6.30	6.56
age 35 – 44	2.79	2.86	5.80	6.11	6.76	6.64
age 45 – 54	3.00	3.08	5.97	6.23	6.75	6.85
age 55 – 64	2.86	3.04	5.79	6.10	6.88	7.16
Size of the municipality						
population of less than 9,999	3.29	3.49	6.80	7.24	7.77	7.94
population of 10,000 to 19,999	2.81	2.94	5.54	6.08	6.22	6.49
population of 20,000 to 49,999	2.77	2.88	5.60	6.14	6.70	6.50
population of 50,000 to 99,999	2.64	2.77	5.34	5.61	6.37	6.34
population of 100,000 and more	2.88	3.09	5.43	5.68	5.82	6.20
Prague	2.61	2.47	4.66	4.86	5.27	5.46
Quintiles of total net monthly incomes of households						
1. quintile	4.66	5.49	8.07	8.16	9.12	9.50
2. quintile	3.50	3.99	6.38	7.15	7.50	7.57
3. quintile	2.96	3.27	5.68	6.18	6.65	6.68
4. quintile	2.70	2.78	5.12	5.40	5.69	5.68
5. quintile	2.16	2.18	3.84	4.03	4.37	4.46

Source: FBS 1991 – 2001.

Table 9: Lending multiplier – average number of households from the total number of households with at least one economically active member that would qualify for a mortgage credit with an LM value over '3'

	1991	1993	1995	1997		1999			2001		
	(1)	(1)	(1)	(1)	(2)	(1)	(2)	(3)	(1)	(2)	(3)
Average for all households	82.0	84.2	95.5	96.1	95.6	97.6	92.0	88.8	92.9	91.5	89.0
Social status of the head of the household											
manual worker	76.5	85.0	94.7	91.4	92.2	96.0	89.9	89.9	92.4	90.1	88.1
entrepreneur	-	78.6	92.9	94.8	93.2	96.5	90.6	88.2	96.9	95.7	93.1
employee	84.0	83.8	97.0	100.0	99.1	99.1	94.3	88.6	91.9	91.3	88.2
farmer	92.2	93.5	87.5	66.7	87.5	100.0	83.3	75.0	83.3	88.9	88.9
Size of the household											
1-member household	93.6	89.1	97.4	100.0	97.1	100.0	92.7	87.6	94.8	93.5	91.4
2-member household	82.6	81.3	92.0	95.2	96.4	92.5	84.1	82.9	88.9	87.6	86.0
3-member household	71.9	83.7	94.2	95.3	93.3	100.0	94.6	89.2	92.1	90.9	89.2
4-member household	82.1	85.9	98.0	98.1	97.7	99.1	94.2	91.6	96.6	94.2	90.8
Age of the head of the household											
age 18 – 24	66.5	68.0	100.0	100.0	100.0	100.0	88.8	86.4	90.9	93.0	93.0
age 25 – 34	75.3	78.1	89.9	96.2	94.7	97.3	88.9	86.4	89.4	86.7	84.9
age 35 – 44	89.7	89.0	99.0	94.7	95.3	97.4	94.0	91.0	95.8	95.2	93.1
Size of the municipality											
population of less than 9,999	84.9	84.5	90.7	91.7	92.8	97.2	93.4	90.9	91.8	89.9	89.9
population of 10,000 to 19,999	80.2	90.1	97.7	88.4	91.6	100.0	97.9	91.4	100.0	97.1	93.5
population of 20,000 to 49,999	78.2	84.3	95.7	100.0	100.0	100.0	93.7	90.1	94.5	95.5	91.3
population of 50,000 to 99,999	84.3	83.9	98.5	100.0	100.0	100.0	88.8	86.3	93.3	92.1	87.2
population of 100,000 and more	94.2	83.3	95.0	100.0	96.1	93.9	92.9	88.0	97.2	89.0	89.0
Prague	77.6	81.7	96.4	96.8	95.4	95.1	88.4	87.0	87.0	87.4	85.3
Quintiles of total net monthly incomes of households											
1. quintile	100.0	-	-	100.0	100.0	100.0	100.0	93.7	-	100.0	100.0
2. quintile	96.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	95.9	95.9
3. quintile	72.1	83.9	100.0	88.3	92.6	94.1	87.4	85.1	87.2	87.4	82.0
4. quintile	83.4	81.8	95.3	97.3	96.4	100.0	91.7	90.5	90.2	90.3	89.4
5. quintile	79.5	82.8	94.8	96.2	95.3	97.6	91.9	87.8	93.8	92.0	88.9

Notice: (1) – average number of households (from the total number of households with at least one economically active member that would qualify for a mortgage credit in a given year without taking into account the state subsidies) with an LM value over 3.

(2) – average number of households (from the total number of households with at least one economically active member that would qualify for a mortgage credit in a given year with taking into account the interest subsidy) with an LM value over 3.

(3) - average number of households (from the total number of households with at least one economically active member that would qualify for a mortgage credit in a given year with taking into account the interest subsidy and tax relief) with an LM value over 3.

Source: FBS 1991 – 2001.

Table 10: Average credit repayment-to-income ratio

	1991	1993	1995	1997		1999			2001		
	(1)	(1)	(1)	(1)	(2)	(1)	(2)	(3)	(1)	(2)	(3)
Average for all households	20.3	21.8	30.8	33.1	29.4	32.7	29.1	27.1	29.9	28.4	26.7
Social status of the head of the household											
manual worker	19.4	21.6	30.0	29.9	27.2	33.1	29.0	27.1	29.6	28.3	26.6
entrepreneur	-	21.0	30.4	33.2	29.6	31.9	28.9	26.9	31.6	30.2	28.4
employee	20.5	22.1	31.7	34.9	30.5	32.8	29.2	27.0	29.5	27.8	26.0
farmer	22.1	23.6	27.1	30.5	30.7	33.2	30.7	29.0	28.5	29.9	28.2
Size of the household											
1-member household	22.5	25.2	33.5	34.1	30.7	33.0	30.5	28.3	30.2	30.2	28.2
2-member household	21.9	22.3	32.0	34.1	30.3	33.1	29.9	27.8	31.1	29.6	27.8
3-member household	18.4	21.8	31.0	33.0	29.0	34.3	30.1	28.0	30.9	29.4	27.6
4-member household	18.6	20.4	29.5	32.6	28.9	31.5	27.5	25.6	28.5	26.8	25.1
Age of the head of the household											
age 18 – 24	19.6	20.9	32.7	34.7	29.0	30.9	27.5	25.7	31.2	29.1	27.4
age 25 – 34	20.3	21.9	29.4	32.0	28.4	31.6	28.4	26.4	29.6	28.2	26.4
age 35 – 44	20.7	21.7	31.5	33.7	30.4	33.7	29.9	27.8	30.0	28.6	26.8
Size of the municipality											
population of less than 9,999	21.3	22.9	29.9	35.0	31.2	36.1	32.1	30.0	31.6	30.5	28.7
population of 10,000 to 19,999	20.9	22.8	31.7	31.2	28.7	33.5	29.1	27.0	30.6	28.8	26.9
population of 20,000 to 49,999	20.4	21.5	30.0	36.0	29.9	32.4	29.3	27.2	29.9	28.2	26.5
population of 50,000 to 99,999	19.0	21.7	32.9	33.6	29.4	30.8	27.9	26.0	29.4	27.6	25.9
population of 100,000 and more	22.2	22.2	31.7	32.0	28.8	32.2	28.5	26.5	30.3	28.8	27.0
Prague	19.5	20.9	30.0	31.3	28.4	31.2	27.0	25.0	27.6	26.4	24.7
Quintiles of total net monthly incomes of households											
1. quintile	16.7	-	-	-	31.8	-	26.1	24.6	-	30.4	28.6
2. quintile	23.4	25.8	34.1	32.0	29.6	37.6	36.3	33.8	29.6	31.0	29.0
3. quintile	19.6	23.4	31.0	31.0	27.4	30.7	26.6	24.7	29.0	27.5	25.8
4. quintile	22.1	22.0	31.4	31.7	28.4	33.1	30.6	28.5	31.0	29.6	27.9
5. quintile	19.0	20.8	30.5	33.8	29.8	32.9	28.5	26.4	29.6	27.8	26.0

Notice: (1) – average credit repayment-to-income ratio of households with at least one economically active member that would qualify for a mortgage credit in a given year without taking into account the state subsidies.

(2) – average credit repayment-to-income ratio of households with at least one economically active member that would qualify for a mortgage credit in a given year with taking into account the interest subsidy.

(3) – average credit repayment-to-income ratio of households with at least one economically active member that would qualify for a mortgage credit in a given year with taking into account the interest subsidy and tax relief.

Source: FBS 1991 – 2001.

Municipal housing policy: CR vs other countries in CEE

- ◆ Unlike many other Central and Eastern European countries, in the Czech Republic municipal housing constitutes a significant portion of the total housing stock. The rejection of the "Right to Buy" often applied in other countries has "saved" a large portion of municipal flats for rental housing and at the same time allowed a relatively substantial rent increase.
- ◆ On the other hand, however, unlike in Bulgaria or Estonia, the state has retained the right to define the maximum rent (rent control), and the continuing rigid regulation has resulted in rampant growth of a housing black market, and has also had other negative consequences.
- ◆ With the exception of the City of Brno, the income from rents and privatisation serves to cover activities that are not in any way related to ensuring or increasing the housing standards.

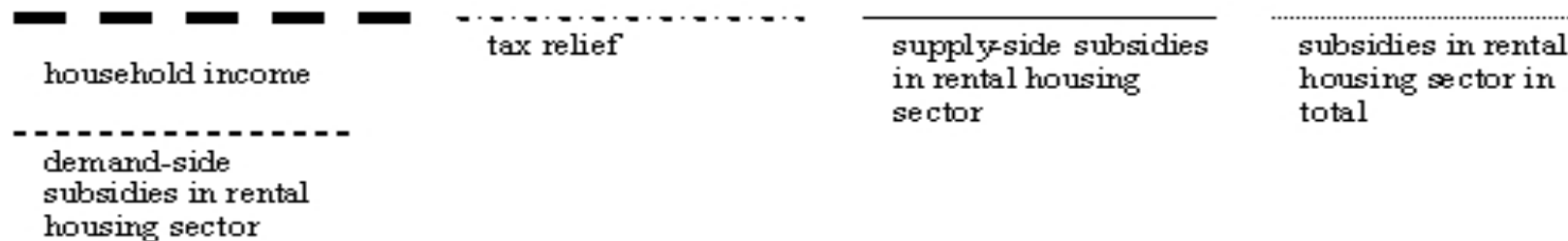
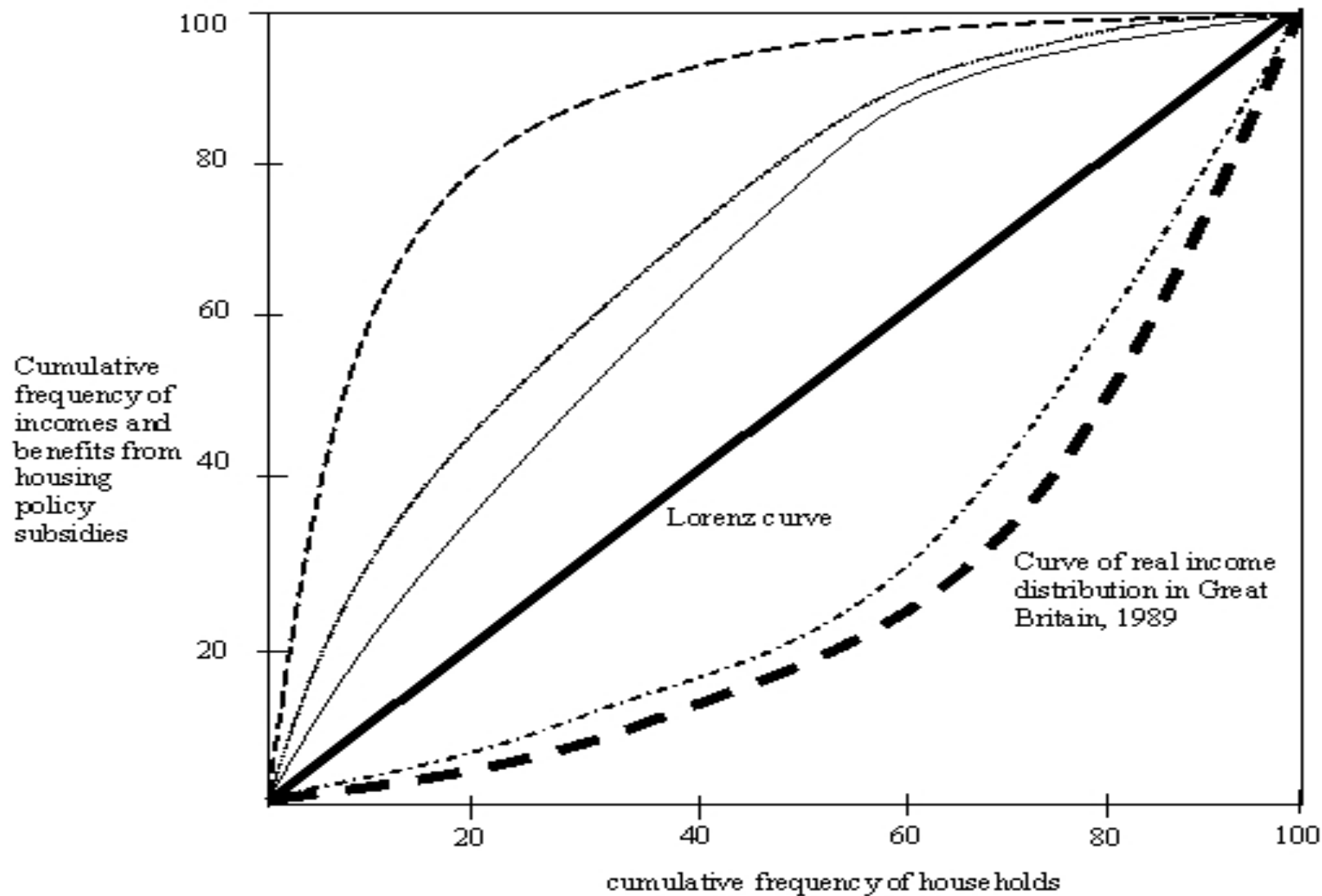
State expenditures for housing

- ◆ **income-tested cash allowance**, which increases the income of needy households (housing allowance, also demand-side subsidies support or *subsidies per head*) – more efficient but it is problematic to ensure that the subsidy is spent on housing.
- ◆ **an allowance decreasing housing costs**, which as a consequence reduces the expenditures of needy households (subsidy for the construction, modernisation or operation of social housing leading to a reduction of the rent under the market level, also supply-side subsidies or *bricks-and-mortar subsidies*).

Lorenz curve construction

- ◆ % of total household income earned by each fifth of the US households in 2000

	Lowest				Highest
Non-cum.	3.6	8.9	14.8	23.0	49.6
Cumulative	3.6	12.5	37.3	60.3	100



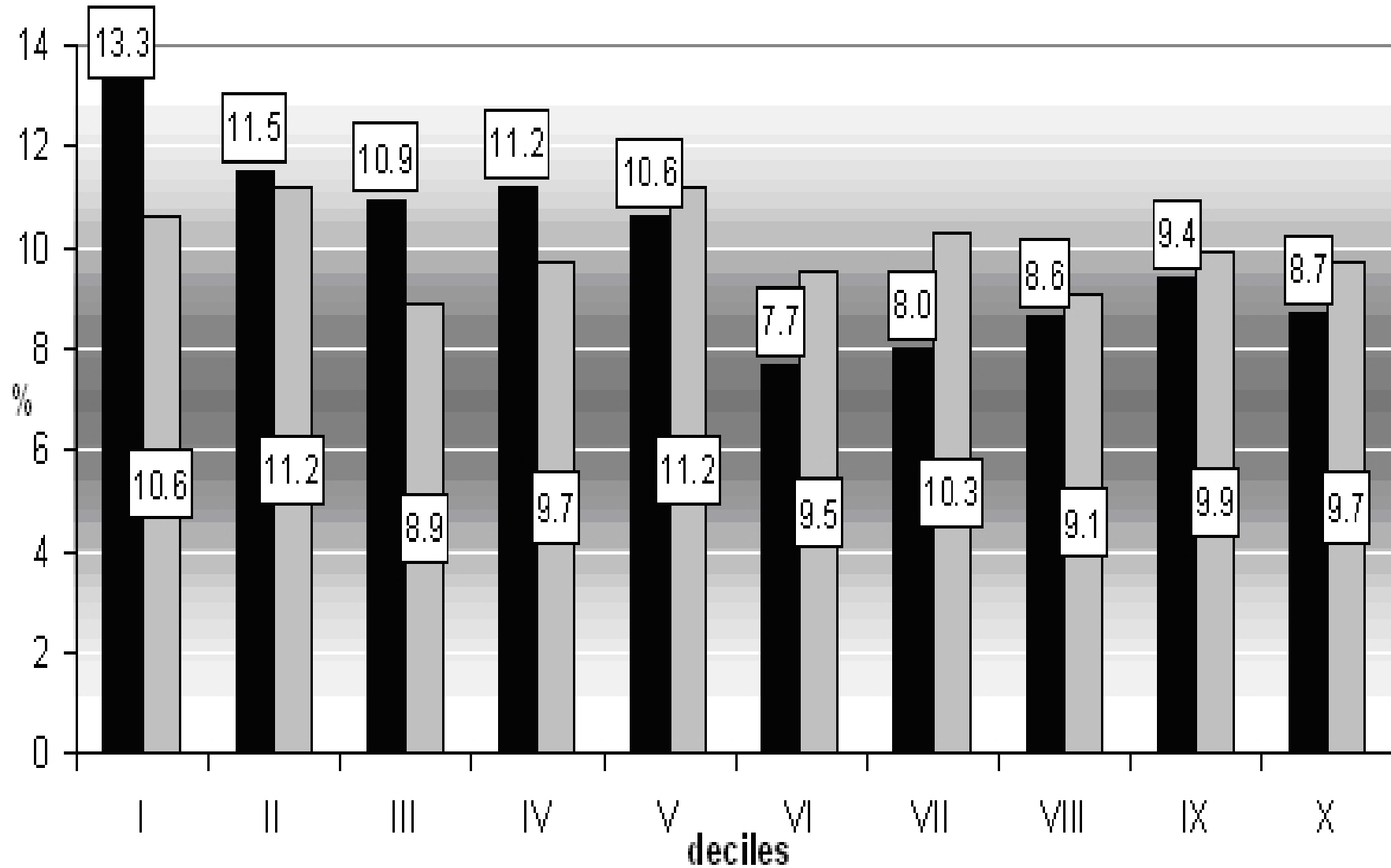
Real housing expenditures

- ◆ According to officially published statistics, state expenditures for housing in 2002 reached CZK 25 billion, i.e., 1.12% of the gross domestic product. In fact, state expenditures are far greater: if one were to include the loss from indirect fiscal support (tax deduction, value added tax exemption or reduction) and especially the hidden subsidies for households living in the rental housing sector where the rent is regulated by the state, the state expenditures would be as high as CZK 32.8 billion to CZK 42.8 billion, i.e., 1.44% to 1.88% of the GDP.

Estimated expenditures

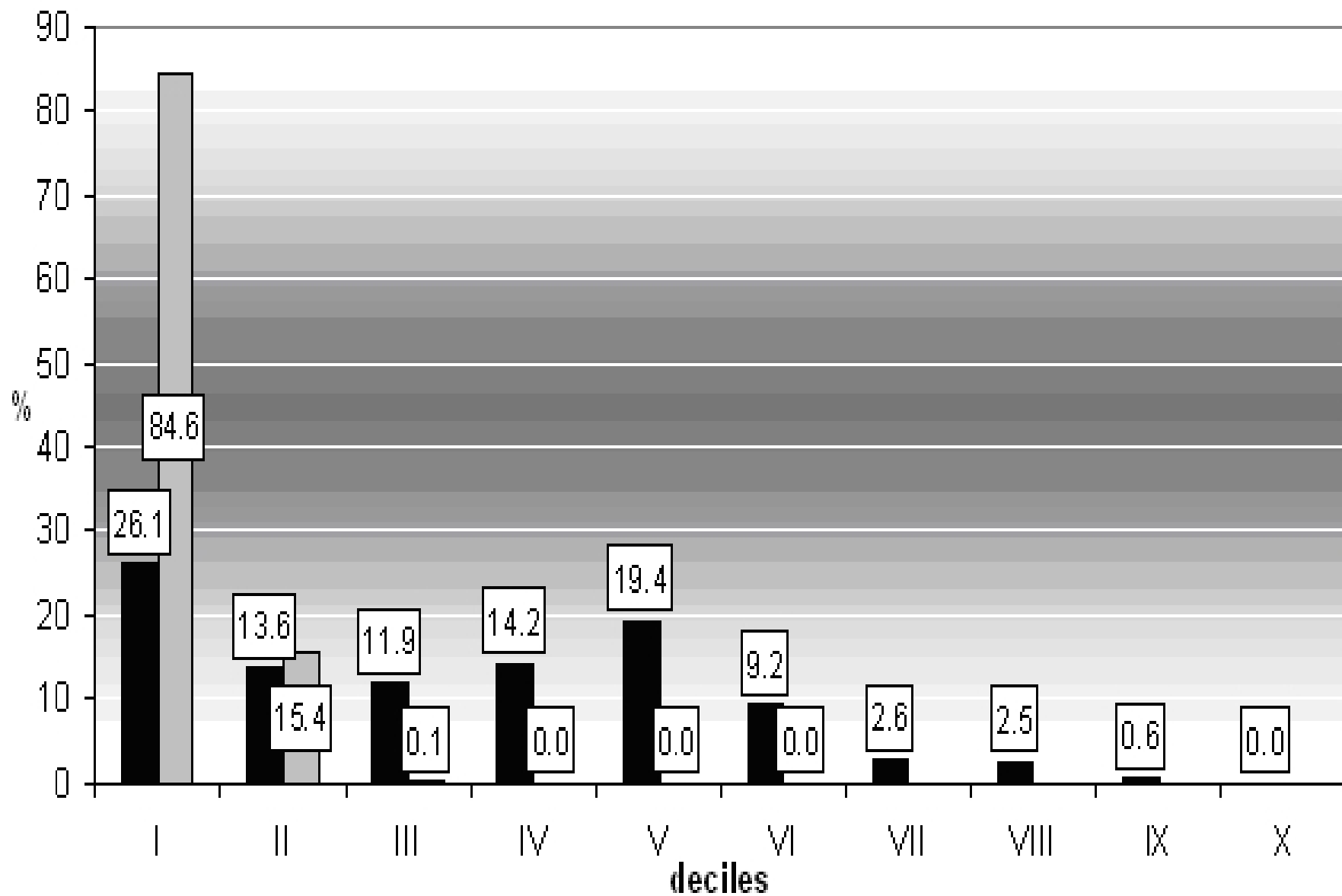
Let us assume a two-member household reaching a total income before taxation (but after deducting the obligatory insurance and applicable expenses) in an amount of CZK 40,000 per month where the husband makes a monthly salary of CZK 25,000 before taxation and the wife an amount of CZK 15,000 before taxation. Let us also assume that this family makes a decision to purchase a new two-bedroom flat (60 m²) at a price of CZK 2 million. At the moment, both the household members have completed the five-year savings cycle of the construction savings plan at the most advantageous alternative (maximum state premium) with a target amount of CZK 240,000 (i.e., each have saved CZK 120,000 in five years with a monthly deposit of CZK 1,500) and together they have saved (or received as a gift) another CZK 120,000. They will cover the remaining CZK 1,400,000 using a mortgage credit.

<i>Total household income before taxation</i>	<i>CZK 40,000</i>
Flat price (5 % VAT)	CZK 2,000,000
Flat price (22 % VAT)	CZK 2,324,000
subsidy:	CZK 324,000
<i>Financial resources:</i>	
Construction savings scheme (twice)	CZK 240,000
subsidy:	CZK 26,551 (man)
	CZK 26,551 (woman)
Construction savings scheme credit (twice)	CZK 240,000
subsidy:	CZK 5,450 (man)
	CZK 6,569 (woman)
Mortgage loan	CZK 1,400,000
subsidy:	CZK 237,355 (tax relief, man)
	CZK 195,425 (interest subsidy)
Own capital (savings)	CZK 120,000
<i>Total</i>	<i>CZK 2,000,000</i>
<i>Subsidy:</i>	<i>CZK 821,901</i>

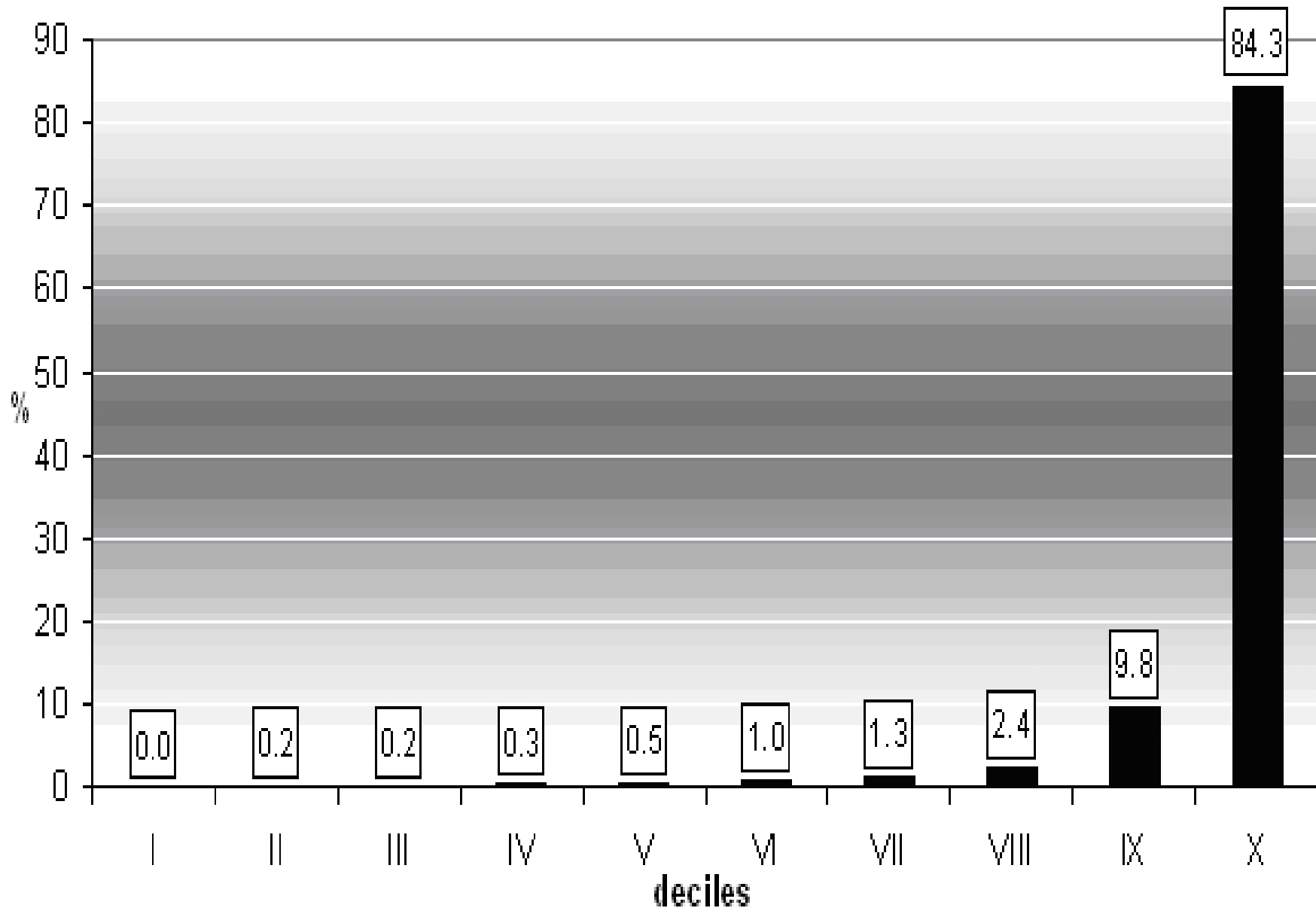


■ percentage of households living in dwellings with regulated rent according to the total income of the household

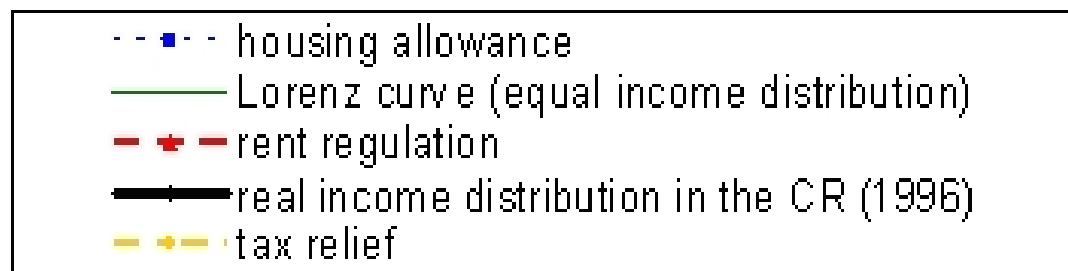
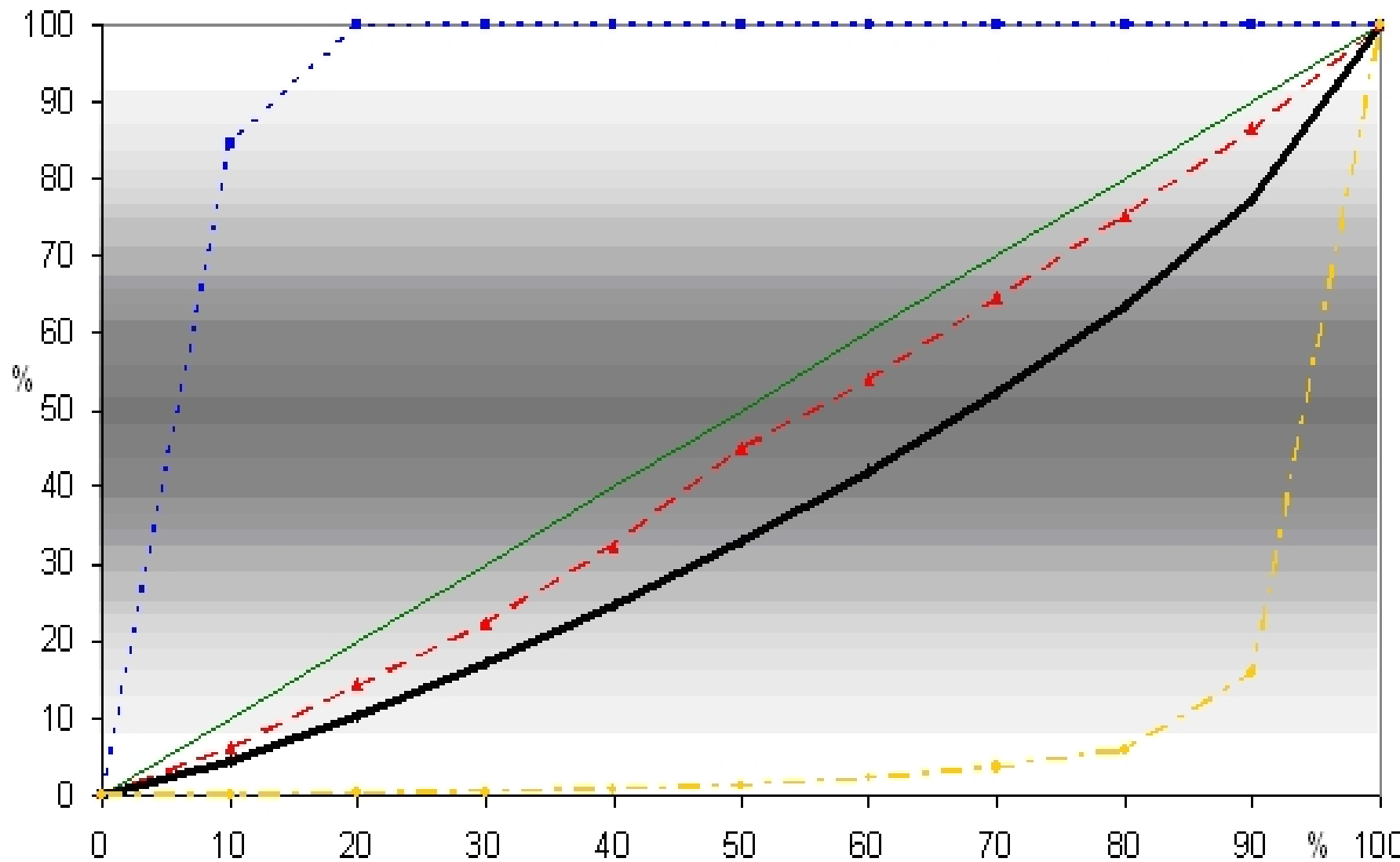
■ percentage of households living in dwellings with regulated rent according to the income per consumption unit



■ total sum of housing allowance according to the total household income
 ■ total sum of housing allowance according to the household income per consumption unit



■ total loss of the state budget from the tax relief



Expenditures summary

- ◆ Rent regulation is not targeted at the actually needy portions of the Czech population
- ◆ There is no legislative provision that would allow owners of regulated rental flats to increase rent if the household income increases
- ◆ Social/affordable housing (generally rental housing with a rent below the market rent value) is not defined in the law and very few municipalities apply the principles of social housing when allocating vacated municipal flats: the criterion of the household income, limited lease contracts, and regular income reviews.

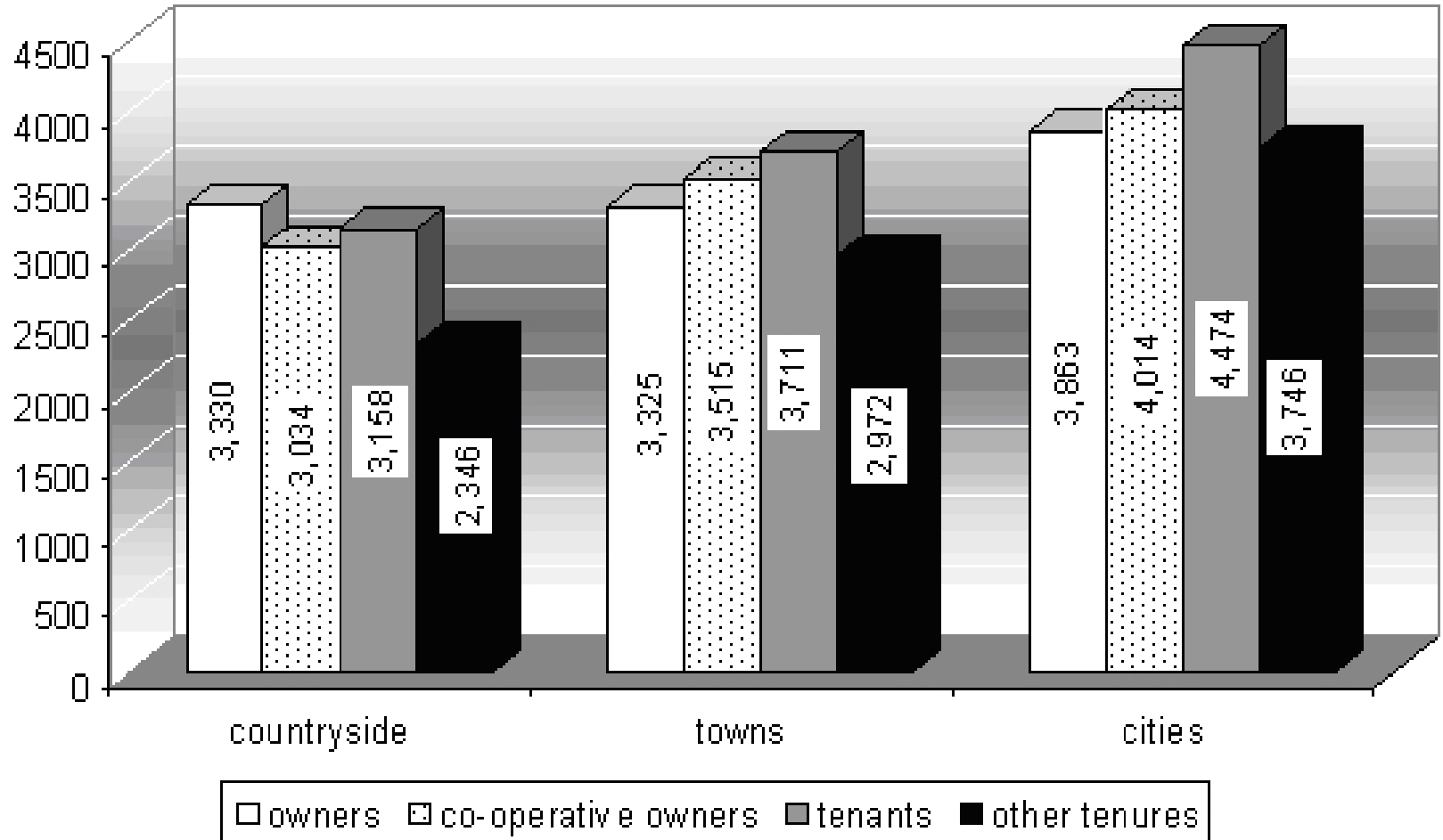
- ◆ *Support for Rental Flat Construction* (so called "320 + 80" programme) introduced in 1995 and consisting of the possibility of receiving a subsidy for housing from a municipality in an amount of CZK 320,000 per housing unit and a subsidy of CZK 80,000 per housing unit intended for the construction of the necessary infrastructure. Thanks to a Contract on the Future Transfer into Ownership, these new "tenants" secured a transfer of the existing flat into their own ownership after 20 years (generally after the repayment of the mortgage credit).
- ◆ The supply-side subsidies should take a new form
- ◆ Housing allowance – though not perfect, works reasonably well

People's opinion about the housing cost burden

- ◆ In 2001 the Socio-Economics of Housing Team at the Institute of Sociology, Academy of Sciences of the Czech Republic conducted a large survey of attitudes of the Czech population toward housing. The *2001 Housing Attitude Survey* was conducted on a sample of more than 3,500 respondents over 18. Respondent sampling was based on the quota selection method (age, education, size of the place of residence and partially the legal basis for using a house/flat of the respondent).
- ◆ Using a standardised interview respondents were asked about satisfaction with their current housing and the housing situation in the Czech Republic in general, financial affordability of housing, attitudes toward the housing black market, state housing policy, a comparison of the current housing situation and the situation before 1989 and a number of other thematic areas.

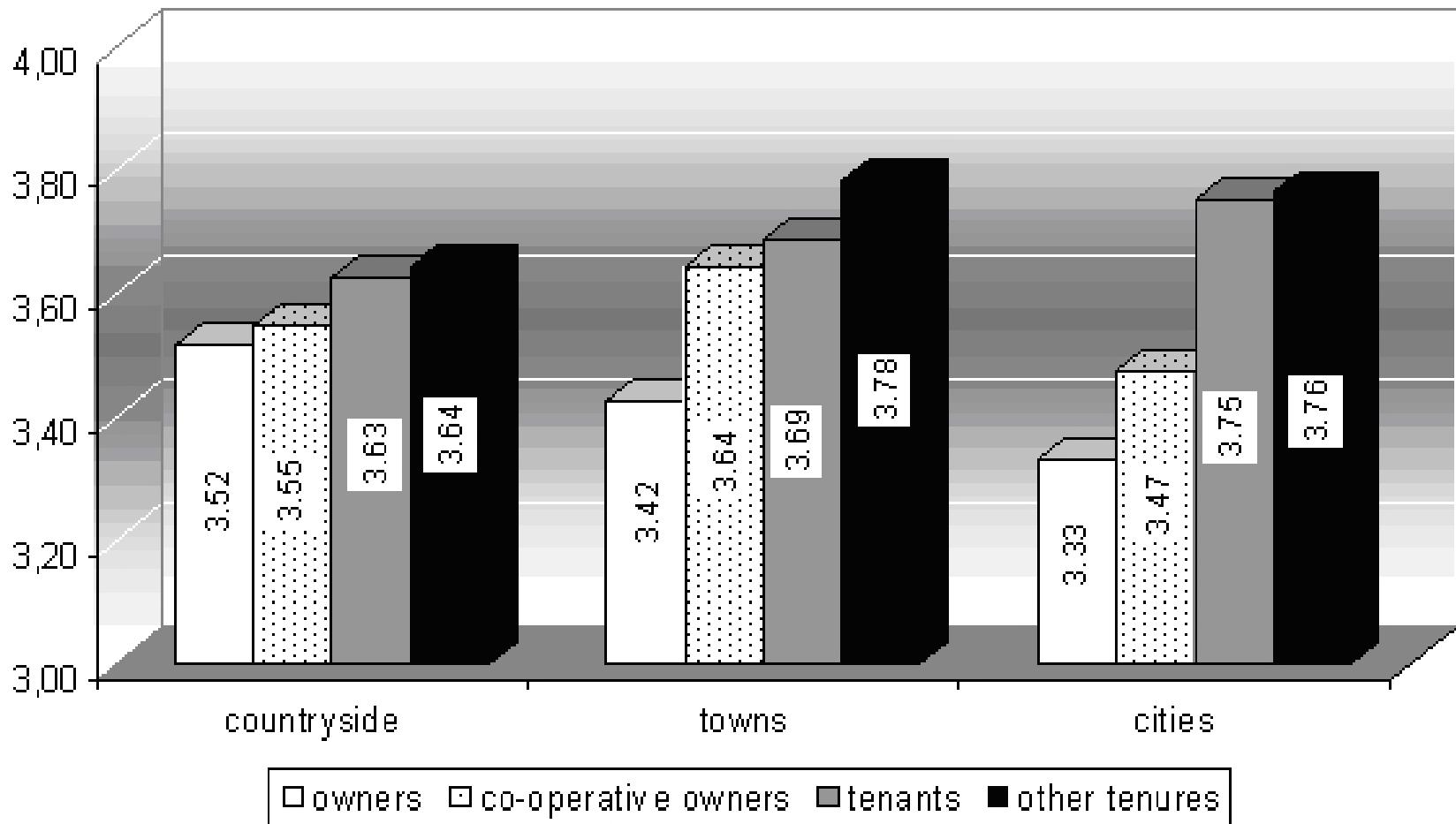
Average monthly expenditures according to the municipality size and tenure

CZK per month

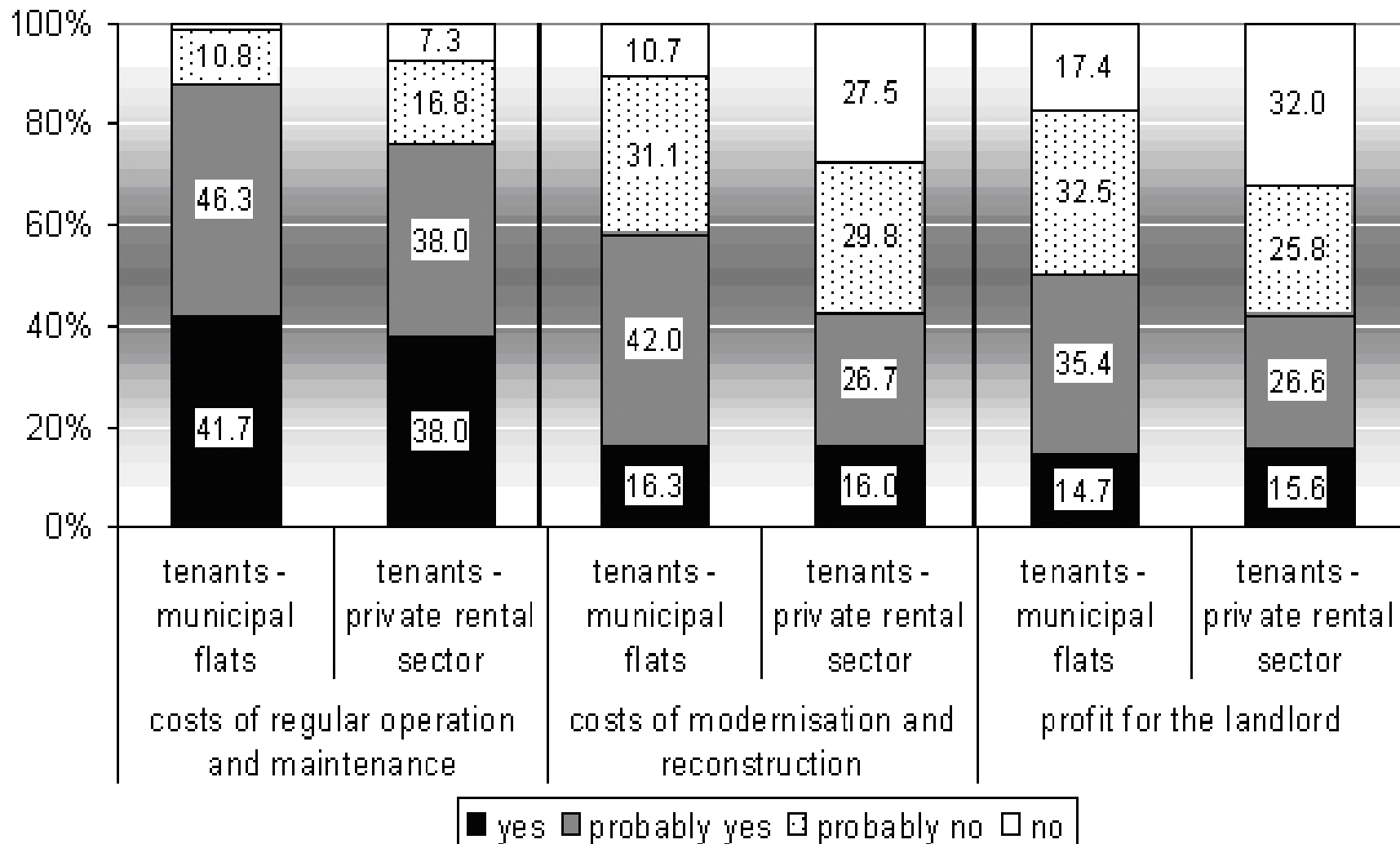


What is your opinion about your regular total housing cost-to-income ratio (very low, low, adequate, high, very high)?

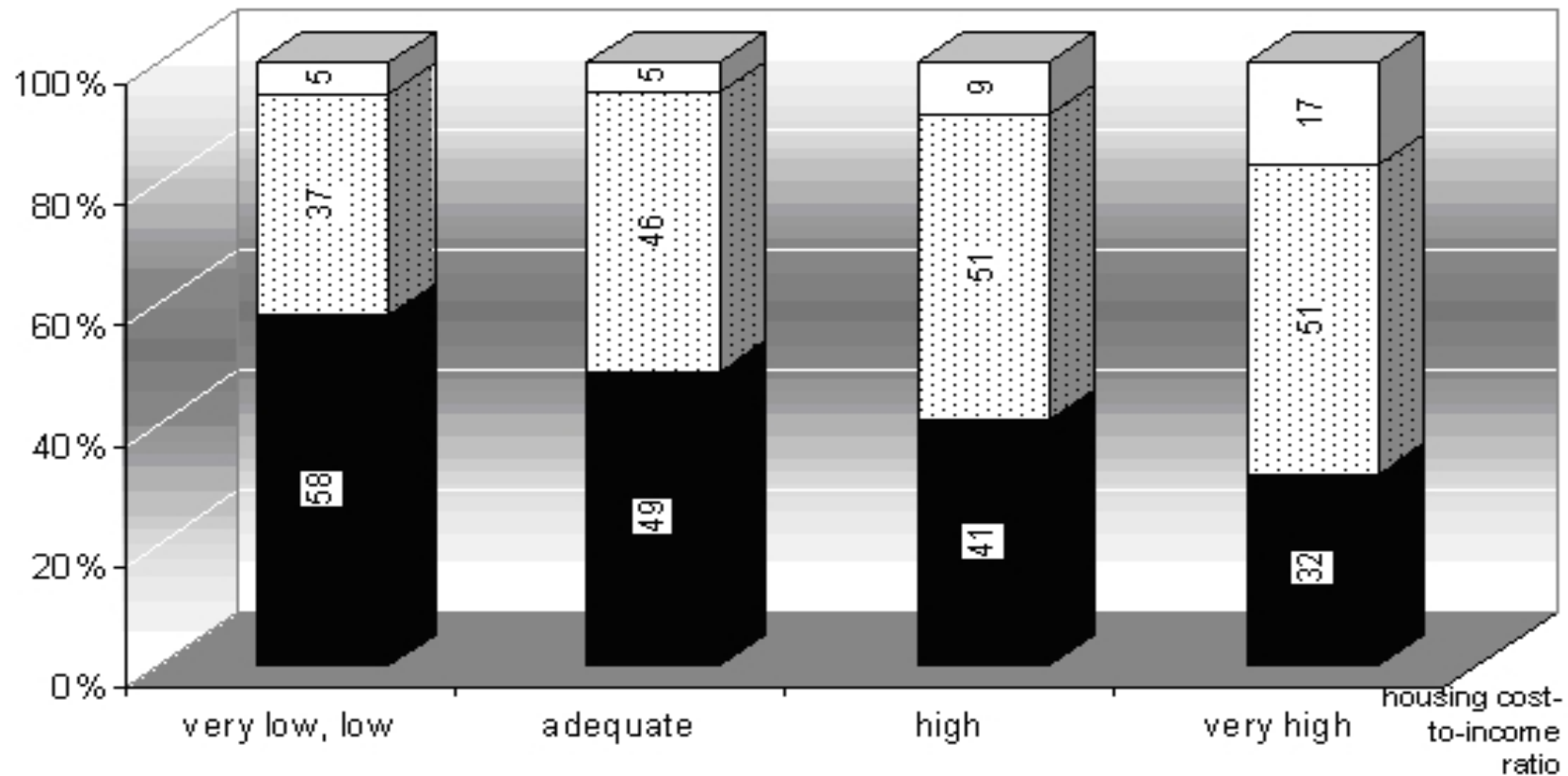
Dissatisfaction index



Opinions about the adequacy of the total rent for covering the costs of regular operation, maintenance, modernisation and reconstruction plus a profit for the landlord



Who is responsible for the housing of the citizens?



- responsibility for housing is a matter of the state or municipality
- responsibility for housing is a matter both the citizen and his family and the state or municipality
- responsibility for housing is a matter of the citizen and his family