

Rent or buy?

Shilling Ch. 23

Pros and cons of owning

- ◆ Greater status, financial stability, ego satisfaction, privacy, personal freedom, more desirable for kids
- ◆ Explicit financial benefits: value appreciation (if any), taxes
- ◆ Opportunity costs . the foregone return on the equity invested in home, transaction costs, repair, maintenance, risk factor, financing costs, property taxes

Pros and cons of renting

- ◆ Mobility, sometimes more convenience and more amenities for living,
- ◆ No direct tax benefits, opportunity costs of not realizing value appreciation (however, no risk either), deposit

Mortgage costs

- ◆ Condominium market value 100000
- ◆ Times: Loan-to-value ratio 0.75
- ◆ Mortgage amount 75000
- ◆ Interest rate 0.12
- ◆ Number of years 30
- ◆ Present value factor 0.033378
- ◆ Debt service 9310.774

Opportunity costs

- ◆ Condominium market value 100,000
- ◆ Times: $1-LTV=0.25$
- ◆ Equity amount 25,000
- ◆ Dividend 12%
- ◆ Annual cash flow 3,000

TOTAL COSTS $12,311/12=1,026\text{month} > 800$

Example - Owning

- ◆ If purchased, 20% down payment required, 30yr mortgage at 12%.
- ◆ Combined state and federal tax rate 28%
- ◆ No capital gains tax if sold after 2 years
- ◆ Transaction costs prorated on a straight-line basis (buying costs 2%, selling costs 7%)
- ◆ Opportunity costs of capital 10%
- ◆ Annual change in all values 5%
- ◆ Property taxes 2%, hazard insurance 0.5%, maintenance 1%.

Example - renting

- ◆ A dwelling offered for rent at 1% of its 100,000 market value.
- ◆ Required security deposit 1500
- ◆ Gross rent multiplier 100
- ◆ Renter's insurance 0.2%
- ◆ Renter's capital invested 20,500.

| | YEAR 1 | | YEAR 2 | | YEAR 3 | |
|--------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | RENT | OWN | RENT | OWN | RENT | OWN |
| COSTS | | | | | | |
| average buying expenses | | 2000 | | 1000 | | 667 |
| interest on loan | | 9584 | | 9548 | | 9506 |
| Annual property taxes | | 2000 | | 2100 | | 2205 |
| Hazard insurance | | 500 | | 525 | | 551 |
| Renter's insurance | 200 | | 210 | | 221 | |
| Annual maintainance | | 1000 | | 1050 | | 1103 |
| Equity opportunity costs | | 2000 | | 2529 | | 3087 |
| Annual rent | 12000 | | 12600 | | 13230 | |
| Average selling expenses | | 7000 | | 3675 | | 2573 |
| TOTAL COST PER YEAR | 12200 | 24084 | 12810 | 20427 | 13451 | 19691 |
| BENEFITS | | | | | | |
| Renter's return 10%, taxes 28% | 1476 | | 1582 | | 1696 | |
| Income tax saving for interest | | 2684 | | 2673 | | 2662 |
| Income tax saving for property taxes | | 560 | | 588 | | 617 |
| Equity build-up | | 5000 | | 5250 | | 5513 |
| TOTAL BENEFITS PER YEAR | 1476 | 8244 | 1582 | 8511 | 1696 | 8792 |
| NET COST PER YEAR | 10724 | 15840 | 11228 | 11916 | 11754 | 10899 |
| NET ADVANTAGE OF BUYING | | -5116 | | -688 | | 855 |

Renter

COSTS

- ◆ Insurance= $0.2 \times 100,000 = 200$
- ◆ Rent= $12 \times 0.01 \times 100,000 = 12,000$

BENEFITS

- ◆ Return= (down payment+ buying exp.-deposit) x int x (1-tax rate)
- ◆ Return= $(20,000 + 2,000 - 1,500) \times 0.01 \times (1 - 0.28) = 1,476$

Owner costs

- ◆ Average buying expenses $0.02 \times 100,000 / \# \text{ years} = 2000$
- ◆ Interest on loan
 int rate 0.01, Periods 360, PVF 0.027816689,
 debt service monthly 822, times 12=9874
 $PVF(0.01, 288) = 0.031344542$
 loan balance after 1 year 79709.69652
 principal 290.3034774
 interest = loan balance - principal = 9584.377453
- ◆ Annual property taxes $0.02 \times 100,000 = 2,000$, year 2 times 1.05
- ◆ Insurance 500, maintainance 1000, all grow at 5% annualy
- ◆ Average selling expenses = $0.07 \times \text{mkt. Value} / \# \text{ years}$, in year 2 = $0.07 \times 100,000 \times 1.05 / 2 = 3,675$

Owner benefits

- ◆ Income tax savings

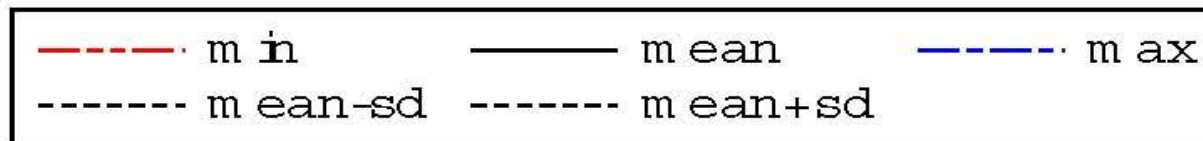
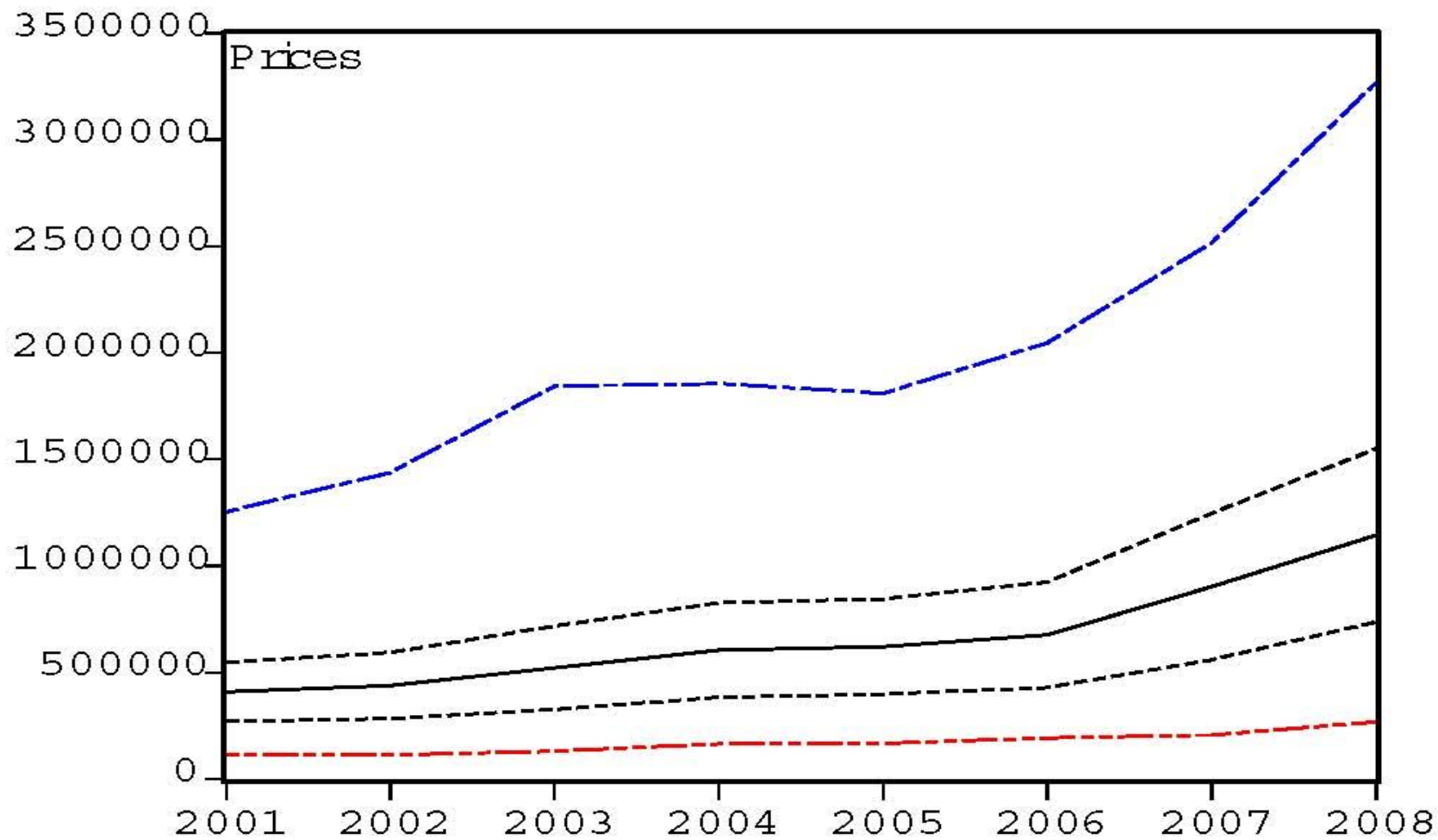
For interest paid=interest*income tax rate= $9,584*0.28=2,684$

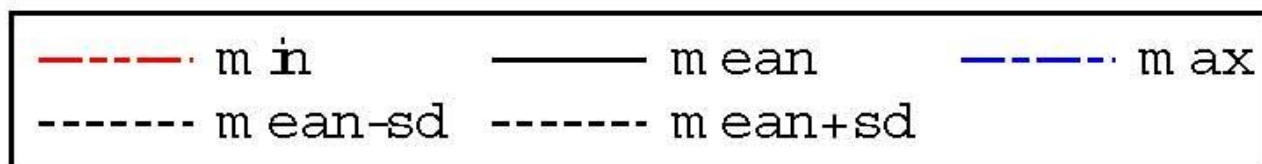
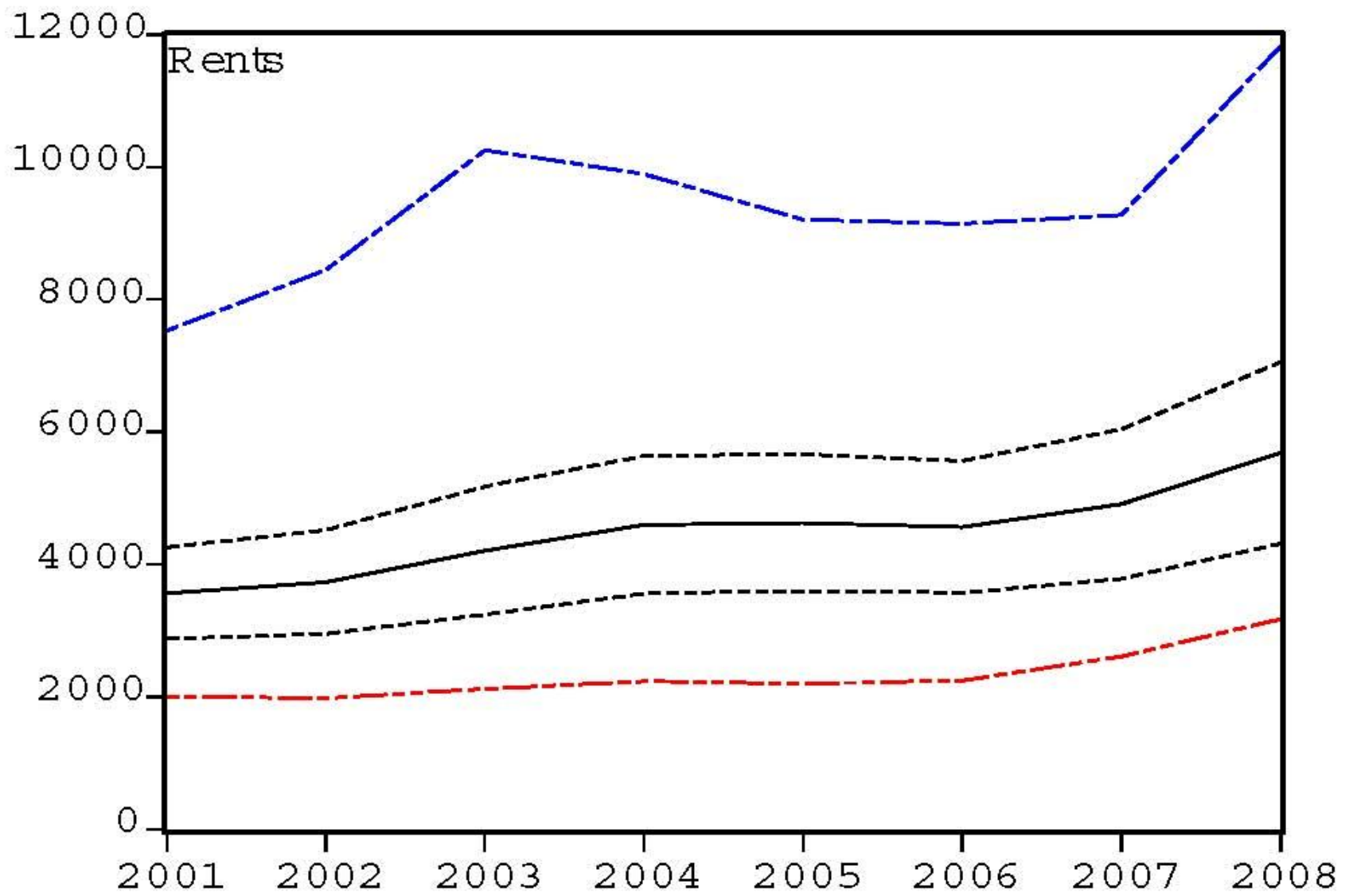
For property taxes=property tax*income tax rate= $2,000*0.28=560$

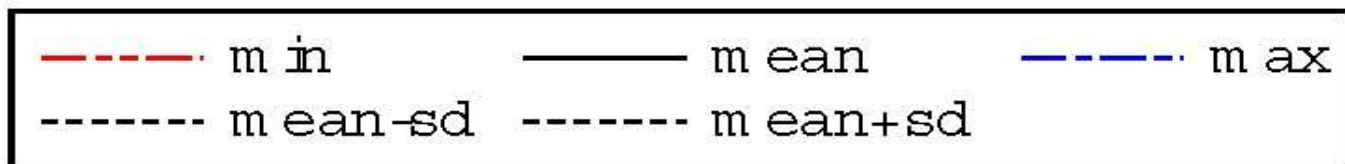
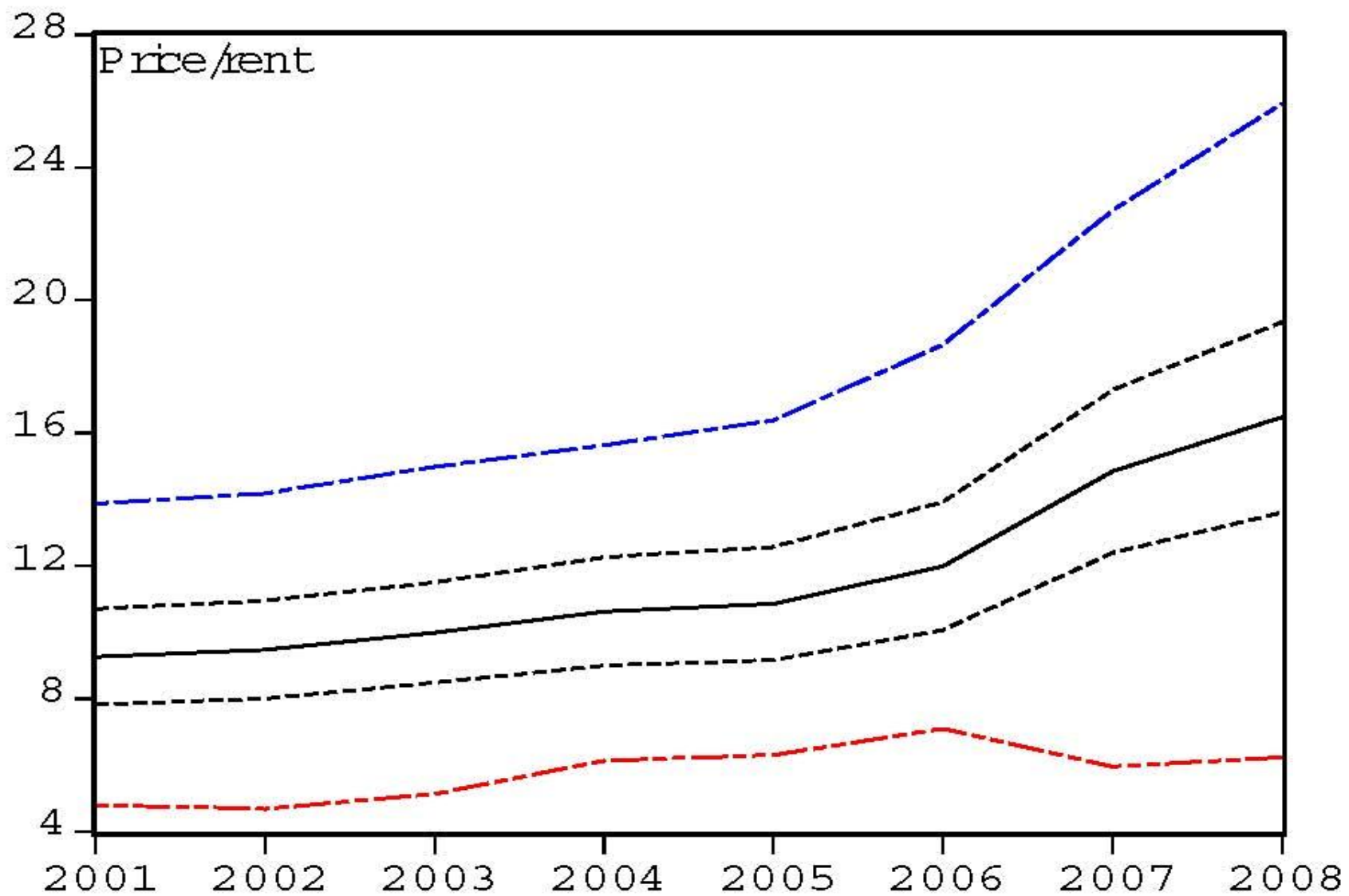
- ◆ Equity build-up

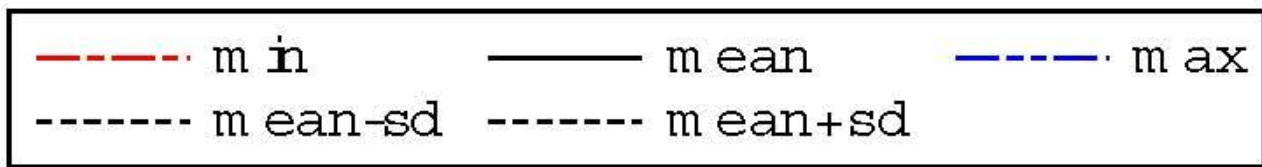
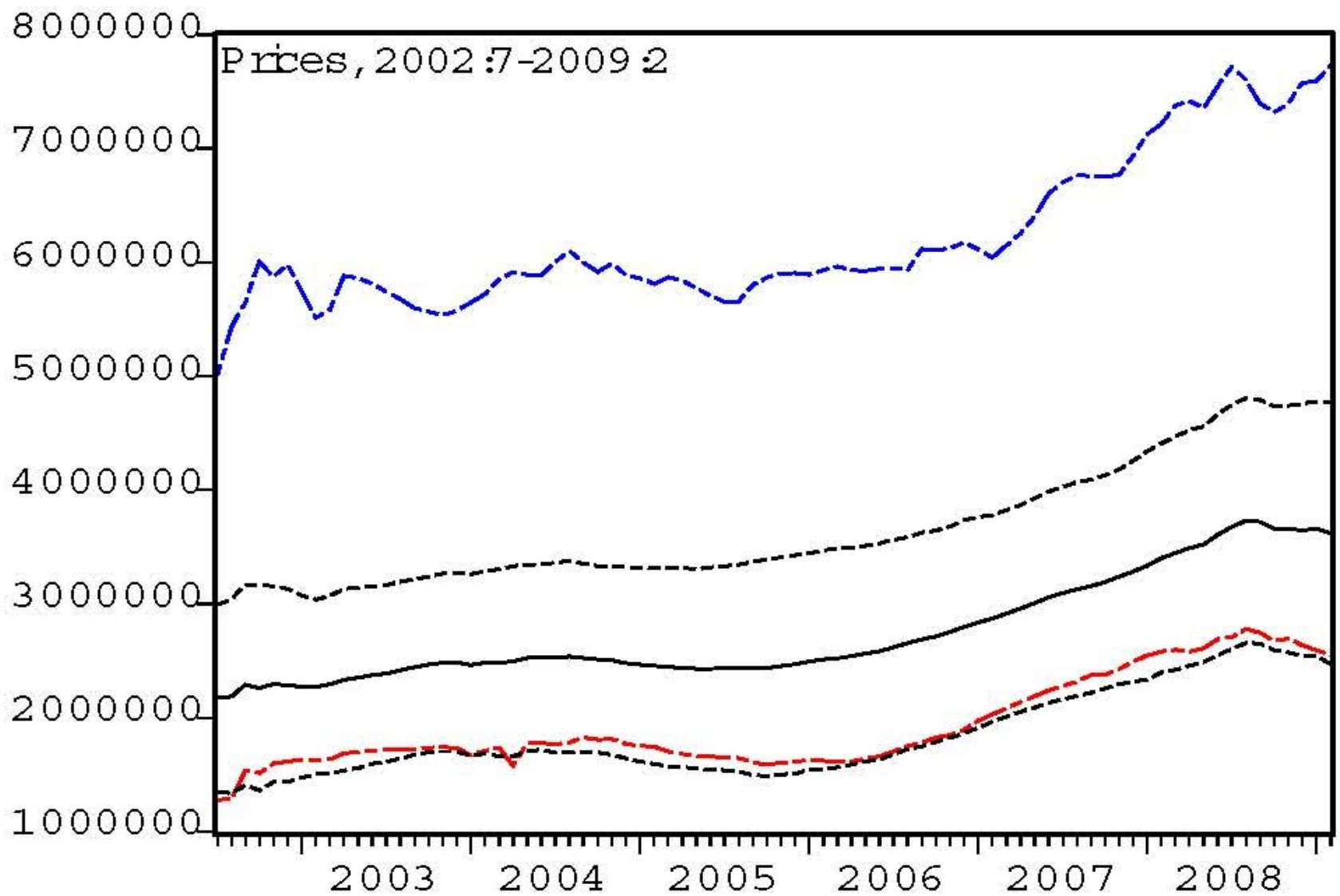
Year 1 5000

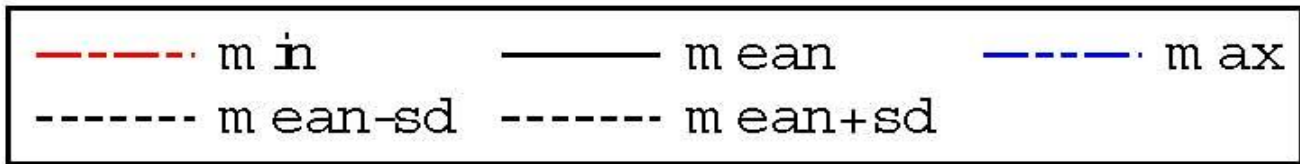
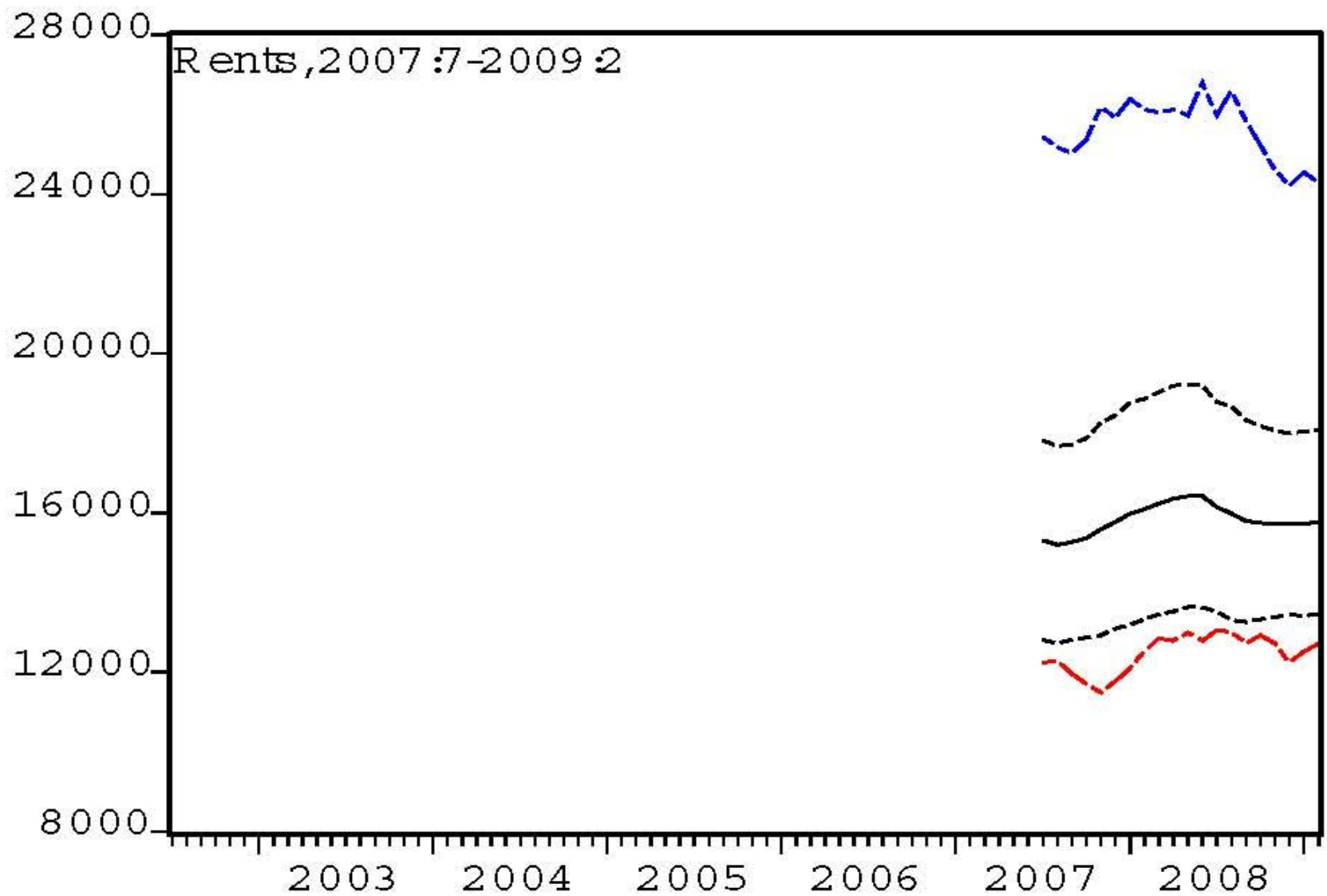
Year 2 $(100,000+5000)*0.05$

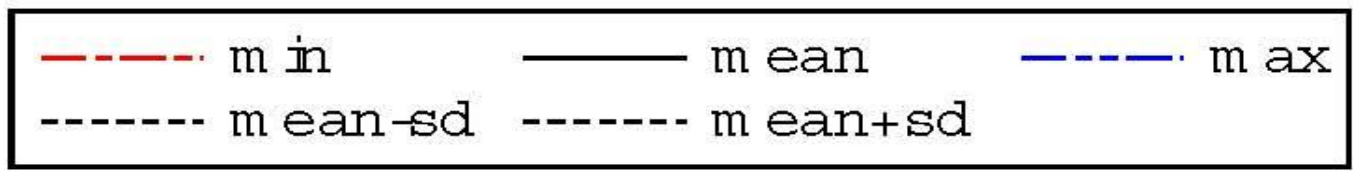
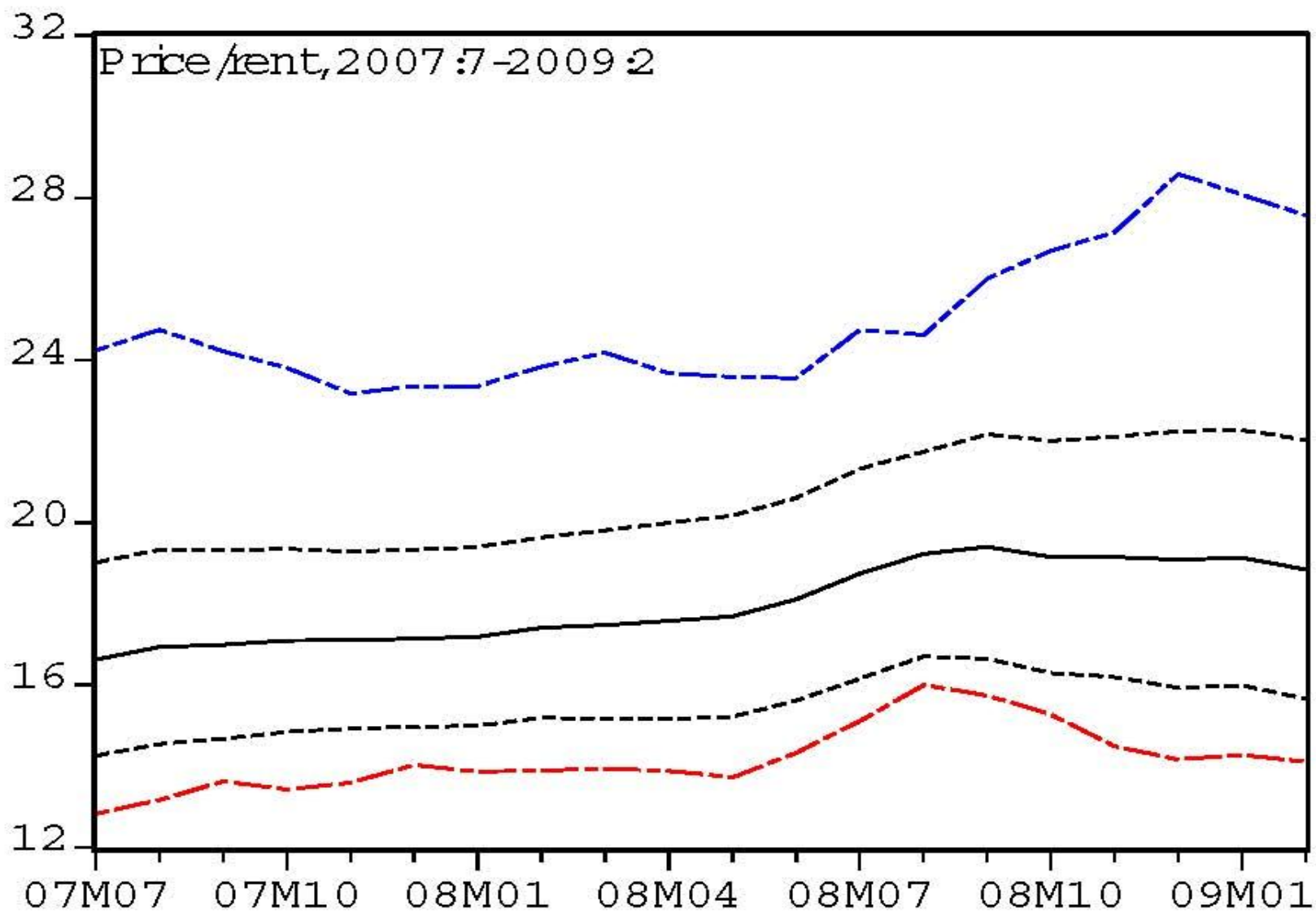












Potential impact of rent regulation

- ◆ rent-controlled apartments in NYC are less likely to be vacant
- ◆ mismatches between tenants and dwellings are common in rental market so the rent regulation can stimulate better matching. Rent regulation welfare improvements over laissez-faire occur if gains from centralized matching can offset the decrease in housing quality, the possible increase in waiting times, and the risks in rationing induced by rent controls.
- ◆ tenancy rent control for short term contracts, which limits the ownersq possibilities to increase rents for a certain number of years leads to lower equilibrium rents and higher social welfare
- ◆ The private Danish housing market- presence of rent regulation negatively affects households mobility since tenancy duration for the typical household is found to be more than six years longer if the dwelling belongs to 10% most regulated units than if it depends to the 10% least regulated units.

Degree of rent regulation in Europe

- ◆ first generation non-targeted rent regulation: simple upward ceilings on the rent level
- ◆ second-generation targeted rent regulation, which is more oriented on providing affordable housing for low-income households.
- ◆ In 1990s also third-generation rent controls evolved under which rents are regulated within individual tenancy.
- ◆ Until 2000s the first-generation non-targeted rent regulation, principles of which were inherited from communism, was applied to old tenancies in many Central and Eastern European countries. In 2000s in some countries such as Bulgaria and Estonia, first generation rent control was abandoned and in the other countries such as Poland it was largely reformed by means of decentralization policies. Nevertheless this kind of rent control is still in effect and is almost unchanged in several countries and in particular in the Czech Republic.

Rent regulation in the Czech Republic

- ◆ The permanent right of living in the apartments with low regulated rents was assigned in 1980s by means of ~~the~~ housing right. This right cannot be canceled but can be only passed on to a family member and applies only to a particular apartment, which makes it almost impossible to evict current tenants from these apartments.
- ◆ Such regulation has made part of the housing stock inaccessible for the new tenants and created quite significant shortage of rental housing (especially for young households), regulated rent apartments 20% of total residential housing stock.
- ◆ Free market rents further appreciated and substantial difference arose between them and the regulated rents. The presence of two separated segments of the rental housing with considerably differing rents appeared unjust from the social perspective and aroused public concerns. Moreover, since regulated rents explicitly depend only on location and size of the dwelling and the right of living in the regulated rent apartments was assigned 20 years ago, in many cases regulated rents do not reflect the social status and income of the tenants.

Recent changes

- ◆ In 2000s about one half of the initially municipal regulated rent apartments were sold to private owners and the low level of regulated rents did not allow them to cover maintenance costs.
- ◆ Rejection by the left wing government of several proposals of increase in regulated rents led 4000 private landlords to make a suit against Czech Republic to the European Court of Human Rights.
- ◆ Due to rising concern of public about the consequences of rent regulation in 2006 New Act of Unilateral Rent Increase was proposed and approved, which suggested gradual increase of regulated rent starting from 2006 and complete removal of rent regulation by 2011.

Impact of deregulation

- ◆ rent deregulation together with application of effective housing policies would lead to an increase of the income landlords, decrease of the currently biased free market rents and improvement of affordability of housing in the Czech Republic
- ◆ rent deregulation should substantially affect the tenure decision of both households living currently at regulated rent apartments as well as young households choosing between renting or owning their dwelling.
- ◆ combination of income targeted decontrol and vacancy decontrol seems the best option for reforming New York City's rent regulation system and would generate substantial new taxable rental income

Lux, Sunega: Housing affordability of Rental and Owner-Occupied Housing over the Course of the Economic Transformation in the Czech Republic

- ◆ To evaluate housing affordability the authors used housing expenditures-to income ratios and data files from the Czech Statistical Office.
- ◆ The objective is also to draw attention to the need to modify standard indicators when measuring housing affordability in countries in transition.
- ◆ Huge differences in affordability ratios between households living in so called %privileged+ and households living in the %unprivileged+ housing market sectors.

Measuring housing affordability

- ◆ **The indicator approach:** household expenditures-to-income ratio.
- ◆ **The reference approach** either refers to the situation in another sector of housing (e.g. the level of rent is fixed according to the level of rent in the sector of private rental housing) or refers to the need to secure housing for certain groups of the population (e.g. rent should be set at a level that is affordable to families of employee households with a number of children and with low wages).
- ◆ **The residual approach:** residual income, which is the amount of total net household income, reduced by expenditures on housing and by the amount of the subsistence minimum, necessary to cover the other essential living costs of the individual household members. . normative aspect

The indicator approach

Housing expenditures-to-income ratio = monthly expenditures of a household on housing (rent, basic expenditures, aggregate expenditures) / monthly total net household income * 100 (%),

where:

1. basic expenditures of the household on housing = the sum of expenditures on rent, central heating, hot water, electricity, gas, energy, water and sewage charges, and other municipal services;
2. aggregate expenditures of the household on housing = the sum of basic expenditures on housing and expenditures on structural and home maintenance, construction requirements, and the maintenance of household installations, loan repayments on the house or flat, and property taxes.

Studied groups

- ◆ The housing affordability is analysed separately for households living in rental housing (municipal, state, and private rental flats) and households living in owner-occupied housing (privately owned flats or family homes); households living in cooperative housing, which has the features of both rental and owner-occupied housing, are excluded from this analysis of housing affordability.
- ◆ For the purpose of monitoring the developments in the affordability of *rental housing the calculation of the housing expenditures-to-income ratio logically* encompasses only the basic expenditures of the household on housing; aggregate expenditures are included only in the analysis of affordability of the owner-occupier housing.

Market segments

- ◆ The segment of households enjoying the advantages of **Í privilegedĬ housing**: People paying regulated rent, people who acquired their own or cooperative housing before 1989, and people who had the opportunity to buy their own housing during the privatisation of municipal flats, wherein flats were and still are sold at prices far below market prices;
- ◆ The segment of **Í non-privilegedĬ** housing, occupied by people who, precisely because of the existence of rent controls on flats in the %privileged+segment, are paying unnecessarily high market rents, and who, owing to fixed term tenancy contracts and the arbitrary methods of determining rent levels (initial and subsequent), enjoy very little legislative protection against the actions of landlords (in contrast to the very rigid protections of %old+tenants), people sometimes referred to as %a forced cohabitation+and people who have acquired their own or cooperative housing under market conditions and paid the price set by the market.

The affordability of rental housing in the %privileged+ housing sector 1991 . 2003, Fig 2 & 3

- ◆ %ratio 1+- basic housing expenditures-to-income ratio in individual years with the assigned regulated rents for households that indicated in their survey logs a higher amount of paid rent than the level of regulated rent at that time.
- ◆ %ratio 2+ shows the development of the housing expenditures-to-income ratio after assigning regulated rent and excluding the expenditures on secondary housing.
- ◆ %ratio 3+ corresponds to the housing expenditures-to-income ratio after assigning regulated rent, excluding the expenditures on secondary housing, and reducing housing expenditures by the amount of the housing allowance(s).
- ◆ %ratio 4+ shows the basic housing expenditures-to-income ratio after assigning regulated rent, excluding the expenditures on secondary housing, reducing housing expenditures by housing allowance and adjusting housing consumption (excluding overconsumption).

The affordability of rental housing in the 'unprivileged' housing sector (2002)

- ◆ The resulting unadjusted average basic housing expenditures-to-income ratio for households living in the 'unprivileged+rental housing sector in 2002 is 27.9%; after taking into account expenditures on secondary housing it is 27.7%; after taking into account expenditures on secondary housing and the reduction of expenditures by the housing allowance it is 27.3%; and after taking into account expenditures on secondary housing, the reduction of expenditures by the housing allowance, and housing overconsumption it is 25.6%.
- ◆ If I use the affordability limit of 25% of the housing expenditures-to-income ratio, 49.6% of households from 'unprivileged+rental housing had unadjusted housing expenditures-to-income ratio higher than the affordability limit and 43.7% of same households have an adjusted housing expenditures-to-income ratio higher than the affordability limit in 2002.

The affordability of owner-occupied

- ◆ Privileged sector Fig 4-5
- ◆ Unprivileged sector Fig 6-7

Table 2 . all sectors