

OVERVIEW FOR THE FINAL EXAM

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2010 FALL

Format

- ◆ 4 essay questions and/or graph analysis
- ◆ Fixed-rate mortgage problem
- ◆ Rent vs. buy problem
- . bring a calculator/laptop with ability to calculate powers

Text

- ◆ Martin Lux (editor, 2003). Housing Policy: An End or a New Beginning? Open Society Institute, Budapest, Hungary (<http://lgi.osi.hu>). (L)
- ◆ James D. Shilling (2002). Real Estate. 13th edition, South-Western. (S)
- <http://home.cerge-ei.cz/petrz/>

Outline

SUPPLY AND DEMAND ON THE HOUSING MARKET

- Donald Haurin (2008). The US Housing Crisis: Lessons Learned
- Jonathan Skinner. Housing and Saving in the United States. NP, Ch. 8

Outline

AFFORDABILITY

- ◆ Lux M., P. Sunega, T. Kostelecký, D. Čermák 2003. Housing Standards 2002/03
Financial Affordability and Attitudes to Housing. Prague: Institute of Sociology, Academy of Sciences of the Czech Republic.
http://seb.soc.cas.cz/publikace_download/standardy2003_downen.htm

REAL ESTATE FINANCE

- ◆ Mechanics of Fixed-Rate Mortgage Financing, S. Ch. 6
- ◆ Patric H. Hendershott. Housing Finance in the United States. NP, Ch. 4
- ◆ Beck, Kibuuka, Tiongson. Mortgage finance in Central and Eastern Europe: Opportunity or burden?

Outline

RENTING VS OWNING

- ◆ Financing Home Ownership, S Ch. 23
- ◆ Czech Republic & Prague . prices and rents
- ◆ Rent deregulation
- ◆ Martin Lux and Petr Sunega (2007). Housing affordability of Rental and Owner-Occupied Housing over the Course of the Economic Transformation in the Czech Republic. International Conference on Sustainable Urban Areas. Available at http://seb.soc.cas.cz/publikace_download/publikace/enhr2007_lux.pdf
- ◆ Country profiles, L. Part II.
 - Rental Model . Czech Republic, Poland
 - Homeownership Model . Estonia, Romania, Slovakia
 - Bulgaria

Haurin: The US Housing Crisis

- ◆ What is the nature and extent of the U.S. housing crisis?
- ◆ What were the standard fundamental causes of the housing boom and what were the newer factors?
- ◆ What factors caused the end of the boom?
- ◆ What lessons can be learned from the crisis and what policies are appropriate?

Skinner: Housing and saving in the US

- ◆ Life-cycle housing decisions
- ◆ House price appreciation and savings of current and potential home owners
- ◆ Housing and uncertainty

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

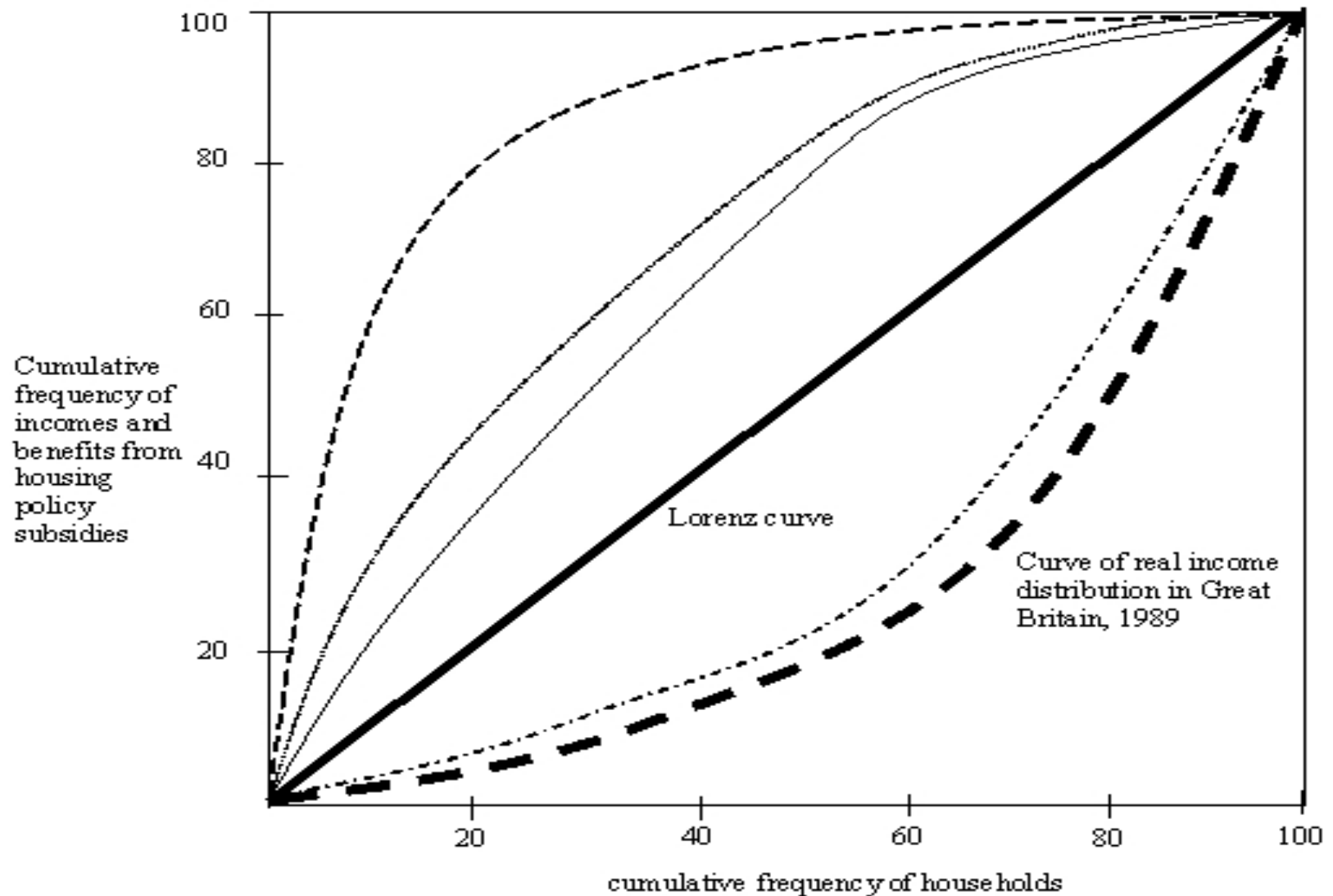
State expenditures for housing

- ◆ **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



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- household income tax relief supply-side subsidies in rental housing sector subsidies in rental housing sector in total
- demand-side subsidies in rental housing sector

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.

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.

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.

LOAN AMORTIZATION SCHEDULE

YEAR	DEBT SERVICE	INTEREST	PRINCIPAL	LOAN OUTSTANDING
0				500,000.00
1	63,749.98	60,000.00	3,749.98	496,250.02
2	63,749.98	59,550.00	4,199.98	492,050.03
3	63,749.98	59,046.00	4,703.98	487,346.05
4	63,749.98	58,481.53	5,268.46	482,077.59
5	63,749.98	57,849.31	5,900.67	476,176.92
6	63,749.98	57,141.23	6,608.75	469,568.16
7	63,749.98	56,348.18	7,401.81	462,166.36
8	63,749.98	55,459.96	8,290.02	453,876.34
9	63,749.98	54,465.16	9,284.82	444,591.51
10	63,749.98	53,350.98	10,399.00	434,192.51
11	63,749.98	52,103.10	11,646.88	422,545.62
12	63,749.98	50,705.47	13,044.51	409,501.11
13	63,749.98	49,140.13	14,609.85	394,891.26
14	63,749.98	47,386.95	16,363.03	378,528.23
15	63,749.98	45,423.39	18,326.60	360,201.63
16	63,749.98	43,224.20	20,525.79	339,675.84
17	63,749.98	40,761.10	22,988.88	316,686.96
18	63,749.98	38,002.44	25,747.55	290,939.41
19	63,749.98	34,912.73	28,837.26	262,102.15
20	63,749.98	31,452.26	32,297.73	229,804.43
21	63,749.98	27,576.53	36,173.45	193,630.97
22	63,749.98	23,235.72	40,514.27	153,116.71
23	63,749.98	18,374.00	45,375.98	107,740.73
24	63,749.98	12,928.89	50,821.10	56,919.63
25	63,749.98	6,830.36	56,919.63	0.00

Interest rate 0.12
 Periods 25
 PVF 0.058823307

Hendershott: Housing Finance in the US

- ◆ 1960s-1970s:
 - Mostly FRM, almost no ARM
 - Portfolio restrictions & tax inducements => 2/3 of the mortgage market supplied by savings and loans institutions (S&L) and mutual savings banks (MSBs).
 - Deposit rate ceilings
 - No securitization of mortgages
 - As a result, the US housing sector was sensitive to changes in interest rates
- ◆ 1980s: restrictions lifted, ARMs, 1986-1989 only 23% of the mortgage market supplied by S&Ls and MSBs. The rest is commercial banks and Federal National Mortgage Association (Fannie Mae).

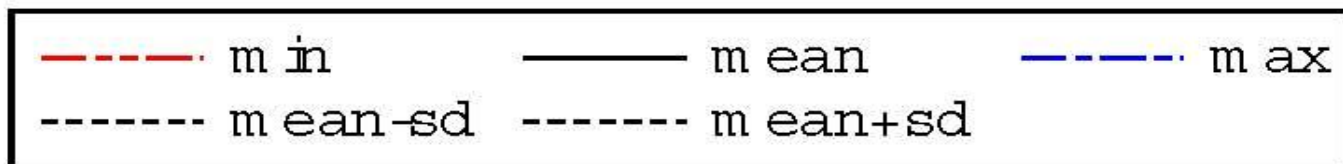
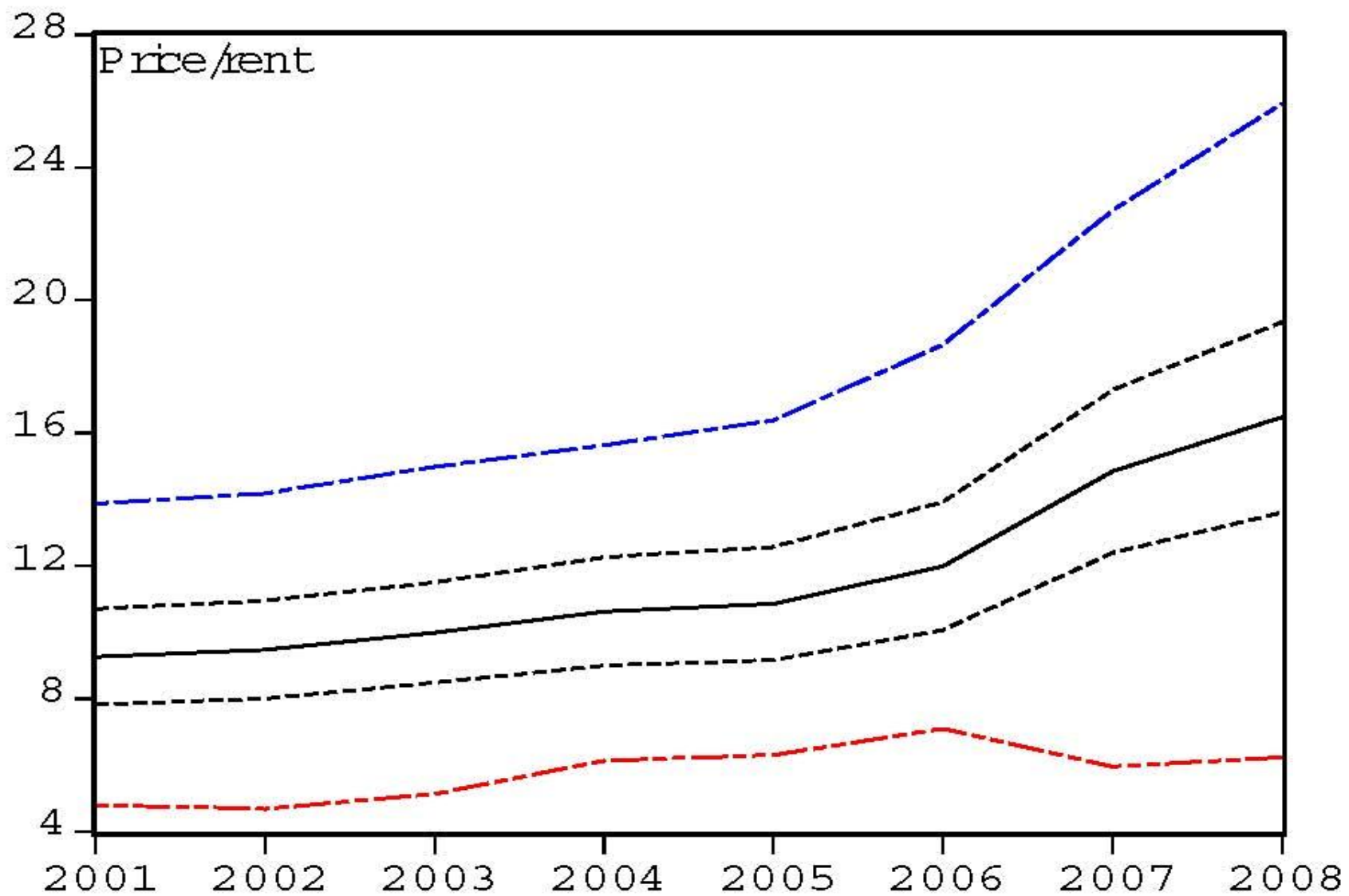
Mortgage Finance in Central and Eastern Europe – Opportunity or Burden? Thorsten Beck, Katie Kibuuka, and Erwin Tiongson

- ◆ Household credit, especially for mortgages, has doubled over the past years in the new European Union member countries, raising concerns about the economic and social consequences of household indebtedness in the event of a macroeconomic crisis.
- ◆ Using household survey data for 2005, 2006, and 2007 for both old and new European Union members, this paper assesses the determinants of access to mortgage finance. It also examines whether mortgage holders were more likely to suffer financial distress compared with non-mortgage holders in the period before the global financial crisis.

Preliminary overview of results

- ◆ The analysis does not find any systematic evidence that mortgage holders are financially more vulnerable than renters or outright owners; in fact, the incidence of financial vulnerability generally fell between 2005 and 2007, possibly reflecting the strong income growth experienced by these countries over this period.
- ◆ In addition, although tenure status is more difficult to explain in the new European Union member countries, the analysis finds that many of the same drivers of tenure status in the older member countries generally drive tenure status in the newer member countries as well.

	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



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.

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

- ◆ Huge differences in affordability ratios between households living in so called %privileged+ and households living in the %unprivileged+ housing market sectors.

Country profiles

- ◆ Rental model . Czech Republic, Poland
- ◆ Homeownership model . Estonia, Romania, Slovakia
- ◆ Bulgaria