

# Aspects of Housing Choice

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Part 2

# Race and Housing Prices

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- ⑩ In U.S. empirical studies show that housing demand by whites is affected negatively by the percentage of African American households in the immediate area.
  - ⑩ Racial prejudice is an aversion to members of a racial group regardless of the attributes of that individual.
  - ⑩ Studies show evidence of both aversion and active discrimination on the part of housing sellers. Neighborhoods experience racial “tipping.”
  - ⑩ Racial segregation in U.S. housing has declined somewhat, but remains high as measured by segregation indexes.
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# Affordable Housing and Gentrification

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- ⑩ Renter households in the lowest 20% of the income distribution experienced an increase in ratio of rent to income; 0.47 in 1960 to 0.55 in 2000. In 2000 79% of this group spent more than 30% of income on rent.
  - ⑩ Causes of trend? **Rent increases**, caused in part by government regulations, growth controls, etc.
  - ⑩ Does gentrification contribute to the problem of housing affordability? Study of Boston [Vigdor (2002)] fails to find any direct connection, although low-income renters in Boston experienced increasing affordability problem – as they did in most other urban areas.
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# Urban Housing in Developing Countries

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- ⑩ Much housing is “informal,” below minimal standards, and not recorded as having been built.
  - ⑩ Innovative study of informal housing by Annez and Wheaton (1984) compares ratio of recorded housing production to household growth from census. Example; ratio = 0.28 in Egypt.
  - ⑩ Housing unit growth from census is a function of population, and does not depend on GNP per capita, cost of recorded units, lending, or public housing built.
  - ⑩ Ratio of recorded units to household growth does depend on GNP per capita. Size of recorded units depends on GNP per cap., cost, and lending.
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# Neighborhood Characteristics – Choice of Jurisdiction (Tiebout-like model)

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- ⑩ Assume there are  $M$  types of households (indexed  $m=1,2,\dots,M$ ); households of the same type are identical
    - ⑩ They have identical preferences
    - ⑩ They have identical income
  - ⑩ Assume that there are  $J$  jurisdictions (indexed  $j=1,2,\dots,J$ )
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# Neighborhood Characteristics – Choice of Jurisdiction

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- ⑩ Each jurisdiction has:
    - ⑩ Amenities indicated by  $a_j$  specific to the jurisdiction
    - ⑩ Tax-expenditure package  $(t_j, y_j)$  specific to the jurisdiction
  - ⑩ Are amenities exogenous or endogenous?
    - ⑩ exogenous
    - ⑩ endogenous
  - ⑩ Is the tax-expenditure package exogenous or endogenous?
    - ⑩ exogenous
    - ⑩ endogenous
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# Multi-jurisdictional Equilibrium with Amenities and Tax-Expenditure Package

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## ⑩ Equilibrium requires:

- ⑩ Equilibrium prices for all commodities traded on markets
- ⑩ Labor market
- ⑩ Housing (land) market in each jurisdiction
- ⑩ Balanced budget:  $c_j(y_j) = t_j B_j$
- ⑩ Locational equilibrium of households
  - ⑩ For each type of household  $m$  which resides in jurisdiction  $j$ <sup>†</sup>  
$$U_{mj}(*x_{mj}, *h_{mj}, y_j) \geq U_{mk}(*x_{mk}, *h_{mk}, y_k)$$

NOTE: If type  $m$  resides in both  $j$  and  $k$ , then the inequality is replaced by an equation

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<sup>†</sup> The asterisks (\*) in the expression below indicate optimal (realized) consumption.

# Tax Advantages of Home Ownership

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⑩ Federal tax law in U.S. permits

Deduction of mortgage interest and property taxes

Capital gain not taxed (up to 250K for individual and 500K for married couple)

⑩ Comparison of owning versus renting example

Real economic cost of house per year:  $C = tV + rV + dV$

$t$  = prop. tax rate,  $r$  = interest rate,  $d$  = utilities, maintenance, depreciation

Cost for home owner:  $C_0 = (1-T)(t+r)V + dV$ ,  $T$ =tax rate

Difference as % of house value is  $(C-C_0)/V = (t+r)T$

If  $t=2.5\%$ ,  $r=6\%$ ,  $T = 35\%$ , cost saving is 3% of  $V$  per yr.

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