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- key assumption : people care about the income distribution in the community in which they live
- (at least) 3 reasons why :
  - status : direct (psychic) benefit from living in town with big houses, expensive cars, rich people
  - peer groups : classmates' attributes affect educational outcomes, and good attributes are more likely in rich kids
  - taxes : income (or property) taxes are mandatory : raising average income (holding public expenditures per capita constant) lowers tax rate

# Poor Chasing the Rich?

- if average income in a community affects people's utility, then sorting and selection problems arise
- Brueckner and Lee (1989), de Bartolome (1990), Epple and Romer (1991), Fernandez and Rogerson (1997), Wilson (1998), Hoyt and Lee (2003), Epple and Romano (2003), Strahilevitz (2006)
- if advantages of high income can't be capitalized in land prices, local public sector decisions in high-income communities may be distorted from first-best

# Federalism

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- restrictions on spending choices of local governments?
- choice between decentralized, varied provision and centralized, uniform provision [of some publicly-provided output]?
- transfers among local governments?

# Our Framework

- no land (so jurisdictions are “clubs”) ; no voting
- 2 classes, “poor” and “rich” ; both perfectly mobile
- jurisdictions run by “entrepreneurs” (Berglas (1976), Henderson (1985), Scotchmer and Wooders (1987), Brueckner (2009))
- free entry by entrepreneurs

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- jurisdictions run by “entrepreneurs” (Berglas (1976), Henderson (1985), Scotchmer and Wooders (1987), Brueckner (2009))
- free entry by entrepreneurs
- but entrepreneurs are “large” not “small” ; instead of taking residents’ utilities as given, they anticipate the effect of their own policies on residents’ location choices
- similar in some respects to the competitive insurance models (Rothschild and Stiglitz (1976), Wilson (1977))

# The Model : Residents

- utility function of type- $t$  resident is  $U_t(g, \lambda)$  ( $t = P, R$ )  
where
  - $g$  : level of public expenditure per capita
  - $\lambda$  : fraction of residents in the community who are rich
- residents are “small” : choose jurisdiction with highest value of  $U_t$ , taking as given  $g_i$  and  $\lambda_i$  in each jurisdiction  $i$
- $U$  is increasing in  $\lambda$  (richer jurisdictions are better) ; single-peaked in  $g$  (people have to pay cost of the public sector)
- single-crossing : rich prefer more public output (ceteris paribus)

# The Model : City Managers

- free entry by “city managers” who choose, and commit to, public output levels  $g_i$
- $\lambda_i$  **not** chosen by city managers ;  $\lambda_i$ 's are determined by residents' location choices, which city managers anticipate
- timing : [0 : federal government sets policies] ; 1 : managers choose output levels  $g_i$  ; 2 : residents choose where to live
- competitive equilibrium : no new city manager can enter, and attract residents to her city, anticipating residents' sorting behavior

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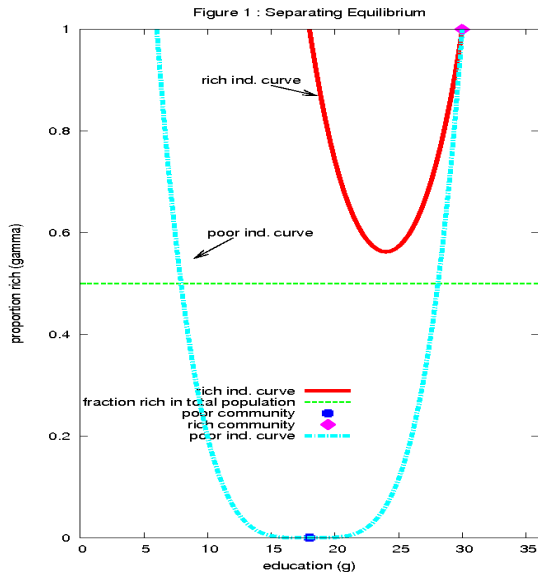
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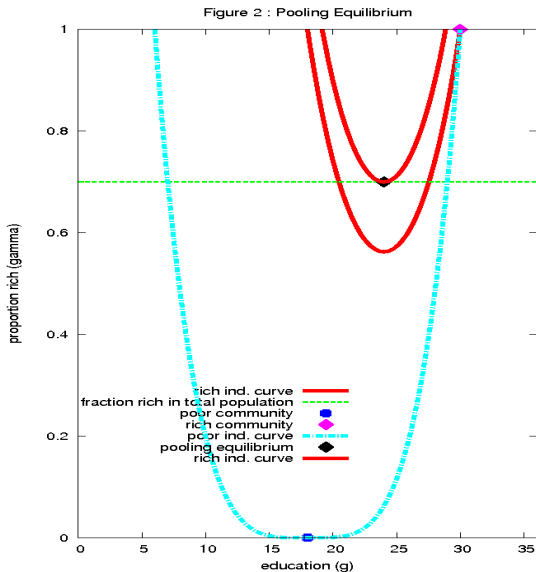
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- if the proportion is higher than this threshold, the only equilibrium is a pooling equilibrium, in which all jurisdictions have identical population mixes, and in which they all provide the level of public output which maximizes the well-being of rich residents  $U_R(g, \bar{\lambda})$

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# a pooling equilibrium



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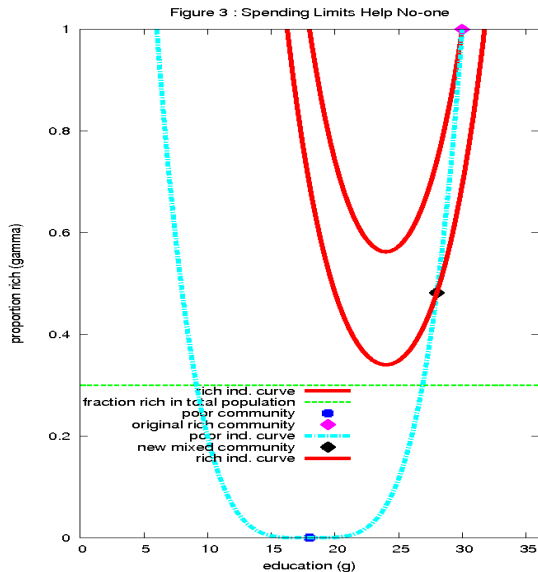
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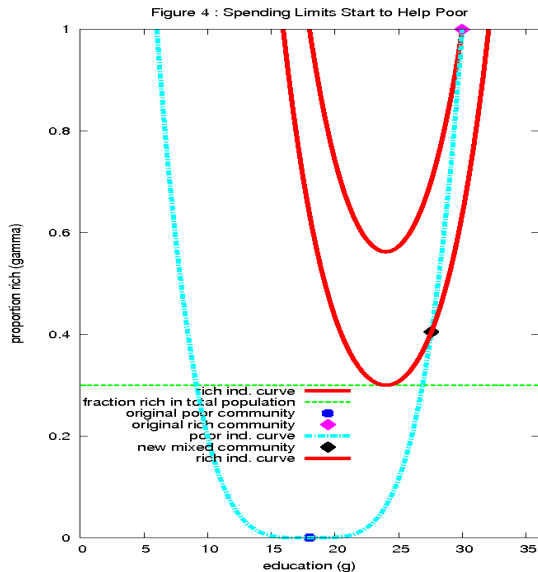
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- but a more serious restriction will benefit the poor (and harm the rich), by switching the equilibrium to a pooling equilibrium

## ceiling on local public expenditure I



## ceiling on local public expenditure II



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- rationale : by making the poor jurisdiction more attractive, the transfers ease the selection constraint, enabling the rich jurisdiction to provide a lower (less distorted) public output level
- important : these are transfers to governments of jurisdictions, not to individuals ; poor people benefit from these transfers only if they choose to live in poor jurisdictions
- for example : transfers to jurisdictions contingent on the jurisdictions' average income level, or tax base, or level of public expenditure

# first-generation federalism

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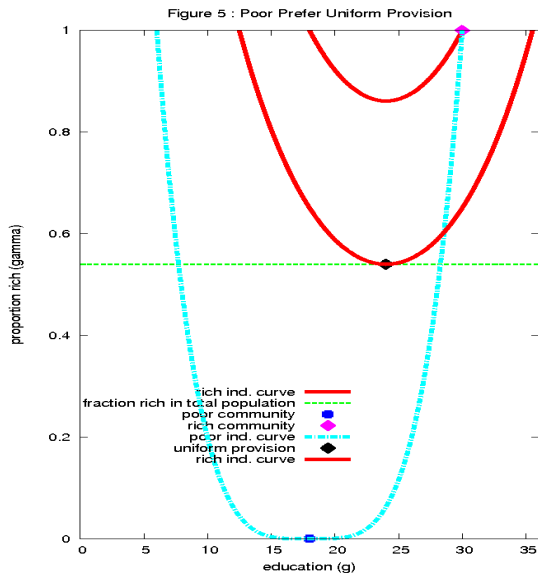
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- then forced uniformity cannot benefit the rich
- and will harm the rich if they are outnumbered (or if the equilibrium under decentralization is separating)
- if the poor outnumber the rich, then they must do strictly better under uniformity than under decentralization
- and if the rich outnumber the poor, then the poor might prefer uniformity (but might prefer decentralization)

## centralization vs. decentralization I



## centralization vs. decentralization II

