A Formal Model

- Consider a town populated by wealthy capitalists **(H)**, middle-class **(M)**, and workers **(L)**.

- Each group is homogenous and is of size n_i....

- Assume that (realistically) $n_M > n_H$ and $n_L + n_H > n_M$.

- Wealthy capitalists are endowed with capital stock k_H; middle class with $k_L < k_H$. Workers have one unit of labour and zero capital.Total capital stock is $K = n_H k_H + n_L k_L$.

- Production technology is

$$Y_i = A(.)\ell_i^{\alpha} k_i^{1-\alpha}.$$

- Labour supplied inelastically

- Market clearing wage is

$$w = A(.)\alpha[K/n_L]^{1-\alpha} = A(.)z$$

- Profits are

$$\pi_H = A(.)k_H x$$

$$\pi_L = A(.)k_L x$$

where

$$x = (1-\alpha)[n_L/K]^{\alpha}$$

- **Critical!** Assume that

$$A = A(g)$$

where g is public good provided; the function $A(g)$ is assumed to be increasing, concave, with $A(0) = 0$ and satisfies Inada conditions.

- All citizens have preferences

$$u_i = y_i + \frac{1}{\beta} h_i^{\beta}$$

where $\beta \in (0, 1)$ and h_i is housing.

- The indirect utility functions are

$$v_H(g) = B + A(g)k_H x - \tau - I_L \tau \frac{n_L}{n_H};$$

$$v_M(g) = B + A(g)k_L x - I_M \tau;$$

$$v_L(g) = C + A(g)z$$

where I_m, I_L are indicator functions for franchise extension & expansion of tax-base

Two Propositions:

Proposition 1:Provision of local public goods g is greater under H franchise than under M if and only if

$$\frac{k_H}{k_M} > \frac{n_M}{n_H} + 1$$

Provision is greater under HML franchise than under H or HM franchise.

Proposition 2: A voluntary extension of the franchise is associated with an increase in public goods spending i.e $g_{HM} > g_H$