

# INSTITUTIONS, INCENTIVES, AND POWER

# HIGH LEVEL INSTITUTIONS

**Selectorate:** The portion of the population that has some chance of playing a role in the selection of the leader.

**Winning Coalition:** The portion of the Selectorate needed to keep a leader in power.

# TYPOLGY

## Democracy

- ▶ Selectorate: Adult Citizens
- ▶ Winning Coalition: Majority (or plurality) of voters

## Autocracies

- ▶ Selectorate: Party members
- ▶ Winning Coalition: Central committee

## Juntas or monarchies

- ▶ Selectorate: Military offices or nobles/clergy
- ▶ Winning Coalition: Some critical group of generals and colonels or barons and bishops

# TWO TYPES OF PUBLIC POLICY

Public Goods

Private Goods to members of winning coalition

# BASIC ARGUMENT

Leaders choose mix of private and public goods to keep WC from defecting to challenger

With small WC inexpensive to do so with private goods

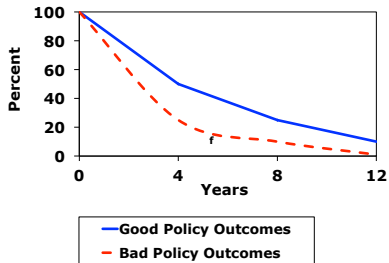
- ▶ Bad policy is good politics

With large WC too expensive to provide private goods

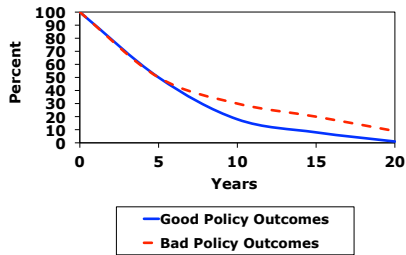
- ▶ Good policy is good politics

# POLICY AND LEADER SURVIVAL

Survival Rates **Large** WC



Survival Rates **Small** WC



# A SELECTORATE MODEL

Incumbent leader ( $L$ ), Challenger ( $C$ ), and Selectorate of size  $S$

$L$  has winning coalition of size  $W < S$

Government has resources  $R > S$

# STRATEGIES

Each politician proposes a policy

- ▶ Public goods ( $g$ )
- ▶ Private goods ( $x$ ) to be provided to each member of the politician's winning coalition

$$pg + Wx \leq R$$

Each member of the Selectorate chooses which politician to support



# LEADERSHIP TRANSITION

$L$  loses power if and only if the following two things both happen:

1. The challenger gets the support of a group of size  $W$ .
2. The leader loses the support of at least one member of her winning coalition.

$L$  is committed to her WC

Each member of Selectorate is equally likely to end up in the challenger's winning coalition

# PAYOFFS

Winning Coalition member:

$$U_W(x, g) = x + \ln g$$

Selectorate member not in WC:

$$U_S(x, g) = \ln g$$

Politician in office:

$$B + u(R - pg - Wx)$$

## STEPS IN THE ANALYSIS

1. Any Politician (Leader or Challenger) wants to allocate whatever money she spends between public and private goods in a way that maximizes the welfare of the Leader's WC. For an arbitrary level of spending, how do the Leader's and Challenger's allocations differ?
2. The Challenger will offer his optimal allocation of the full budget,  $R$ .
3. If the Leader were to offer her optimal allocation of the full budget, the members of her WC would strictly prefer her to the Challenger. So she can offer less and still retain power.
4. How much does the Leader spend, and on what, as a function of the institutions (i.e.  $W$  and  $S$ )?

# CHALLENGER'S OPTIMAL ALLOCATION OF $\Delta$

$$\max_{(g,x)} \frac{W}{S}x + \ln g \quad \text{subject to } pg + Wx = \Delta$$

$$\left( pg + Wx = \Delta \Rightarrow x = \frac{\Delta - pg}{W} \right)$$

$$\max_g \frac{W}{S} \times \frac{\Delta - pg}{W} + \ln g$$

$$\frac{1}{g^C} = \frac{p}{S}$$

$$g^C = \frac{S}{p} \quad x^C = \frac{\Delta - S}{W}.$$

# LEADER'S OPTIMAL ALLOCATION OF $\Delta$

$$\max_{x,g} x + \ln g \quad \text{subject to } Wx + pg = \Delta.$$

$$\left( pg + Wx = \Delta \Rightarrow x = \frac{\Delta - pg}{W} \right)$$

$$\max_g \frac{\Delta - pg}{W} + \ln g$$

$$\frac{p}{W} = \frac{1}{g}$$

$$g^L = \frac{W}{p} \quad x^L = \frac{\Delta - W}{W}$$

# COMPARING CHALLENGER'S AND LEADER'S OPTIMAL ALLOCATIONS

$$g^C = \frac{S}{p} \quad x^C = \frac{\Delta - S}{W}.$$

$$g^L = \frac{W}{p} \quad x^L = \frac{\Delta - W}{W}$$

Leader gets larger benefit from private goods because of commitment

Especially acute when  $W$  is small

# THE CHALLENGER'S PROPOSAL

The best the Challenger can do is to choose his optimal allocation of the full budget

Expected payoff to a member of Leader's WC from the Challenger winning is:

$$\frac{W}{S} \times \frac{R - S}{W} + \ln \frac{S}{p} = \frac{R - S}{S} + \ln \frac{S}{p} \equiv \bar{U}^C$$

# THE LEADER NEED NOT SPEND THE WHOLE BUDGET

If Leader offers to optimally allocate the full budget, her allocation solves:

$$\max_g \frac{R - pg}{W} + \ln g$$

Expected payoff to a member of Leader's WC from the Leader winning is:

$$\frac{R - W}{W} + \ln \frac{W}{p}$$

The payoff from the Leader must be higher than from Challenger, since it was chosen to maximize the WC member's welfare when Leader is in office



# THE WINNING PROPOSAL

The Leader will not allocate her whole budget

Leader spends some amount,  $\Delta^*$ , satisfying:

$$\frac{\Delta^* - W}{W} + \ln \frac{W}{P} = \bar{U}^C$$

$$\Delta^* = W \left( \bar{U}^C + 1 - \ln \frac{W}{p} \right)$$

# OUTCOMES AND INSTITUTIONS

Total government spending increasing in size of the winning coalition

Public goods increasing in size of winning coalition

Private goods decreasing in size of winning coalition

Welfare of population members not in WC increasing in size of winning coalition

Large winning coalition  $\rightarrow$  good policy is good politics

Small winning coalition  $\rightarrow$  good policy is bad policy

# INSTITUTIONS AND DEVELOPMENT: AN EMPIRICAL STRATEGY

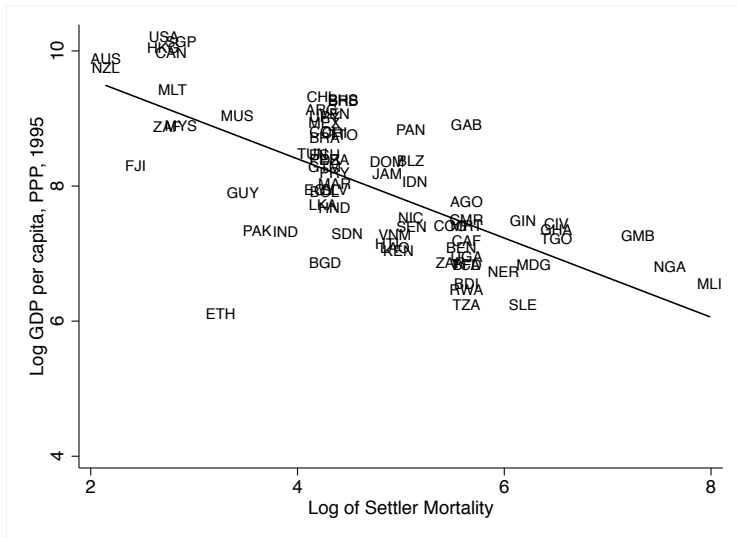
Mortality at the time of colonization affected settlement patterns.

Settlement patterns affected historic institutions.

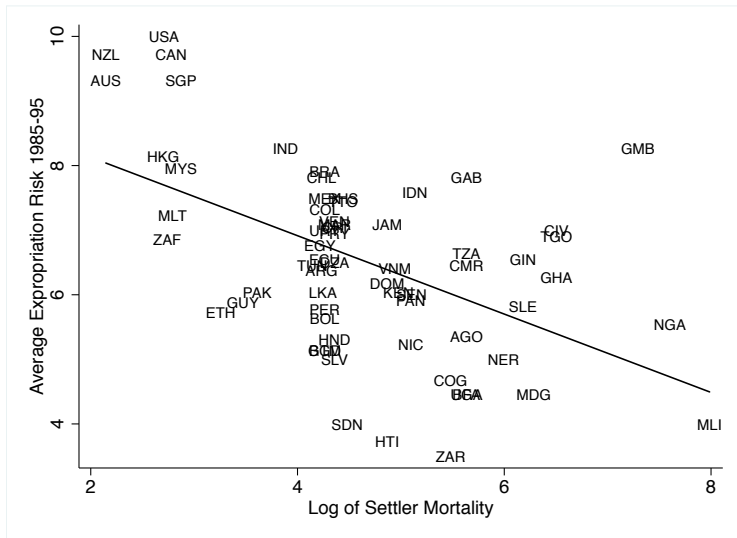
Historic institutions affect modern institutions.

Modern institutions, we believe, affect economic outcomes.

# SETTLER MORTALITY AND MODERN ECONOMY



# SETTLER MORTALITY AND MODERN INSTITUTIONS



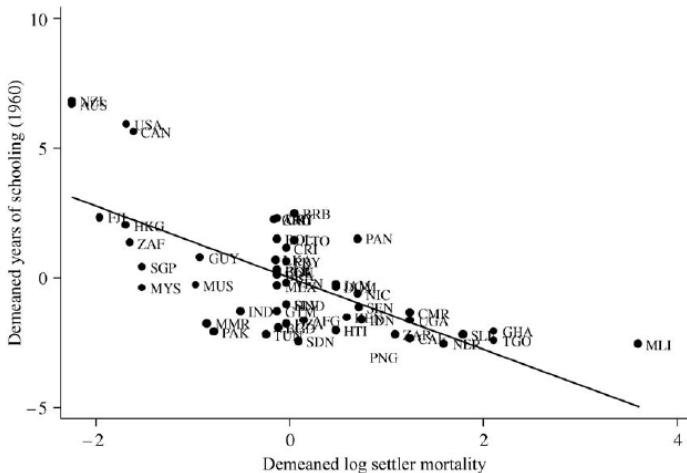
# MODERN INSTITUTIONS AND MODERN ECONOMIES

Good institutions seem to lead to better economic outcomes

Moving from the twenty-fifth percentile to the seventy-fifth percentile in quality of institutions, yields a seven-fold increase in GDP

- ▶ Nigeria to Chile.

# A POSSIBLE PROBLEM: HUMAN CAPITAL



# TAKE AWAYS

Different institutions create different incentives for leaders seeking to retain power

When power depends on the support of a small number of people, good policy is bad politics

When power depends on the support of a large number of people, good policy is good politics