

INSTITUTIONS, INCENTIVES, AND POWER

THE KEY IDEA

Policies will be skewed towards those who have **institutional authority** to select the government

When institution requires support of many, policies will be efficient

When institution requires support of few, policies will be inefficient

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 selected citizens (socially inefficient)

BASIC ARGUMENT

Leaders choose mix of private and public goods to keep a winning coalition's support

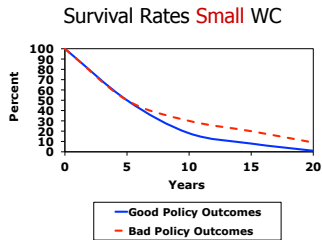
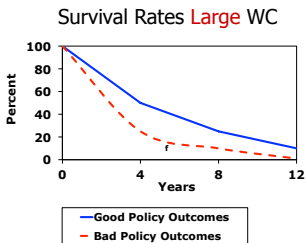
With small winning coalition it is inexpensive to do so with private goods

- ▶ Bad policy is good politics

With large winning coalition it is too expensive to provide private goods

- ▶ Good policy is good politics

POLICY AND LEADER SURVIVAL



OUTLINE

THE MODEL

ANALYSIS

- The Politicians' Allocations
- Equilibrium Proposals
- Outcomes

A SELECTORATE MODEL: PLAYERS

Incumbent leader (L), Challenger (C)

Population of size N , Selectorate of size $S \leq N$,

L has winning coalition of size $W < S$

A SELECTORATE MODEL: RESOURCES

Government has resources R

Resources can be spent on:

- ▶ Public good, $g \in \{0, 1\}$, at price p
 - ▶ Every citizen gets utility 1 from public good
 - ▶ Providing public good is good policy: $N > p$
- ▶ Private good, x , to each citizen in government's winning coalition
- ▶ Rents for the politician in power

THE SEQUENCE OF MOVES

Leader proposes (g_L, x_L) such that

$$pg_L + Wx_L \leq R$$

Challenger proposes (g_C, x_C) such that

$$pg_C + Wx_C \leq R$$

Each member of the Selectorate chooses which politician to support

LEADERSHIP TRANSITION

Leader loses power if loses support of at least one member of her winning coalition

If the Leader wins, the current winning coalition members remain in the winning coalition

If the Challenger wins, there is a new winning coalition

- ▶ Each member of the Selectorate is equally likely to end up in the Challenger's winning coalition: $\frac{W}{S}$

PAYOFFS

Winning Coalition member:

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

Selectorate member not in Winning Coalition:

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

Politician in office:

$$B + \underbrace{R - pg - Wx}_{\text{unspent budget}}$$

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STEPS IN THE ANALYSIS

We solve this game using backward induction:

1. Each Selectorate member supports the politician who offers her higher utility
2. Challenger wants to beat the Leader
 - ▶ Allocate entire budget R to maximize a Selectorate member's expected payoff
3. What does the Leader choose?

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EXPECTED PAYOFF FROM POLITICIAN WITH PLATFORM (g, x)

If in winning coalition, utility is:

$$U_W = x + g$$

If not in the winning coalition, utility is:

$$U_S = g$$

Expected utility if probability in winning coalition is q :

$$\begin{aligned} q \cdot U_W + (1 - q) \cdot U_S &= q \cdot (x + g) + (1 - q) \cdot g \\ &= qx + g \end{aligned}$$

PROBABILITY OF BEING IN WINNING COALITION

If the leader wins:

- ▶ Previous winning coalition member: $q = 1$
- ▶ Selectorate member not in previous winning coalition:
 $q = 0$

If the challenger wins

- ▶ Everybody has the same probability: $q = \frac{W}{S}$

EXPECTED UTILITY OF SELECTORATE MEMBERS

If the leader wins:

- ▶ Previous winning coalition member:

$$x_L + g_L$$

- ▶ Selectorate member not in previous winning coalition

$$g_L$$

If the challenger wins:

- ▶ Any Selectorate member:

$$\frac{W}{S} x_C + g_C$$

CHALLENGER'S ALLOCATION OF R

Expected utility of Selectorate member if $g_C = 1$:

$$\frac{W}{S} \times \frac{R - p}{W} + 1 = \frac{R - p}{S} + 1$$

Expected utility of Selectorate member if $g_C = 0$:

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Expected utility of Selectorate member if $g_C = 0$:

$$\frac{W}{S} \times \frac{R}{W} = \frac{R}{S}$$

To maximize Selectorate's utility, offer public good if

$$\frac{R-p}{S} + 1 > \frac{R}{S} \Rightarrow p < S$$

WHY DOES SELECTORATE SIZE MATTER

The Challenger can't commit to who will be in winning coalition

When S is big, it is very unlikely any individual will end up in Challenger's winning coalition

This makes promises of private goods not very valuable

Challenger more likely to focus on public goods when S is large

LEADER'S OPTIMAL OFFER

Suppose Leader chooses to spend $\Delta \leq R$

How should the Leader allocate Δ to maximize chance of winning?

- ▶ Maximize utility of winning coalition member

How big does the Leader need to make Δ to win?

- ▶ Make winning coalition members like her at least as much as the Challenger

LEADER'S ALLOCATION OF Δ

Expected utility of Winning Coalition member if $g_L = 1$:

$$\frac{\Delta - p}{W} + 1$$

Expected utility of Wining Coalition member if $g_L = 0$:

$$\frac{\Delta}{W}$$

LEADER'S ALLOCATION OF Δ

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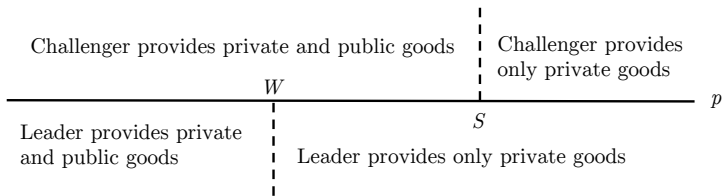
Expected utility of Wining Coalition member if $g_L = 0$:

$$\frac{\Delta}{W}$$

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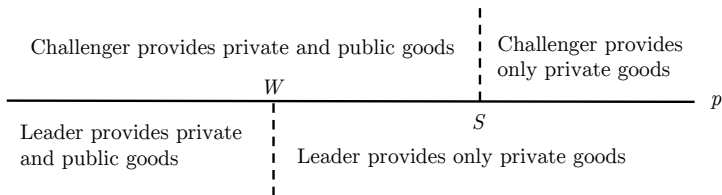
COMPARING CHALLENGER'S AND LEADER'S ALLOCATIONS



Leader gets larger benefit from private goods because she can commit to members of her winning coalition

Leader more inclined to provide private goods if W small

COMPARING CHALLENGER'S AND LEADER'S ALLOCATIONS



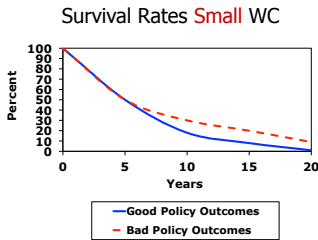
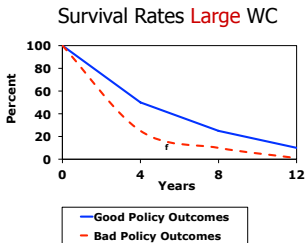
Large Winning Coalition \rightarrow good policy is good politics

Small Winning Coalition \rightarrow good policy is bad politics

POLICY AND LEADER SURVIVAL AGAIN

To survive, the Leader should choose

- ▶ private goods (bad policy) if W is small
- ▶ public goods (good policy) if W is large



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IDENTIFYING LEADER'S RENTS

So far we have characterized politicians' choice of policy

To calculate Leader's rents, we need to know how much of the budget the Leader needs to spend to win

THE UTILITY FROM CHALLENGER'S PROPOSAL

$\mathbf{p} > \mathbf{S}$: Full budget on private goods, so utility is

$$\frac{W}{S} \times \frac{R}{W} = \frac{R}{S}$$

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$p > S$: Full budget on private goods, so utility is

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$p < S$: Public good and remainder on private goods, so utility is

$$\frac{W}{S} \times \frac{R-p}{W} + 1 = \frac{R-p}{S} + 1$$

THE WINNING PROPOSAL: Δ^*

$\mathbf{p} > \mathbf{S}$: Only provide private goods, such that

$$\frac{\Delta^*}{W} = \frac{R}{S}(+\varepsilon) \Rightarrow \Delta^* = \frac{W}{S} \cdot R(+\varepsilon)$$

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$\mathbf{W} < \mathbf{p} < \mathbf{S}$: Only provide private goods, such that

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$\mathbf{p} < \mathbf{W}$: Public goods and private goods, such that

$$\frac{\Delta^* - p}{W} + 1 = \frac{R-p}{S} + 1(+\varepsilon) \Rightarrow \Delta^* = \frac{W}{S} \cdot (R-p) + p(+\varepsilon)$$

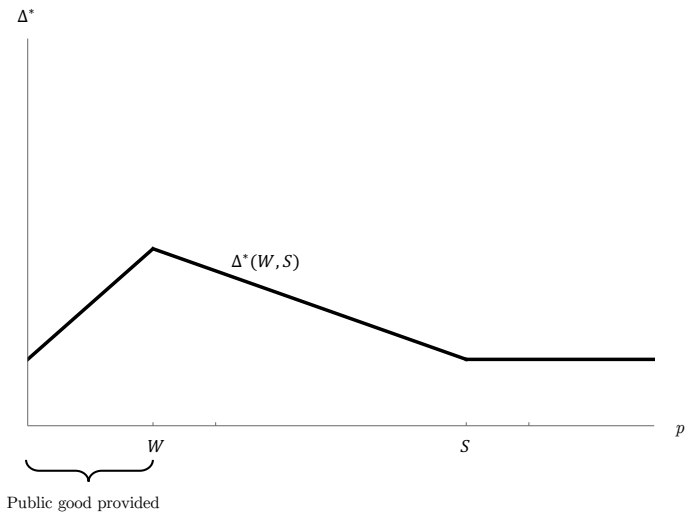
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Δ^* AND PUBLIC GOODS

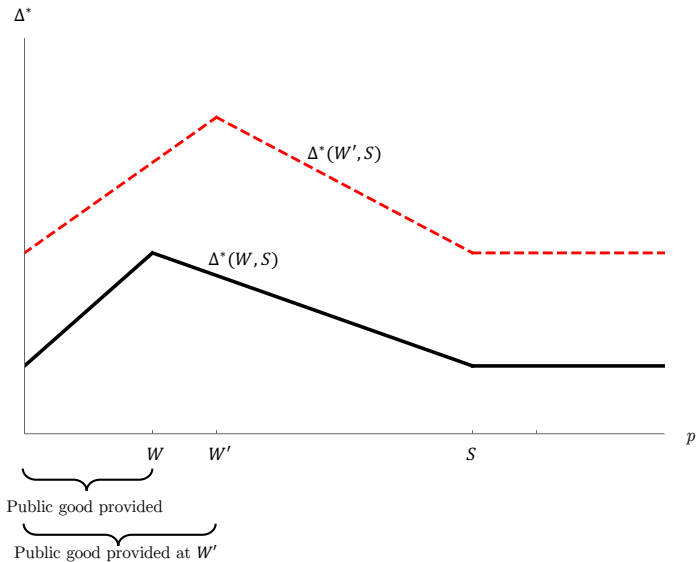


INSTITUTIONS AND RENTS

Bigger $W \Rightarrow$ more expensive to hold onto power

- ▶ Have to provide public goods more
- ▶ Have to provide private goods to more people

CHANGING W



INSTITUTIONS AND RENTS

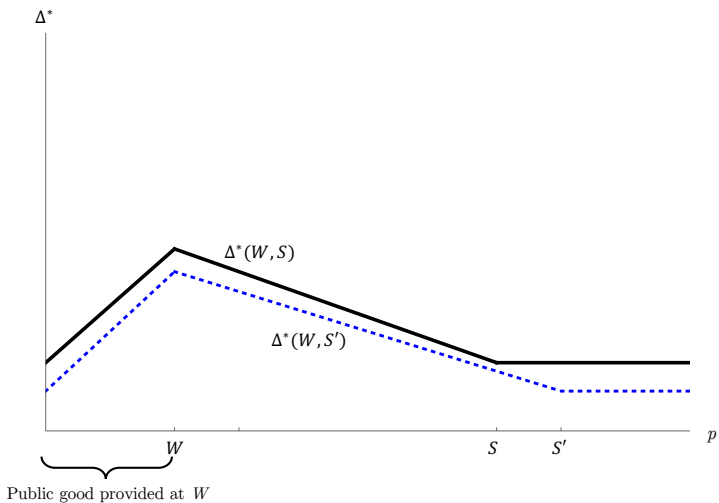
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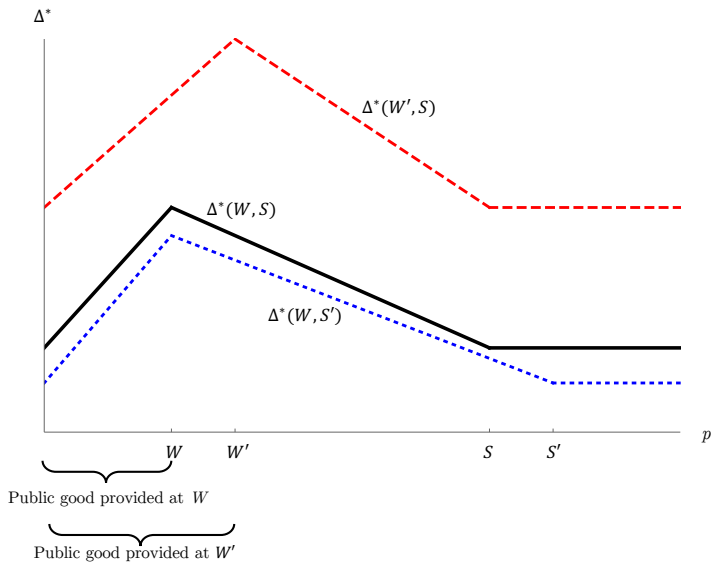
Bigger $S \Rightarrow$ cheaper to hold onto power

- ▶ Leader's winning coalition members are loyal because they probably won't be in Challenger's
- ▶ Cheap to buy their support

CHANGING S



OUTCOMES AND INSTITUTIONS



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Total government spending increasing in size of Winning Coalition and decreasing in size of Selectorate

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Public goods increasing in size of Winning Coalition

Welfare of population members not in Winning Coalition increasing in size of Winning Coalition

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Total government spending increasing in size of Winning Coalition and decreasing in size of Selectorate

Rents to the Leader decrease in size of the Winning Coalition and decreasing in size of Selectorate

Public goods increasing in size of Winning Coalition

Welfare of population members not in Winning Coalition increasing in size of Winning Coalition

TAKE AWAYS FROM MODEL

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**