Competence and Ideology

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Introduction

- Classic papers study how the **ideologies** of politicians and voters affect **policy choice** and **political outcome**.
- There are other fundamental characteristics that make politicians different from each other:
  - competence;
  - character;
  - charisma;
  - organizational efficiency.
- An expanding literature tries to incorporate this so called **valence** dimension.
Introduction

- Most of the existing models are static (single-election).
  - Voters observe the valence of all candidates before the election.
  - In equilibrium, there is a negative correlation between valence and extremism.
  - In equilibrium, candidates with high valence are more likely to win the election.
Introduction

Kartik and McAfee (AER 2007)

- Static signaling model where some candidates have **character**, not observable by voters before the election.

- A candidate with character:
  - increases the utility of all voters when in office;
  - by definition **cannot** compromise. Her platform/policy **must** be her ideology.

- A candidate without character can costlessly locate moderately to try to win the election.

- Main results:
  - **positive** correlation between character and extremism;
  - candidates with character are **less** likely to win.

- Callander and Wilkie (GEB 2007) generalize the model and generate similar results.
Introduction

In summary,

1. Static (single election) models.
2. Exogenous cost of compromising in Kartik and McAfee, and Callander and Wilkie.

- We develop a dynamic model of repeated elections, where reputation/re-election concerns serves to endogenize the costs of locating extremely.
3. How does **valence** of politicians affects **policy choice** and **political outcome**? Single-election literature offers conflicting answers.

We answer the following questions in a dynamic framework:

- Who compromises more?
- Who is more likely to be re-elected?
- Who chooses more extreme policies?
- How correlation between valence and extremism changes along time?
  - First-Term Representatives vs. Stationary Distribution (Large Congress)
Model

Valence

- We define **valence** as a characteristic of a politician which benefits each citizen by the same amount, independently of ideology.
- Each citizen candidate has a level of valence $\nu \in V$.
- Valence is distributed in the population according to the c.d.f. $G$, independently of ideology.
- The valence of a candidate is private information before she holds office, but is revealed by her performance in office.
  - Competence, organizational efficiency.
  - Incumbent vs. Untried Candidate.
Model

**Ideology**

- Each citizen candidate is indexed by her ideology $x \in [-a, +a]$.
- Private information.
- Distributed according to the c.d.f. $F$.
- Density function $f$:
  - Single-peaked,
  - Symmetric about the median voter, $x = 0$.
- 2-party model.
Model

Utility

- Time-\(t\) utility of a citizen with ideology \(x\) depends on office-holder’s valence \(v\) and implemented policy \(y\):

\[
u_x(y, v) = v - |x - y|^z,
\]

where \(z \geq 1\).

- Trade off between valence \(v\) and policy \(y\) changes with ideology \(x\).

- Office-holders care about who replaces them.

- Period utilities are discounted by factor \(\delta \in (0, 1)\).
Model

Timing

1. Elected politician with ideology $x$ and valence $v$ selects a policy $p(x, v) \equiv y \in [-a, +a]$.

2. Politician holds office and voters observe her valence $v$ and policy chosen $y$. 
Model

Timing

1. Elected politician with ideology $x$ and valence $v$ selects a policy $p(x, v) \equiv y \in [-a, +a]$.

2. Politician holds office and voters observe her valence $v$ and policy chosen $y$.

3. Re-election shock is realized:
   - with probability $1 - q$ incumbent runs for re-election;
   - with probability $q$ incumbent does not run for re-election, in which case her party draws an untried candidate.

4. Opposing party draws an untried candidate.
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4. Opposing party draws an untried candidate.

5. For an untried candidate, voters have no information about valence, and no information about ideology other than party affiliation. For an incumbent running for re-election, voters know valence, previous policy chosen and party affiliation.

Equilibrium Characterization

We focus on symmetric, stationary and stage-undominated perfect Bayesian equilibrium (PBE).

**Theorem (Existence and Uniqueness)**

*If the loss function does not display too much risk aversion, then an equilibrium exists, the median voter is decisive and every equilibrium is completely summarized by threshold functions $w, c : V \rightarrow (0, a)$.***

Equilibrium is unique if a monotonicity condition is satisfied.
Equilibrium Characterization

Equilibrium Condition 1 (Median Voter is Decisive)

\[ v - |w_v|^z = U_0^R(w, c) = U_0^L(w, c). \]

The decisive median voter is indifferent between re-electing incumbent with valence \( v \) that chooses policy \( w_v \) and an untried candidate from either party (symmetric).
Equilibrium Characterization

Equilibrium Condition 2
(Indifference of Extremist Politician $c_v$)

An elected politician with valence $v$ and ideology $c_v$ is indifferent between

- compromising to policy $w_v$ to be re-elected and
- adopting her preferred policy $c_v$ and not be re-elected.

\[
\begin{array}{c}
\text{Centrists} & \quad \text{Moderates} & \quad \text{Extremists} \\
0 & \quad w_v & \quad c_v \\
\end{array}
\]
Equilibrium Characterization

Lemma 1

High valence office-holders can take more extreme policy positions and be re-elected.

\[ v_H > v_L \Rightarrow w_H > w_L. \]

The decisive median voter trades off valence for policy,

\[ v_H - |w_H|^z = v_L - |w_L|^z. \]
Equilibrium Characterization

**Lemma 2**
*Valence is positively correlated with probability of being re-elected.*

\[ v_H > v_L \Rightarrow c_H > c_L. \]

**Lemma 3**
The compromise set is strictly increasing in valence.

\[ v_H > v_L \Rightarrow c_H - w_H > c_L - w_L. \]
Equilibrium Characterization

In our model, a higher valence politician endogenously is more willing to compromise and more likely to be re-elected:

- It is less costly to compromise since she can compromise to a more extreme position and win re-election.

$\begin{align*}
0 & \quad [ \, \begin{array}{c}
\omega_L \\
\omega_H \\
\chi
\end{array} \, ] \\
& \quad a
\end{align*}$

- It is more costly to be replaced by an untried candidate from the opposite party (lose re-election):

  - She fears being replaced by a low valence candidate.
  - Her ideology is further away from untried candidate's expected policy.
Equilibrium Characterization

In our model, a higher valence politician **endogenously** is **more** willing to compromise and **more** likely to be re-elected:

- It is **less costly** to compromise since she can compromise to a more extreme position and win re-election.

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- It is **more costly** to be replaced by an untried candidate from the opposite party (lose re-election):
  - She fears being replaced by a low valence candidate.
  - Her ideology is further away from untried candidate’s expected policy.

\[
\begin{align*}
\omega_L & \quad \omega_H & \quad c_L & \quad \chi_H = c_L + (\omega_H - \omega_L) \\
0 & & & a
\end{align*}
\]
Equilibrium Characterization

Theorem (Valence & Extremism: First-Term Representatives)

*If ideologies are uniformly distributed then valence is *negatively* correlated with extremism of an untried candidate.*

This result is driven by the extreme platform choices taken by *lemons* — newly-elected representatives who have both low valence and extreme ideologies.

![Diagram with labels](attachment:diagram.png)
Theorem (Valence & Extremism: Large Congress)

*When incumbents are likely to run for re-election (q is small), in the long-run stationary distribution of office holders, valence is positively correlated with extremism.*

- This captures the cross-sectional distribution of policies in a large congress.
- Re-elected high valence politicians implement more extreme policies.
- The equilibrium probability of having lemons (low valence, extreme ideology representatives) is smaller.
Welfare

Proposition (Valence Distribution Improvement — FOSD)

A First-Order Stochastic Dominance improvement of the distribution of valences strictly increases median voter’s expected utility from an untried, first-time representative.

- Untried high valence politician is more likely to locate closer to the median voter.
Welfare

Proposition (Valence Distribution Improvement — FOSD)

A First-Order Stochastic Dominance improvement of the distribution of valences *strictly increases* median voter’s expected utility from an untried, first-time representative.

- Untried high valence politician is more likely to locate closer to the median voter.
- In a large congress, high valence candidates are more extreme. Is the median voter hurt if we increase the probability of high valence candidates?
Proposition (Valence Distribution Improvement — FOSD)

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- Untried high valence politician is more likely to locate closer to the median voter.
- In a large congress, high valence candidates are more extreme. Is the median voter hurt if we increase the probability of high valence candidates?

When incumbents are likely to run for re-election ($q$ is small), a FOSD improvement in valence strictly increases median voter’s expected utility from the stationary distribution (large congress).

- Untried candidate is more attractive.
- All valence levels must compromise to more moderate positions to be re-elected.
However, voters of different ideologies trade off valence and policy differently.

The decisive median voter is more willing to accept a more extreme position from a high valence incumbent.

More extreme voters are less willing to trade off policy for valence.

Are some voters hurt by an increase in the probability of a high valence candidate?
Welfare

- However, voters of different ideologies trade off valence and policy differently.
- The decisive median voter is more willing to accept a more extreme position from a high valence incumbent.
- More extreme voters are less willing to trade off policy for valence.
- Are some voters hurt by an increase in the probability of a high valence candidate?

- No! **All** voters benefit.

- When does the fact that extreme voters trade off differently than the median voter make a difference?
One and Two-Valence Cases

- Compare a **two-valence economy**,
  - $v_H$ with probability $p$,
  - $v_L$ with probability $1 - p$,

with **one-valence economy**,

  - with probability 1, $\tilde{v} = pv_H + (1 - p)v_L$.

- Is the risk-averse median voter hurt by the “riskier” environment with heterogeneity in valence?
One and Two-Valence Cases

- Compare a **two-valence economy**,
  - $v_H$ with probability $p$,
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with **one-valence economy**,  
  - with probability 1, $\tilde{v} = pv_H + (1 - p)v_L$.

- Is the risk-averse median voter hurt by the “riskier” environment with heterogeneity in valence?

- No! There is a positive **option value** associated with an untried challenger.

- What about other voters?
One and Two-Valence Cases

Utility function:

\[ u_x(y,v) = v - |x - y|^z \]

- \( z < 2 \): extreme voters gain more than the median.
- \( z = 2 \): all voters gain the same since \( U_x(\cdot) = U_0(\cdot) - x^2 \).
- \( z > 2 \): extreme voters lose from “gamble”. In fact, a majority of voters may lose.

- All voters benefit the same from the change in equilibrium valence.
- Impact of change in equilibrium policy depends on the relative risk aversion.
Investment in Valence

- We extend the model to endogenize the distribution of valence of untried candidates, via investment decisions of Interest Groups.
- We provide conditions for more extreme Interest Groups to induce more extreme equilibrium policy.
Conclusion

In our dynamic model:

- We do not need to introduce exogenous costs of compromising.
- Incumbents are free to choose policy.
- Valence and ideology are ex ante uncorrelated.
Conclusion

In equilibrium:

▶ Politicians with high valence compromise more, to more extreme policies, and are more likely to be re-elected.

▶ First-term Representatives: valence is negatively correlated to extremism.

▶ Large Congress: valence is positively correlated to extremism.

▶ All voters prefer FOSD improvement in valence distribution.

▶ Median voter gains from heterogeneity in valence, but a majority of voters may lose.