

## Alternative voting Systems

Small groups can make decisions on the basis of consensus, for larger groups this is not possible

The historic solution to this problem was Autocracy (dictatorships)

Some historic examples of voting

The Greek Polis (Direct Democracy)

The Roman Republic (Representative Democracy)

Question: Do institutions matter?

The 1997 Thai Constitution was *designed* to create Thaksin

### Examples of Voting Rules

We can place voting rules on a continuum, from everybody getting a veto, to only one getting one.

Unanimity (Wicksellian Unanimity),

EU foreign Policy decisions, Trial by Jury

Super-Majority – More than 50%

Amending the U.S. Constitution, Bicameralism

Majority Rule – more than 50%, the most widely used rule

U.S. Supreme Court Decisions, Thai Parliament votes for PM

Some elections are this way, not always by design (Bush 2004, Obama 2008)

Plurality Rule – whoever gets the most votes wins

When only two issues, this is still majority rule, but with more issues....

Most U.S. elections are of this sort (Clinton 92, 96, Bush 2000)

Committee Rule – A small group, usually elites, makes the decision

Often by majority rule within the Committee

Bureaucracies, Econ's International Affairs Committee

Principle-Agent problems abound

Dictatorship – Rule by one person. Often by a larger “elite”, or ruling class

The predatory state vs. the contract state

### Variations on voting rules

“One man, one vote”, is how we typically think of voting. In actuality, there are many other ways to vote that are used in practice.

**Majority Rule:** choose the candidate who is ranked first by more than half of voters

**Majority Rule, with a runoff:** Choose the candidate who is ranked first by more than half of the voters if such a candidate exists, otherwise hold a run-off election between the two candidates who received the most votes to determine the winner

**Plurality Rule:** Choose the candidate who is ranked first by the most voters

**Condorcet Criteria:** Choose the candidate who defeats all other candidates in pairwise voting

**The Hare Criteria:** Each voter indicates their favorite candidate. Remove from the list that candidate who received the fewest votes. Now vote again, on the remaining candidates. Repeat until only one candidate remains

**The Coombs System (veto voting):** Each voter indicates the candidate they LEAST want in office. The “winner” of that vote is eliminated, then another round of voting begins

**Approval Voting (Borda Count):** Each candidate receives a number of votes from each voter based on their ranking of the candidates and the number of candidates, so a voter's favorite candidate receives 4 votes, 2<sup>nd</sup> favorite 3 votes, 3<sup>rd</sup> favorite 2 votes, and least favorite 1 vote. Then, votes are totaled and a winner is declared.

Also:

Weighted Voting – all stakeholders can vote, but the vote is proportional to the stake held

Corporate voting, the Thammasat Credit Union, IMF lending

In practice, skilled chairmen (agenda setters) have a more important vote

**A Quick Example of the Above:**

Notes for class at BMIR

4 candidates (A,B,C,D), 7 voters

| Voter                  | I | II | III | IV | V | VI | VII |
|------------------------|---|----|-----|----|---|----|-----|
| 1 <sup>st</sup> Choice | A | A  | A   | B  | B | C  | D   |
| 2 <sup>nd</sup> Choice | D | D  | B   | A  | C | D  | C   |
| 3 <sup>rd</sup> Choice | C | C  | D   | D  | D | B  | B   |
| 4 <sup>th</sup> Choice | B | B  | C   | C  | A | A  | A   |

Who wins the election?

**Majority Rule:** *No winner, nobody gets a majority*

**Majority Rule, with a runoff:** Choose the candidate who is ranked first by more than half of the voters if such a candidate exists, otherwise hold a run-off election between the two candidates who received the most votes to determine the winner  
*A receives 3 votes, B receives 2 votes, C and D each receive one vote and are eliminated*  
*In the run-off between A and B, B receives 4 votes and A receives 3 votes, a win for B*

**Plurality Rule:** Choose the candidate who is ranked first by the most voters  
*A receives 3 votes, and B receives 2 votes, C and D get one vote each. A wins the election.*

**Condorcet Criteria:** Choose the candidate who defeats all other candidates in pairwise voting  
A vs. B, B wins                      B vs. C, C wins  
A vs. C, A wins                      B vs. D, D wins  
A vs. D, A wins                      C vs. D, D wins

*(if A beats C, C beats B, and B beats A – vote cycling)*

*If we switched voter IV's preferences for A and B, a stable solution, A beats anybody straight up.*

**The Hare Criteria:** Each voter indicates their favorite candidate. Remove from the list that candidate who received the fewest votes. Now vote again, on the remaining candidates. Repeat until only one candidate remains  
*In the first round, either C or D is eliminated. In the next round, the other one is. In the final round, between A and B, B wins.*

**The Coombs System (veto voting):** Each voter indicates the candidate they LEAST want in office. The “winner” of that vote is eliminated, then another round of voting begins  
*A is eliminated first, then B is gone, then C is gone, and D wins the election.*

**Approval Voting (Borda Count):** Each candidate receives a number of votes from each voter based on their ranking of the candidates and the number of candidates, so a voter's favorite candidate receives 4 votes, 2<sup>nd</sup> favorite 3 votes, 3<sup>rd</sup> favorite 2 votes, and least favorite 1 vote. Then, votes are totaled and a winner is declared.  
*A gets 18, B gets 17, D gets 19, C gets 16*

A party list: imagine if the top two candidates are both selected (Republican Rome, U.S. pre 11<sup>th</sup> amendment).  
Then A and B get selected. Note that C and D do not, even though all 7 voters rank C and D very closely, one is only marginally preferred to the other. If either C or D dropped out, the election would instead result in A and C/D winning.