Arrow's Theorem and Midterm Review

PS 171B - Week 4

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4/4/2019

Administration

- Midterm on Monday in class

- Bring blue books, something to write with

- Review session tomorrow (April 26) 11-12 in Haines 122

Homework 2 Comments

- Check Answer Key

- Strategic vs. Sincere Agendas

- What counts as a May's Axiom violation?

- Remember group membership matters
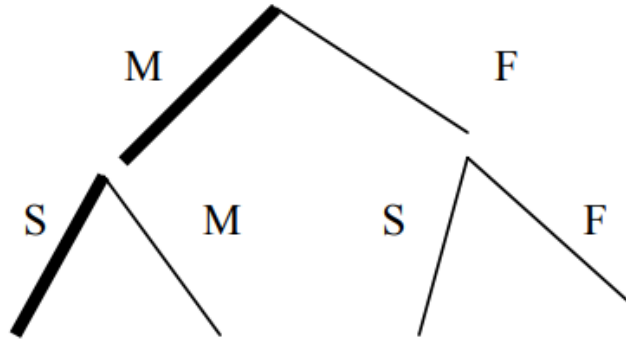
- Sometimes, there are no shortcuts

Agenda Setting

Recommendation: write out all possible agendas as decision trees. Its faster, clearer, and prevents you from missing a possible combination.

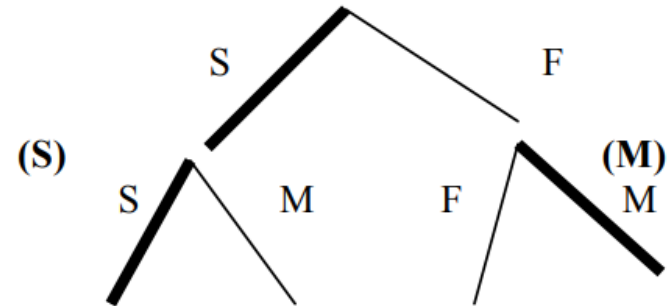Also, with 3 alternatives, you only have to write out 3 decision trees.

Taking a Step Back...

If there is a Condorcet winner, does the agenda order matter? Why or why not?

Sincere vs. Strategic Voting

Sincere Voting

Strategic Voting

Practice Problem

Assume three individuals have the following preferences over outcomes A, B, and C:

P1	P2	P3
A	B	C
B	C	A
C	A	B

First, determine the social ordering of preferences. Then, assume you are person 1. What agenda would you choose to get your most desired outcome assuming all group members vote sincerely? Assuming all group members vote strategically?

Arrow's Theorem

Given more than two alternatives, is there a voting rule that satisfies 6 minimal fairness/practicality requirements? According to Arrow, no.

Collective choice rules can be **STUPID**:

- **S**everal alternatives

- **T**ransitivity

- **U**niversal domain

- **P**areto

- **I**ndependence of irrelevant alternatives

- **D**ictators

Questions?