

## 9.2

## Majority Voting: When It Works

- There are three types of voters in a town: *parents*, *elders*, and *young couples without children*.
- They have different preferences over the level of school spending (high, medium, or low).

	<b>Parents (33.3%)</b>	<b>Elders (33.3%)</b>	<b>Young Couples (33.3%)</b>
First choice	<i>H</i>	<i>L</i>	<i>M</i>
Second choice	<i>M</i>	<i>M</i>	<i>L</i>
Third choice	<i>L</i>	<i>H</i>	<i>H</i>

## 9.2

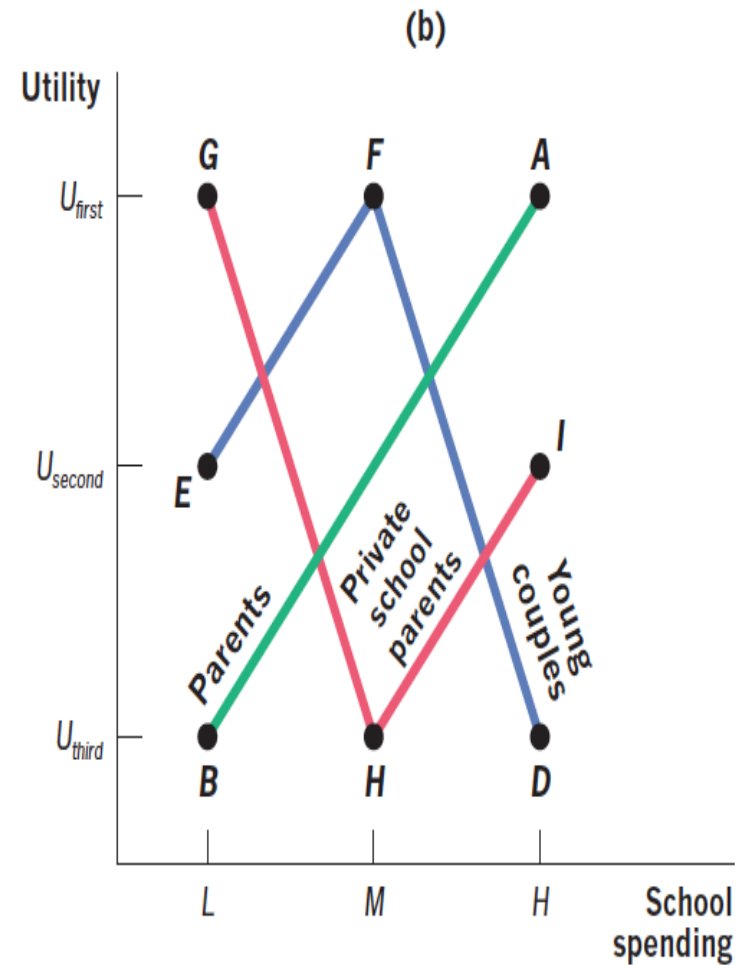
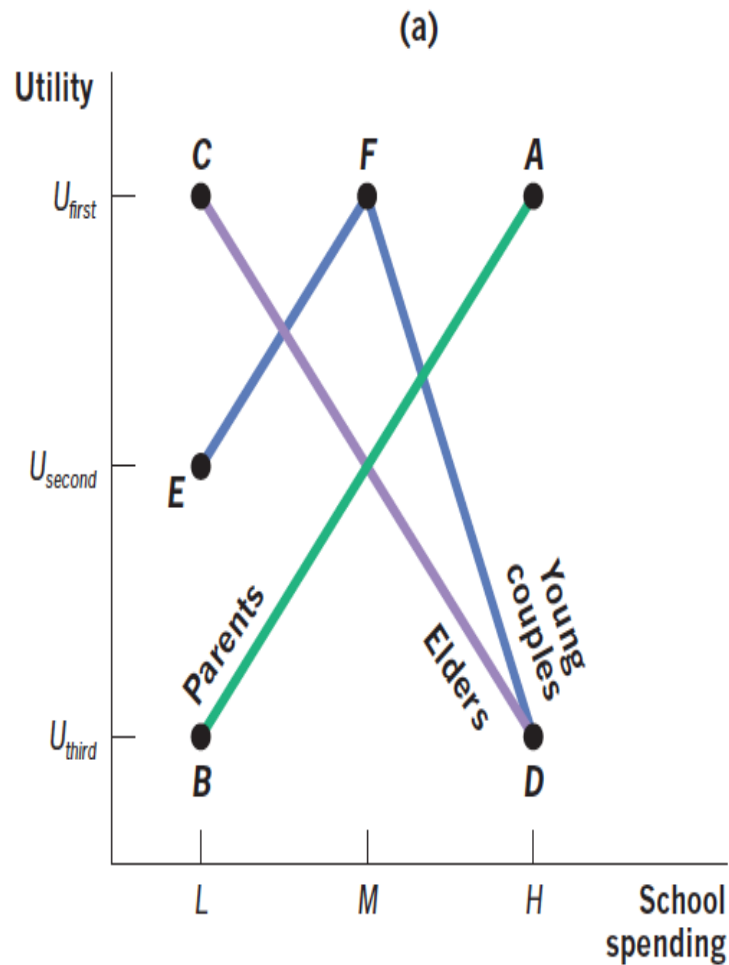
## Majority Voting: When It Doesn't Work

- **Cycling:** When majority voting does not deliver a consistent aggregation of individual preferences.

	<b>Public school parents (33.3%)</b>	<b>Private school parents (33.3%)</b>	<b>Young Couples (33.3%)</b>
First choice	<i>H</i>	<i>L</i>	<i>M</i>
Second choice	<i>M</i>	<i>H</i>	<i>L</i>
Third choice	<i>L</i>	<i>M</i>	<i>H</i>

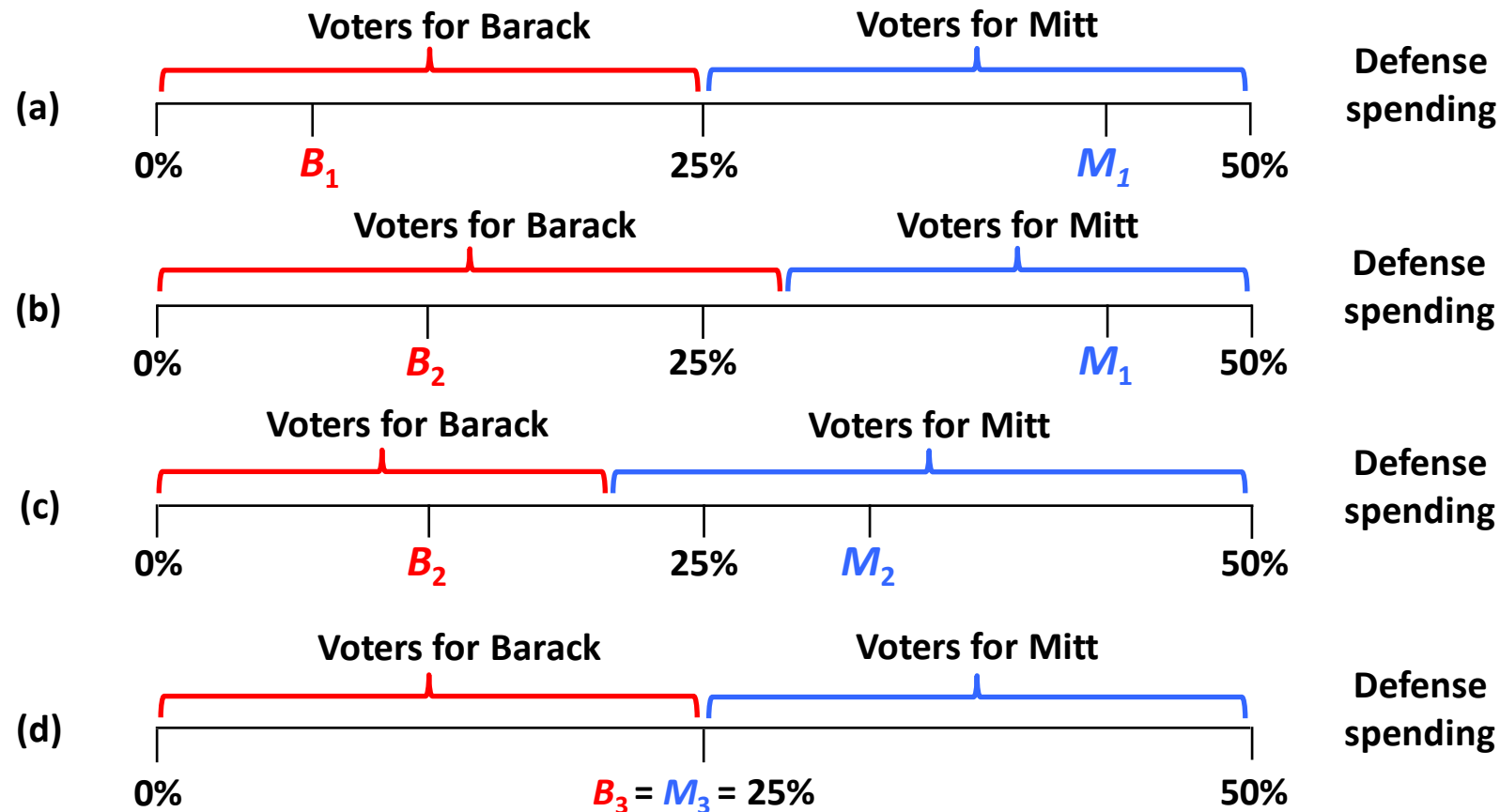
## 9.2

## Single-Peaked versus Non-Single-Peaked Preferences



## 9.3

## Vote-Maximizing Politicians Represent the Median Voter



## APPLICATION: Farm Policy in the United States

- The farming sector receives \$23 billion in support from the federal government each year in two forms:
  - *Direct subsidy* payments (\$11 billion)
  - *Price supports* (\$12 billion)
- The average farmer receives more than \$10,000/year in support.
- The average American *pays* more than \$200/year for this.

## APPLICATION: Farm Policy in the United States

Why do American families pay such large costs to support the farm sector?

- One answer: This helps preserve the “family farm.”
  - But most support goes to large farms, and other countries have farming without subsidies.
- More likely answer: free rider problems.
  - Farmers have a strong incentive to support a farm lobby (\$10,000/year).
  - Non-farmers have little reason to oppose.

## APPLICATION: Contracting Out with Non-Competitive Bidding

Contracting out often takes place without a competitive bidding process.

- Since early 2000s, Wackenhutt Corporation has been the primary security contractor at U.S. weapons plants.
  - Wackenhutt cheated during safety tests, so the inspector general reported the results were “tainted and unreliable.”
  - Hired by the Nuclear Energy Institute in 2004.

## APPLICATION: Contracting Out with Non-Competitive Bidding

- In 2003 and 2004, DHB industries won hundreds of millions of dollars of contracts to supply body armor to troops in Iraq.
  - But in 2002, DHB had to return 6,400 defective vests to the NYPD.
  - In 2003, workers accused DHB of sloppy quality control.
  - 23,000 vests were recalled from Iraq.



## APPLICATION: Contracting Out with Non-Competitive Bidding

- Since 2005, the Pentagon awarded more than \$50 million of contracts to Applied Energetics.
  - Wanted solutions to combat improvised explosive devices.
  - Applied Energetics continued to receive funding after failed test.
  - Rival company Xtreme Alternative Defense System, with successful anti-IED technology, has received only \$1.5 million.

## APPLICATION: Government Corruption

- In 2003, former Illinois governor George Ryan indicted for corruption.
  - Sold state contracts in exchange for cash, gifts, loans and trips for his family.
- Replaced by Rod Blagojevich, who campaigned as a reformer.
- In 2008, Blagojevich was arrested on federal corruption charges.
  - Tried to sell Obama's Senate seat and pressured Tribute Company to fire critical journalists.

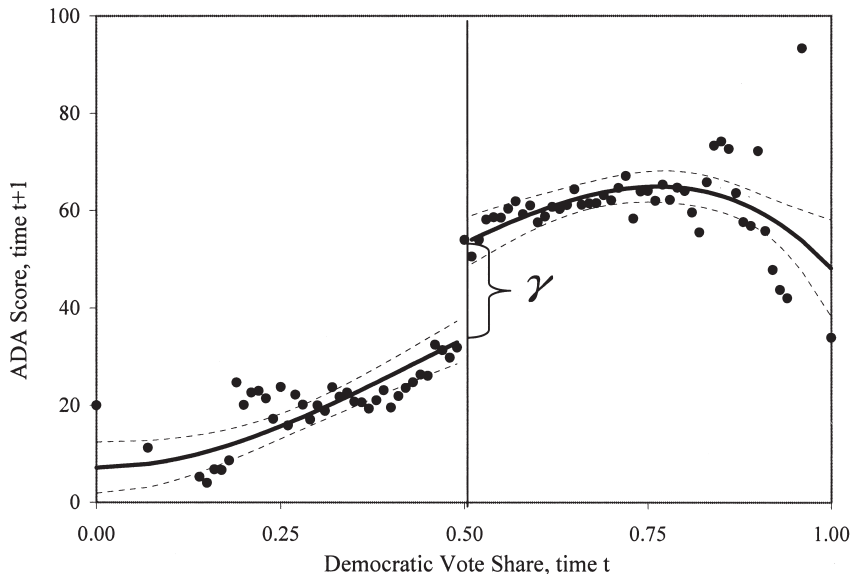


FIGURE I

Total Effect of Initial Win on Future ADA Scores:  $\gamma$ 

This figure plots ADA scores after the election at time  $t + 1$  against the Democrat vote share, time  $t$ . Each circle is the average ADA score within 0.01 intervals of the Democrat vote share. Solid lines are fitted values from fourth-order polynomial regressions on either side of the discontinuity. Dotted lines are pointwise 95 percent confidence intervals. The discontinuity gap estimates

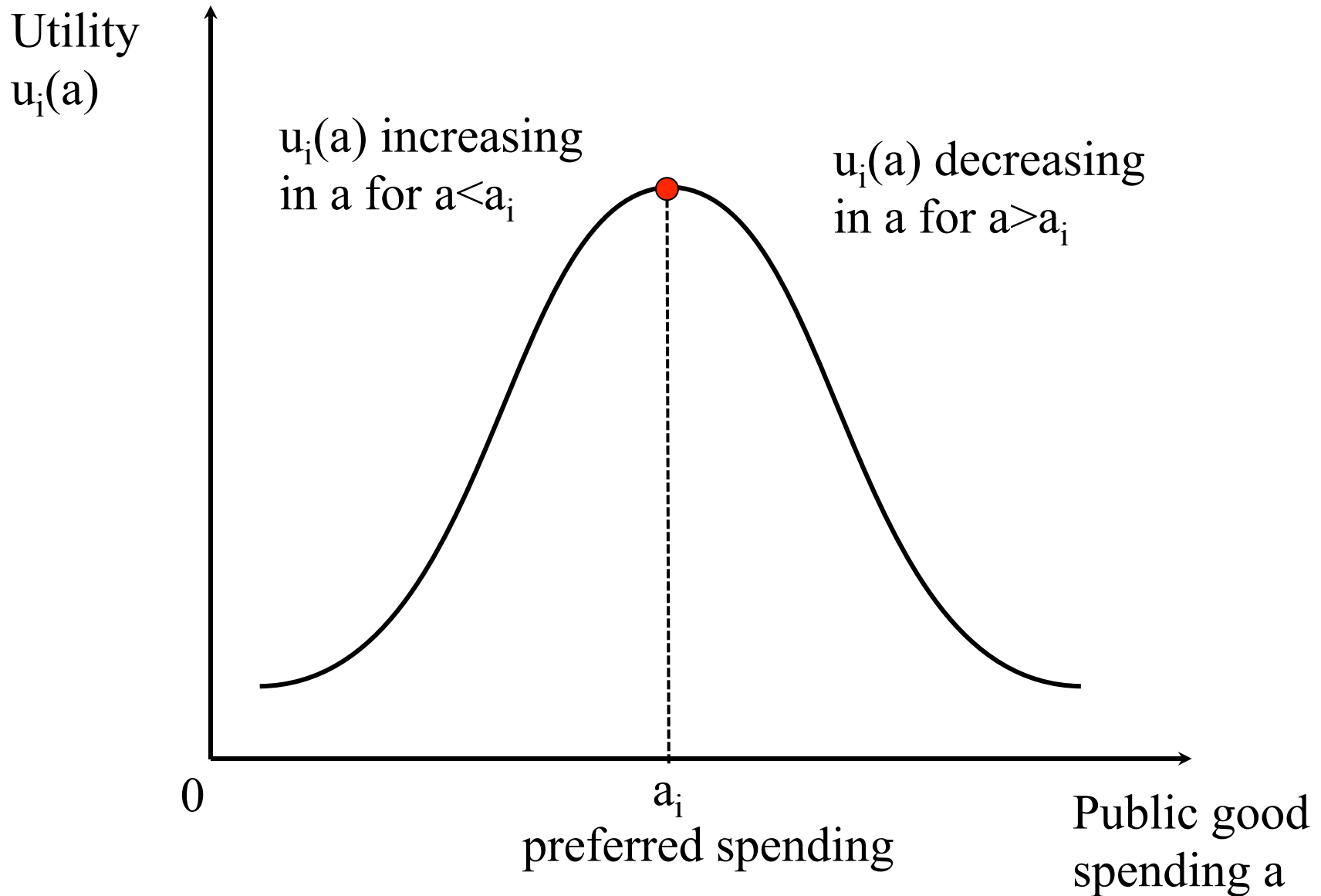
$$\gamma = \underbrace{\pi_0(D_{t+1}^{*D} - P_{t+1}^{*R})}_{\text{"Affect"}} + \underbrace{\pi_1(P_{t+1}^{*D} - P_{t+1}^{*R})}_{\text{"Elect"}}.$$

Source: Lee, Moretti, Butler

"Affect"

"Elect"

# Single Peaked Preferences



# Median Voter Theorem

