Lecture 9

Limits to Public Intervention: Government Failures

Direct democracy – voting.

Issues arise when using voting to reveal preferences.

Condorcet in France in the 18th century discovered that in a set of pair-wise votes, majority votes can disobey the properties of transitivity for a group.

Budget.

Low – low cost budget

Medium – same as the area norm

High – with fancy high cost stuff

Three groups in society:

Moderates, who prefer Medium, to High, to Low (45%)

Fiscal Conservatives, who prefer Low, to Medium, to High (35%)

Effective Schoolers, who prefer High, to Low, to Medium (20%)

	Preferences over Budget Levels			Percent of the vote
	First Choice	Second Choice	Third Choice	
Moderates	Medium	High	Low	45%
Fiscal Conservatives	Low	Medium	High	35%
Effective Schoolers	High	Low	Medium	20%

Table 8.1 : Two rounds of voting, pair-wise voting.

Agenda A: Compare High to Low, then winner takes on Medium

Round 1: High versus Low. High wins 45% moderates, 20% effective schoolers = 65%

Round 2: High versus Medium. Medium wins 45% of moderates, 35% of fiscal conservatives=80%

RESULT: Medium

Agenda B: Compare Medium versus Low, winner takes on High

Round 1: Medium versus Low. Low wins 35% of conservatives, 20% of effective schoolers = 55%

Round 2: Low versus High. High wins 45% moderates, 20% effective schoolers = 65%

RESULT: High

Agenda C: Compare High versus Medium, winner takes on Low

Round 1: High versus Medium, Medium wins 45% of moderates, 35% of fiscal conservatives=80%

Round 2: Medium versus Low. Low wins 35% of conservatives, 20% of schoolers = 55%

RESULT: Low

Can be more uncertain if we allow for strategic voting, or 'sophisticated voting' when people realize that voting against one's own preferences in early rounds can lead to a more desired outcome in the final round.

Arrow in 1951 illustrated that any rule of voting that satisfies a basic set of fairness conditions can lead to an illogical result. A group of two or more people choosing from a set of three or more options.

First: each person has transitive preferences over the options (axiom of unrestricted domain). Recall the principle of transitivity; if A is preferred to B and B is preferred to C, then A is preferred to C as well.

Second: If one alternative is unanimously preferred to a second, then the rule of choice will not select the second (axiom of Pareto choice).

Third: The ranking for any two alternatives should not change if a third alternative is introduced (axiom of independence).

Fourth: The rule should not allow one person dictatorial power over the other members deciding (axiom of nondictatorship).

Any fair voting system that obeys these four properties will fail to ensure a transitive social ordering of policy alternatives.

A policy will be selected, but the framing of the question becomes an important determinant of what the final answer will be.

The power to set the agenda then is a powerful tool.

Figure 8.1 illustrates the concept of agenda control.

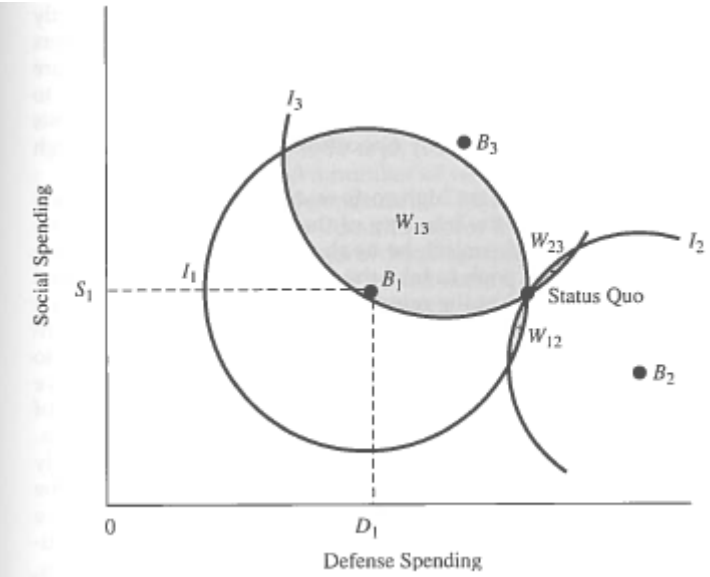

Figure 8.1 Agenda Control in a Two-Dimensional Policy Space

Y axis is social spending, x-axis is defense spending.

Policy makers have 'bliss points', B_1, B_2, and B_3.

Around these respective 'bliss points' they have circular indifference curves, where closer in is preferred to farther out.

The status quo is the current spending on both.

"Win Sets" are the areas where a positive vote (2 yes, 1 no) are possible.

- There is a W_{13} where one and three vote yes and two votes no.
- There is a W_{12} where one and two vote yes and three votes no.
- There is a W_{23} where two and three vote yes and one votes no.

If one can set the agenda, then can propose B_1 and it will win, as it is preferred (slightly) by three to the status quo. If two could set the agenda, could propose something in either of the two other ‘win sets’ to build a majority.

As we explored perfectly competitive markets, we came to the argument that a utility maximizing consumer and a profit maximizing producer meet in a market. The outcome of a perfectly competitive market is economic efficiency that maximizes total social welfare.

This is the fundamental theorem of welfare economics.

There is no corollary that is a fundamental theorem of electoral democracy.

Democratic processes do not always give us a true assessment of social values.

Governments following the 'will of the people' will not always be doing good.

On the other hand, the selling point may be more that it allows a way to correct really bad mistakes by voting people out.

Democratic processes "…may deny us the full benefits of a truly benevolent and wise government, but they help protect us from the harm of one that is either evil or foolish'. (P 163 5th edition, 155 6th edition)

Issues of Representative democracy:

Representatives have their own interests, reelection, constituents, prestige…that may distract them from questions of what maximizes social welfare.

- Campaign contributions. Difficulty of discerning whether donors give to those who make the kinds of decisions they like or whether they influence decisions.
- Monitoring representatives is costly and time consuming. Those who have the time and money to monitor tend to be non – representative in their preferences, as they are often interest groups.
- Party discipline may influence decisions.

Problems of geographic representation:

Say there are 100 districts, each with 1000 people, all voting in support of or against a proposal.

In 51 of the districts, 501 people support, 499 don't support a proposal. If each representative is voting according to the majority will of the constituents, there will be 51 yes votes.

In the other 49 districts, all 1000 people are against. If each representative is voting according to the majority will of the constituents, there will be 49 no votes.

It will pass 51 representatives say yes, 49 say no.

However, in the total population, there are 74,449 against [49,000 (49*1000) + 25,449 (51*499)]

In the population, there are 25,551 (51*501) for.

So even though there are 74,449 people opposed and 25,551 for the project passes.

Another aspect to consider is ‘Regulatory capture’ – regulating agency eventually finds it has moved from monitoring and oversight of an industry to an advocacy / facilitation / protection of the industry role.

- “Revolving door” as people move back and forth between government and industry.
- Expertise may be more valuable in industry than in government.

Voting and public goods.

Finding everyone's valuation is difficult if not impossible.

Even if you knew, practical issues arise about charging different people different rates.

Usually, we end up charging a uniform rate.

A version of the median voter theorem. A project will pass if the median voter's valuation is greater than the cost to that voter.

Project is a traffic light. Total cost of light installation is $300. There are 3 voters here who get benefits and pay the costs. Assume they split the costs evenly, so each one pays $100 per light installed.

They can install no lights, one light, two lights, or three lights.

Three corners are being voted on, and the following represents the voters WTP.

	Fred	Barney	Wilma
Corner A	50	100	150
Corner B	50	75	250
Corner C	50	100	110

Corner A has a total WTP of 300
Corner B has a total WTP of 375
Corner C has a total WTP of 260

Barney is always the median voter.

Which ones will pass if we vote and people vote yes if their WTP-cost is greater than or equal to zero?

Yes – no voting ignores intensity of preferences.

If the valuation of the median voter is greater than the cost to that voter, it will pass a vote with a majority.

Public goods, voting, and benefit cost.

A community of five people is voting to decide on public good provision. There are three proposals:

Proposal A: Build a wall around the community to prevent anyone entering or exiting. Total cost is $3,000 ($600 each).

Proposal B: Rebuild the roads in the town as the infrastructure is crumbling. Total cost is $5000 ($1,000 each).

Proposal C: Increase hours worked by local police to crack down on crime. Total cost is $7,500 (1,500 each)

This table records each household's WTP for each proposal.

	Proposal A- wall	Proposal B-roads	Proposal C-police
Taylor	$800	$ 800	$1,400
Feeney	$200	$2,500	$1,000
Badger	$200	$ 900	$4,500
Bennett	$900	$1,900	$1,200
McPeak	$700	$ 500	$1,300

a) How will they vote for each proposal and which proposal or proposals will pass with a majority? (circle)

	Proposal A		Proposal B		Proposal C	
Taylor	Yes	No	Yes	No	Yes	No
Feeney	Yes	No	Yes	No	Yes	No
Badger	Yes	No	Yes	No	Yes	No
Bennett	Yes	No	Yes	No	Yes	No
McPeak	Yes	No	Yes	No	Yes	No
Pass or not?						

b) If the costs are present value costs, and the willingness to pay figures are present value benefits, what is the net present value of each proposal?

Proposal A- wall	Proposal B - roads	Proposal C – police

c) Did voting lead us to select the proposal that had the highest net present value? Explain why or why not.

Planning horizon in public sector is tied to election cycle (for elected officials).

Policy options may play out through the media.

Importance of media attention for policy makers as means of communicating to voters their importance.

Importance of media to campaigns in terms of communication with voters.

Role of policy 'windows'. Reactive to event, leads to policy outcomes that respond to the event rather than perhaps underlying issues as a whole.

- View of sunk costs may differ, public and private.
- Private (or at least market forces) make sunk cost not relevant – do the marginal revenues outweigh the marginal costs of going forward.
- Public may have less discipline than private in that it may consider sunk costs as backing down is admitting a mistake that can be used against politicians in a political context.
- Public decisions and political exposure may lead to a throwing good money after bad approach.
- Importance of precedents in public decision making.
- If you bail out one, you have to bail out others.
- If you allow a provision for one state's residents, you may have to allow it for others. Firms don't have to be as consistent.

In the political arena, perception framing by stressing risk, uncertainty, and worst case scenarios (balanced against the other side minimizing risk, uncertainty, and best case scenarios).

In a contested policy debate, there are incentives to move to the extreme rather than consensus.

Summary of why socially optimal outcomes may diverge from politically selected outcomes. (5th edition P 178, 6th edition P 169)

Nature of the interests among the voting population	Concentrated interests have a strong incentive to monitor and lobby
	Diffuse interests have weak incentives to monitor and lobby
	Organized diffuse interests that overcome collective action problems monitor and lobby
	Diffuse interests may be mobilized around sudden media attention to the topic and creation of a 'policy window'.
Incentives of elected representatives generally	Focused on how actions will influence elections, underemphasize long run cost, overemphasize short run benefits
	Emphasis on risk or cost of opponents proposals to take advantage of risk aversion
Incentives of elected representatives with regard to their constituency	Seek benefits of a policy for the district even if it is to the detriment of society
	Seek to capture the contracts for factor suppliers from the district even if they are not the lowest cost or best suppliers.

Government creates organizations to supply goods and services that the private market cannot or we think should not supply (national defense, legal institutions, monetary policy, EPA,…)

Some differences between the incentive structures in a private firm and a public organization.

Firm, maximize profit as revenue minus cost. Incentive to minimize cost to maximize return.

Public organization - write a project budget, get awarded a given amount with budget lines for different activities, and scramble to spend out by the end of the fiscal year. The amount you get next year is often a function of how much you got this year, so not much incentive to underspend. Also, can't use distribution of unspent money as an incentive structure (without getting in trouble at least we hope).

Pay scale in private sector at least in theory based on the value of the marginal product.

Pay scale in the public sector a function of something like a GS table with time served as a way of moving up:

SALARY TABLE 2022-GS
INCORPORATING THE 2.2% GENERAL SCHEDULE INCREASE
EFFECTIVE JANUARY 2022

Annual Rates by Grade and Step

Grade	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9	Step 10	WITHIN GRADE AMOUNTS
1	$ 20,172	$ 20,849	$ 21,519	$ 22,187	$ 22,857	$ 23,249	$ 23,913	$ 24,581	$ 24,608	$ 25,234	VARIES
2	22,682	23,222	23,973	24,608	24,886	25,618	26,350	27,082	27,814	28,546	VARIES
3	24,749	25,574	26,399	27,224	28,049	28,874	29,699	30,524	31,349	32,174	825
4	27,782	28,708	29,634	30,560	31,486	32,412	33,338	34,264	35,190	36,116	926
5	31,083	32,119	33,155	34,191	35,227	36,263	37,299	38,335	39,371	40,407	1,036
6	34,649	35,804	36,959	38,114	39,269	40,424	41,579	42,734	43,889	45,044	1,155
7	38,503	39,786	41,069	42,352	43,635	44,918	46,201	47,484	48,767	50,050	1,283
8	42,641	44,062	45,483	46,904	48,325	49,746	51,167	52,588	54,009	55,430	1,421
9	47,097	48,667	50,237	51,807	53,377	54,947	56,517	58,087	59,657	61,227	1,570
10	51,864	53,593	55,322	57,051	58,780	60,509	62,238	63,967	65,696	67,425	1,729
11	56,983	58,882	60,781	62,680	64,579	66,478	68,377	70,276	72,175	74,074	1,899
12	68,299	70,576	72,853	75,130	77,407	79,684	81,961	84,238	86,515	88,792	2,277
13	81,216	83,923	86,630	89,337	92,044	94,751	97,458	100,165	102,872	105,579	2,707
14	95,973	99,172	102,371	105,570	108,769	111,968	115,167	118,366	121,565	124,764	3,199
15	112,890	116,653	120,416	124,179	127,942	131,705	135,468	139,231	142,994	146,757	3,763

SALARY TABLE 2022-AL
INCORPORATING THE 2.2% GENERAL SCHEDULE INCREASE AND A LOCALITY PAYMENT OF 18.68%
FOR THE LOCALITY PAY AREA OF ALBANY-SCHENECTADY, NY-MA
TOTAL INCREASE: 2.89%
EFFECTIVE JANUARY 2022

Annual Rates by Grade and Step

Grade	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9	Step 10
1	$ 23,940	$ 24,744	$ 25,539	$ 26,332	$ 27,127	$ 27,592	$ 28,380	$ 29,173	$ 29,205	$ 29,948
2	26,919	27,560	28,451	29,205	29,535	30,403	31,272	32,141	33,010	33,878
3	29,372	30,351	31,330	32,309	33,289	34,268	35,247	36,226	37,205	38,184
4	32,972	34,071	35,170	36,269	37,368	38,467	39,566	40,665	41,763	42,862
5	36,889	38,119	39,348	40,578	41,807	43,037	44,266	45,496	46,726	47,955
6	41,121	42,492	43,863	45,234	46,604	47,975	49,346	50,717	52,087	53,458
7	45,695	47,218	48,741	50,263	51,786	53,309	54,831	56,354	57,877	59,399
8	50,606	52,293	53,979	55,666	57,352	59,039	60,725	62,411	64,098	65,784
9	55,895	57,758	59,621	61,485	63,348	65,211	67,074	68,938	70,801	72,664
10	61,552	63,604	65,656	67,708	69,760	71,812	73,864	75,916	77,968	80,020
11	67,627	69,881	72,135	74,389	76,642	78,896	81,150	83,404	85,657	87,911
12	81,057	83,760	86,462	89,164	91,867	94,569	97,271	99,974	102,676	105,378
13	96,387	99,600	102,812	106,025	109,238	112,450	115,663	118,876	122,088	125,301
14	113,901	117,697	121,494	125,290	129,087	132,884	136,680	140,477	144,273	148,070
15	133,978	138,444	142,910	147,376	151,842	156,307	160,773	165,239	169,705	174,171

This does not reflect the value of the marginal product!

Difficulty in assigning a precise economic value to the output of public agencies. What is the marginal value of another ship for the Navy?

What is the value of having a FDA?

From the Washington Post:

FDA pressured to combat rising 'food fraud'

By Lyndsey Layton
Washington Post Staff Writer
Tuesday, March 30, 2010

"The expensive "sheep's milk" cheese in a Manhattan market was really made from cow's milk. And a jar of "Sturgeon caviar" was, in fact, Mississippi paddlefish…. "Food fraud" has been documented in fruit juice, olive oil, spices, vinegar, wine, spirits and maple syrup, and appears to pose a significant problem in the seafood industry. Victims range from the shopper at the local supermarket to multimillion companies, including E&J Gallo and Heinz USA. Such deception has been happening since Roman times, but it is getting new attention as more products are imported and a tight economy heightens competition. And the U.S. food industry says federal regulators are not doing enough to combat it. …"

http://www.washingtonpost.com/wp-dyn/content/article/2010/03/29/AR2010032903824.html?hpid=topnews

Another issue is the incentive to innovate.

In the private sector, there is a profit motive to shift up the production function.

In the public sector, there is not the same pressure.

Private sector has less protection of employees – easier to hire and fire.

Public sector, due to the change in the party in charge, has to have policies in place to protect civil servants.

Private sector can change in response to changing factor prices.

Public sector, lines are in the budget, and moving funds across lines is a difficult process.

Decentralization can lead to there being multiple levels of governance:

some in a hierarchy,

some not

Can it lead to forum shopping?

Table 2
Who was asked to resolve this conflict by conflict type

	Boundary	Graze	Water	Raid	Crop	Forest	Privatization[a]	Salt
Elders	12%	33%	44%	28%	42%	37%	31%	50%
Gada	3%	15%	20%	5%	17%	30%	23%	0%
Government	75%	38%	33%	26%	14%	23%	23%	0%
Not resolved	9%	14%	4%	41%	28%	10%	23%	50%
Number of instances	379	136	55	39	36	30	13	2

[a] Refers to private enclosing of land for grazing and/or farming.

McPeak and Little 2018

Change can be challenging with existing policy

https://prospect.org/economy/shipping-carriers-are-making-a-killing-on-food-aid/