Lecture 10

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.

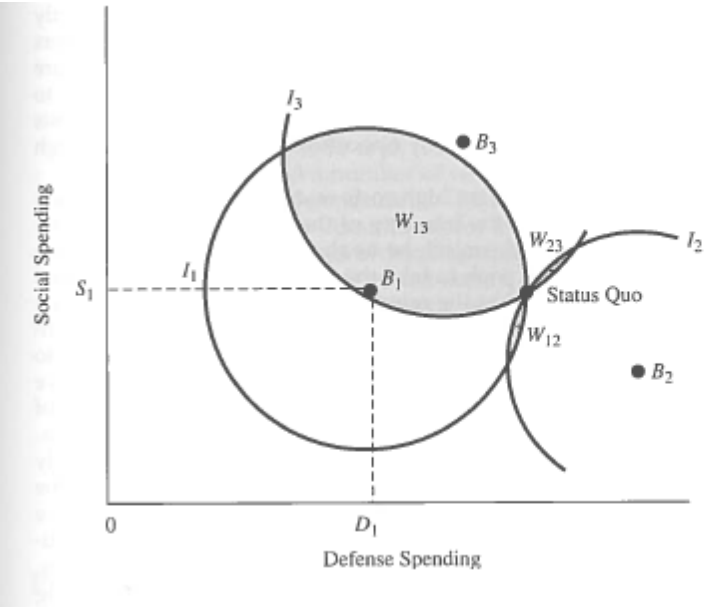

Figure 8.1 Agenda Control in a Two-Dimensional Policy Space

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 representative 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.

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.

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

Plays 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 advertising.

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 2020-GS
INCORPORATING THE 2.6% GENERAL SCHEDULE INCREASE
EFFECTIVE JANUARY 2020

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	$ 19,543	$ 20,198	$ 20,848	$ 21,494	$ 22,144	$ 22,524	$ 23,166	$ 23,814	$ 23,840	$ 24,448	VARIES
2	21,974	22,497	23,225	23,840	24,108	24,817	25,526	26,235	26,944	27,653	VARIES
3	23,976	24,775	25,574	26,373	27,172	27,971	28,770	29,569	30,368	31,167	799
4	26,915	27,812	28,709	29,606	30,503	31,400	32,297	33,194	34,091	34,988	897
5	30,113	31,117	32,121	33,125	34,129	35,133	36,137	37,141	38,145	39,149	1,004
6	33,567	34,686	35,805	36,924	38,043	39,162	40,281	41,400	42,519	43,638	1,119
7	37,301	38,544	39,787	41,030	42,273	43,516	44,759	46,002	47,245	48,488	1,243
8	41,310	42,687	44,064	45,441	46,818	48,195	49,572	50,949	52,326	53,703	1,377
9	45,627	47,148	48,669	50,190	51,711	53,232	54,753	56,274	57,795	59,316	1,521
10	50,246	51,921	53,596	55,271	56,946	58,621	60,296	61,971	63,646	65,321	1,675
11	55,204	57,044	58,884	60,724	62,564	64,404	66,244	68,084	69,924	71,764	1,840
12	66,167	68,373	70,579	72,785	74,991	77,197	79,403	81,609	83,815	86,021	2,206
13	78,681	81,304	83,927	86,550	89,173	91,796	94,419	97,042	99,665	102,288	2,623
14	92,977	96,076	99,175	102,274	105,373	108,472	111,571	114,670	117,769	120,868	3,099
15	109,366	113,012	116,658	120,304	123,950	127,596	131,242	134,888	138,534	142,180	3,646

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 parties 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