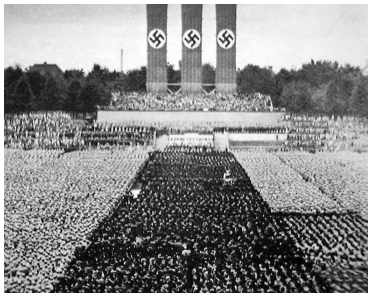
4 Government Design

"There are two opposite reasons for being a democrat. You may think all men so good that they deserve a share in the government of the commonwealth and so wise that the commonwealth needs their advice. . . . On the other hand, you may believe fallen men to be so wicked that not one of them can be trusted with any irresponsible power over his fellows." — C. S. Lewis



Why isn't 2010's Iowa like 1930's Germany?

August 28, 2019

4.1: Forms of Government

The extent of government failure depends on how government is set up. One way to think about forms of government is by asking what is fair. Fairness means different things to different people, but this might lead you, for example, to think that every adult should be able to vote on every law. Another way of thinking about it is by asking what God wants. Divine will means different things to different people, but you might end up, for example, thinking that it does not matter so much how the leader is chosen but that the nation should follow sharia, the ancient Islamic law. Still another way of thinking is to ask who makes the best decisions. This might lead you to technocracy, in which expertise, examinations, and intelligence rather than elections determine who gets to make regulations and judge disputes. Or you might look to history and property rights, as Robert Filmer did in the 1600's, and say that since government originated from the family, the king, as head of the family, should rule subject to the promises his ancestors made to his people— or reach the opposite conclusion, like Filmer's rival John Locke, and say that historical origins imply that governments originated when groups of families made agreements to set them up.[1]

In this chapter, we will keep our focus on surplus maximization as the objective. Thus, we will put aside the question of whether justice requires democracy, freedom of speech, the right of every person over age 18 to vote, and so forth, though, as with "Thou shalt not steal", features like those might turn out to maximize surplus. The best kind of government design from the point of surplus maximization would be to give complete discretion, without any red tape or restrictions, to intelligent, well-educated, unselfish officials, appointed for life so they are exempt from political pressure. But there is a catch, one noted in the third century B.C. by the Chinese philosopher Han Fei:

> Now there are not more than ten truly merciful and faithful men in this country, whereas there are hundreds of official posts. So if only merciful and faithful men are selected for public service, the candidates will not be sufficient for filling all the official posts. In that case, those who maintain order would be few while disturbers would abound. Therefore, the way of the enlightened lord is to unify laws instead of seeking for wise men, to solidify policies instead of yearning after faithful persons. In consequence, as long as laws do not fail to function, the body of officials will practise neither villainy nor deception....[2]

Han Fei was arguing for the **rule of law** as opposed to the **rule of men** favored by the Confucians, who wanted fewer laws and rules and stressed the cultivation of virtue in the kingdom. He noted that when the Confucian scholars advocated unrestricted rule by cultivated scholars they were not entirely disinterested.

---

[1] Locke's famous 1689 book on the social contract is *Two Treatises of Government: In the Former, the False Principles, and Foundation of Sir Robert Filmer, and His Followers, Are Detected and Overthrown. The Latter Is an Essay Concerning the True Original, Extent, and End of Civil Government*.

[2] Han Fei "Five Vermin: A Pathological Analysis of Politics."

The question, then, of government design is ancient. It is central to Plato's *Republic*, which was quoted in Chapter 1 on justice as giving back what one takes, and to other of his dialogues such as *The Laws* and *Statesman*. Aristotle follows *Statesman's* section 302c-d in his *Politics* book III where he divides governments into three types: monarchy, aristocracy, and "politeia" ($\pi\text{ø}\lambda\iota\tau\epsilon\iota\alpha$, rule of the many). Aristotle says that, "Of the above-mentioned forms, the perversions are as follows: of monarchy, tyranny; of aristocracy, oligarchy; of polity, democracy. For tyranny is a kind of monarchy which has in view the interest of the monarch only; oligarchy has in view the interest of the wealthy; democracy, of the needy: none of them the common good of all."

Even earlier is the Bible's example of organizing a judicial system: Numbers 18:14-26 says:

> And when Moses's father-in-law saw all that he did to the people, he said, What is this thing that thou doest to the people? why sittest thou thyself alone, and all the people stand by thee from morning unto even? And Moses said unto his father in law, Because the people come unto me to enquire of God: When they have a matter, they come unto me; and I judge between one and another, and I do make them know the statutes of God, and his laws.
>
> And Moses's father-in-law said unto him, The thing that thou doest is not good. Thou wilt surely wear away, both thou, and this people that is with thee: for this thing is too heavy for thee; thou art not able to perform it thyself alone. Hearken now unto my voice, I will give thee counsel, and God shall be with thee: Be thou for the people to God-ward, that thou mayest bring the causes unto God: And thou shalt teach them ordinances and laws, and shalt shew them the way wherein they must walk, and the work that they must do. Moreover thou shalt provide out of all the people able men, such as fear God, men of truth, hating covetousness; and place such over them, to be rulers of thousands, and rulers of hundreds, rulers of fifties, and rulers of tens: And let them judge the people at all seasons: and it shall be, that every great matter they shall bring unto thee, but every small matter they shall judge: so shall it be easier for thyself, and they shall bear the burden with thee. If thou shalt do this thing, and God command thee so, then thou shalt be able to endure, and all this people shall also go to their place in peace.
>
> So Moses hearkened to the voice of his father-in-law , and did all that he had said.

As time passed, Israel grew, and so did the government. I Samuel 8: 4-19 is about the problem of how the Israelites could respond to the Philistines, an invading people who were highly effective in battle. The old system didn't seem to be working for Israel, so they went to Samuel, who occupied a position similar to Moses.

> "Then all the elders of Israel gathered themselves together, and came to Samuel unto Ramah, And said unto him, Behold, thou art old, and thy sons walk not in thy ways: now make us a king to judge us like all the nations. But the thing displeased Samuel, when they said, Give us a king to judge us. And Samuel prayed unto the LORD. And the LORD said unto Samuel, Hearken unto the voice of the people in all that they say unto thee: for they have not rejected thee, but they have rejected me, that I should not reign over them. According to all the works which they have done since the day that I brought them up out of Egypt even unto this day, wherewith they have forsaken me, and served other gods, so do they also unto thee. Now therefore hearken unto their voice: howbeit yet protest solemnly unto them, and shew them the manner of the king that shall reign over them.

> And Samuel told all the words of the LORD unto the people that asked of him a king. And he said, This will be the manner of the king that shall reign over you: He will take your sons, and appoint them for himself, for his chariots, and to be his horsemen; and some shall run before his chariots. And he will appoint him captains over thousands, and captains over fifties; and will set them to ear his ground, and to reap his harvest, and to make his instruments of war, and instruments of his chariots. And he will take your daughters to be confectionaries, and to be cooks, and to be bakers. And he will take your fields, and your vineyards, and your oliveyards, even the best of them, and give them to his servants. And he will take the tenth of your seed, and of your vineyards, and give to his officers, and to his servants. And he will take your menservants, and your maidservants, and your goodliest young men, and your asses, and put them to his work. He will take the tenth of your sheep: and ye shall be his servants. And ye shall cry out in that day because of your king which ye shall have chosen you; and the LORD will not hear you in that day.
>
> Nevertheless the people refused to obey the voice of Samuel; and they said, Nay; but we will have a king over us; That we also may be like all the nations; and that our king may judge us, and go out before us, and fight our battles.

The problem Samuel is warning against is "Quis custodiet ipsos custodes?"— "Who will guard the guardians themselves?" This Latin maxim comes from Juvenal's Satire 6, lines 346–348, where the narrator frets about his wife's infidelity:

> I hear always the admonishment of my friends:
> "Bolt her in, constrain her!" But who will guard
> the guardians? The wife plans ahead and begins with them.[3]

This fundamental problem of government design was perceived very early. How do we keep officials from using power for their own personal ends? That is how government failure begins. It is interesting that Han Fei, Plato, Aristotle, and the Bible don't focus on the intrinsic morality of a form of government, unlike our modern focus on democracy and free elections. Instead, they focus on the practical concern of making a government do the right things. Aristotle wants to find a government that will aid the common good, whether that government be monarchic, aristocratic, or democratic. He disagrees with Filmer's idea that a government is like a family, with the head saying what everyone else can do. Instead, he says, "Every state is as we see a sort of partnership, and every partnership is formed with a view to some good ... Those then who think that the natures of the statesman, the royal ruler, the head of an estate and the master of a family are the same, are mistaken" (*Politics*, I-1252a). Moses has a practical problem too: he wants to find out how to administer justice without wearing himself out. And when it comes to monarchy versus informal rule by judges, Samuel and the people of Israel are disagreeing about how to solve the problem of how to run an effective war against the Philistines.

[3] Audio quid ueteres olim moneatis amici,
"Pone seram, cohibe." sed **quis custodiet ipsos**
Custodes? cauta est et ab illis incipit uxor.

Government design has made significant progress since Samuel's warning about monarchy. The United States Constitution of 1789 was written specifically to try to combine the best features of Aristotle's three forms of government in such a way that the different parts of government would fight each others' attempts to abuse their powers. It sets up three branches of government. The **legislative branch** makes laws, the **executive branch** carries out laws, and the **judicial branch** interprets the laws and whether they are being carried out consistently with how they were written. Other countries have different designs for their governments, but there is general recognition that it is important to avoid too much centralization of power and to attend carefully to the incentives of government officials.

The legislative branch of the federal government of the United States is made up of the House of Representatives, elected on the basis of population every two years, and the Senate, two people from each state who are elected every six years with staggered terms (that is, 1/3 of them are elected in 2012, 1/3 in 2014, and 1/3 in 2016).

The executive branch is headed by the President, who is elected every four years. Under him, however, is a vast bureaucracy that carries out the laws and that makes regulations to help carry them out. The top bosses of this bureaucracy are appointed by the President and can be fired by him, and it is these **political appointees** who are supposed to make policy decisions. Most of the bureaucracy is made up of **career civil servants**, members of the **civil service**, who are hired by older civil servants rather by the elected officials and who cannot be fired except for obvious misbehavior. A career civil servant can be fired if he embezzles from his office, but not just because he is a Democrat and his political appointee boss is a Republican. In many countries, members of the civil service are chosen by competitive examination, but in the United States in the past few decades they are chosen by the existing civil servants on grounds such as years of education and experience, race, sex, disability statuts, and veteran status.

The judicial branch is made up of the courts and the judges. It does not include prosecutors and police (for example, the Federal Bureau of Investigation, a federal police agency), who are in the executive branch because they are carrying out the laws. Judges are supposed to be independent of the President because they monitor whether the executive branch officials are properly carrying out the laws that the legislative branch passed. Judges, together with juries, decide whether the prosecutor has correctly determined who has broken the law. In addition, people who believe they have been hurt by incorrect application of the laws or regulations can take their cases to court. Judges oversee more than just government actions, though; they also decide disputes between private parties on issues such as property rights, contracts, and injuries. Federal judges are chosen by the President, but must be approved by the Senate. They have life terms, so the President can't fire a judge just because the judge makes wrong decisions, or because he dislikes the decision. Judges can be impeached by Congress

and removed, but this is very rare and is generally used to remove judges who have committed crimes (though in the nineteenth century, two judges were impeached for intoxication on the bench).

The division of the government into three branches is known as a system of **checks and balances** because the intent is to divide power to reduce the amount of government failure.[4] Each branch is assigned different duties so that power is not concentrated and cannot become self-perpetuating.

Another common way to organize a democracy is by a **parliamentary system** used by the United Kingdom and Israel. Parliament is the legislature, elected by district based on population (as in the U.K.) or a party's' share of the national vote (as in Israel). Some countries have another legislative chamber too, usually with less power than the main one. Parliament, in turn, elects the prime minister, who chooses ministers for the various departments of government and runs the executive branch. Unlike in the United States, the legislature can unseat the executive at any time. The members of parliament can vote to choose a new prime minister even without running for re-election themselves. It's unclear whether in the end a prime minister is more powerful than a president (because the prime minister controls a majority of the executive branch) or less powerful (because a majority of the legislative branch can vote him out).

In the United States, there exists a parallel system of state governments, each with its own legislative, executive, and judicial branches. The U.S. is not alone in this—Mexico, Canada, Australia, and Germany are also federal systems. The states, in turn, set up still another layer of executive and legislative branches (though with power only over limited subjects) in the form of city and county governments. A difference between the federal and state governments is that state governments often elect judges rather than having the executive appoint them and state governments have elections for many executive officials, not just the top man (the governor) and his potential replacement (the lieutenant-governor), but the attorney-general, the county prosecutors, and so on. All of the states have chosen to have 3-branch governments, but this is up to each state. One of the states, Nebraska, has just one legislative body, rather than both a senate and a house of representatives. Another, Louisiana, follows the Roman legal regime adopted in France, its former owner, rather than the common law regime of England and the other 49 states.

Although the three-branch form of government seems a tidy arrangement, in practice there is considerable slippage in the allocation of duties, particularly in making laws. Congress is the legislative branch, so it is supposed to have the exclusive power to pass laws. The President, however, can write regulations, and how is a regulation

[4]This idea was first developed by Montesquieu in his 1748 *The Spirit of the Laws* and is famously opposed to Rousseau's preference for a unified all-powerful government (*The Social Contract*, 1762).

different from a law? The courts can interpret laws, and what if they decide to interpret a law to mean the opposite of what Congress intends? Nonetheless, separation of powers does reduce the damage any one man can cause. This republican version of a democracy satisfies both of C.S. Lewis's seemingly contradictory advantages when he says

> There are two opposite reasons for being a democrat.
>
> You may think all men so good that they deserve a share in the government of the commonwealth and so wise that the commonwealth needs their advice. . . .
>
> On the other hand, you may believe fallen men to be so wicked that not one of them can be trusted with any irresponsible power over his fellows."[5]

4.2: Administrative Law

The question of how regulations come to be made and how they relate to laws is the subject of **administrative law**. A regulation is very much like a law, but Congress doesn't have to approve it. In addition, every regulation is supposed to be a mere detail of implementation of a Congressionally-passed law. Such details of implementation are inevitable. Congress passes the law as a general rule, but it is up to the President to carry out the laws. Just as the President must decide which contracts to use to buy printers for the Army, so he must decide how much to restrict the level of benzene if Congress passes a law that says dangerous substances must be kept to safe levels in the workplace. This gives a lot of power to the President. Congress has, however, passed laws to constrain the executive branch in the way it makes regulations. A major goal of these procedures are to make sure that regulation-making is **transparent**: that is, so regulation-making proceeds slowly and openly with enough time for anyone who might be affected to comment. The box "How Regulations Are Made" gives an example of the standard path for rulemaking.[6]

[5] C.S. Lewis (1949) *Transposition and Other Addresses*, chapter 3, "Membership".

[6] For more, see the article by the head of OMB's cost-benefit analysis in the George W. Bush Administration: John D. Graham, Noe, Paul R. & Branch, Elizabeth L. (2006) "Managing the Regulatory State: The Experience of the Bush Administration," *Fordham Urban Law Journal*, 33(4): 953–1002 (2006).

TABLE 4.1
HOW REGULATIONS ARE MADE

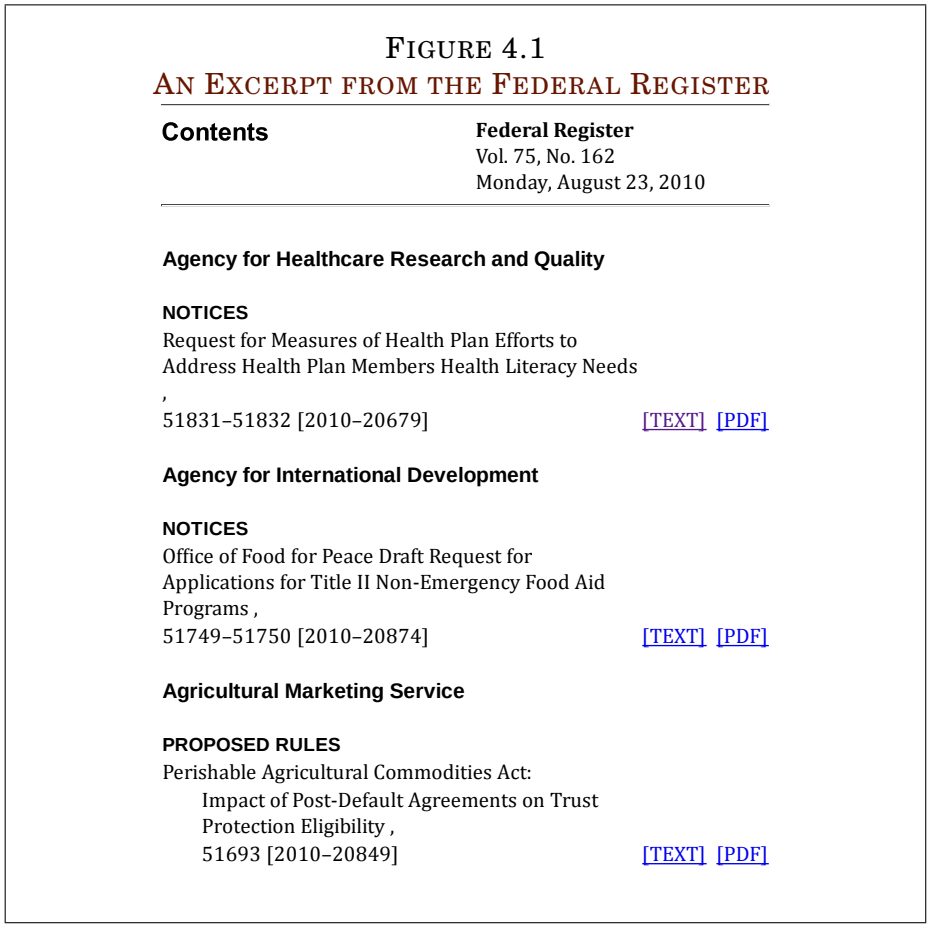
1. Congress passes a vague law. "Milk products must not contain dangerous levels of chemicals."
2. The agency proposes regulations, notifying the Office of Management and the Budget (OMB). One might be: "Yogurt can only contain a limited amount of propozine."
3. The agency sends a specific rule to OMB, together with a Regulatory Impact Analysis ("Yogurt produced by companies with over 30 employees can only contain 50 parts per million of propozine.")
4. OMB has at least 60 days to comment and then approve or reject. (OMB says it should be 40 ppm, not 50).
5. The agency publishes a Notice of Proposed Rulemaking in the Federal Register.
6. The agency listens to public comment for 30 to 90 days. (Large yogurt companies propose changing to 70 ppm and removing the small-company exemption; small yogurt companies propose 20 ppm.)
7. After the comment period closes, the agency decides whether to revise the rule. (It decides to go to 45 ppm.)
8. The agency sends the revised rule to OMB for a month of consideration and approval or disapproval.
9. The agency publishes the final rule in the Federal Register.
10. After 30 days, the rule goes into effect. The agency starts enforcing it.
11. Within 60 days of publication, the Congressional Review Act lets the House and Senate pass a bill killing the regulation by a 50% vote rather than the 60% often required by their rules. If the President signs the bill, the regulation is killed and must be rewritten.
12. Maybe somebody objects to the rule and takes the agency to court. (Statutory: 45 ppm is too lax, because even 10 is "dangerous". Constitutional: The Constitution does not give Congress the right to regulate yogurt that is only sold locally, not across state lines.)
13. Later, the agency may re-evaluate the rule, and possibly change it. (20 years later, scientists have found conclusively that propozine is harmless, so the rule is rescinded– after going through the procedure again starting at step 2.)

Most regulations (or "rules") get changed during the rulemaking process, and an appreciable number are even withdrawn by the agency that proposed them. Lobbying by businesses, nonprofit organizations, and even individuals can make a big difference. We think of lobbying as being for the purpose of taking away somebody else's surplus, and much lobbying is indeed for that purpose, but lobbying also helps to make Pareto improvements in regulations— changes that help someone and hurt nobody. The agency that proposes the rule has expertise, but not as much expertise as the businesses affected, so it might propose a regulation that is simply more costly than it needs to be to attain its purpose. In addition, have less incentive to find problems, since the industry, not the officials, bear the cost of the regulation. If an industry lobbyist points out an unintended problem, the agency will be happy to modify the regulation. Lobbyists and public commenters generally are like volunteer staff for the agency.

An example of the effect of political lobbying is the standard for how much cotton dust workers in cotton mills can be exposed to. In 1978, OSHA, the agency in charge of worker safety, proposed a very strict standard to President Carter. The Chairman of the Council of Economic Advisors, who is the President's advisor on economics generally, opposed the standard as not maximizing surplus. President Carter agreed at first, but then changed his mind after talking with his Secretary of Labor, who agreed with OSHA, and the strict standard was imposed. The next President was Ronald Reagan, a conservative who had promised to roll back regulation. Despite some members of his administration wanting to loosen the standard, however, he did not, perhaps because the large manufacturers in the industy by that time had already complied with the strict standard and did not mind there being a high cost that would hurt smaller or newer competitors.[7]

[7] W. Kip Viscusi, "Cotton Dust Regulation: An OSHA Success Story?" *Journal of Policy Analysis and Management,* 4: 325–343 (1985).

FIGURE 4.1
AN EXCERPT FROM THE FEDERAL REGISTER



Contents

Federal Register
Vol. 75, No. 162
Monday, August 23, 2010

Agency for Healthcare Research and Quality

NOTICES
Request for Measures of Health Plan Efforts to Address Health Plan Members Health Literacy Needs
,
51831–51832 [2010–20679] [TEXT] [PDF]

Agency for International Development

NOTICES
Office of Food for Peace Draft Request for Applications for Title II Non-Emergency Food Aid Programs ,
51749–51750 [2010–20874] [TEXT] [PDF]

Agricultural Marketing Service

PROPOSED RULES
Perishable Agricultural Commodities Act:
Impact of Post-Default Agreements on Trust Protection Eligibility ,
51693 [2010–20849] [TEXT] [PDF]

4.3: The Example of FERPA and Grade Disclosure

Back in the 1970's it was routine for college professors to post test grades on their office doors so students could see how well they'd done. By 2010, college computer grading systems had made such posting obsolete, but well before that, the practice had also become illegal, in the sense that a college which allowed the posting of grades would lose its eligibility for federal student aid and federal research grants. This was the result of how the executive and judicial branches interpreted a law passed by Congress. We will use it as an example of how the meaning of a law is developed after Congress finishes writing it.

First, there is the law itself. A law which is passed by a legislature, as opposed to originating in judicial interpretation, is called a **statute**. In this case the statute is the bill known variously as FERPA, the Family Educational Rights and Privacy Act, and the Buckley Amendment. University administrators need to refer to this law a lot, so

they say "Firpa" for short. Let's take a look at part of the FERPA law (just part, which is why it starts with "(b)").

> UNITED STATES CODE, TITLE 20, CHAPTER 31, SUBCHAPTER III, Part 4, §1232g
> (b) Release of education records; parental consent requirement; exceptions; compliance with judicial orders and subpoenas; audit and evaluation of federally supported education programs; recordkeeping
> (1) No funds shall be made available under any applicable program to any educational agency or institution which has a policy or practice of permitting the release of education records. . .

Another section of the statute defines "education records".

> UNITED STATES CODE, part (a) of TITLE 20, CHAPTER 31, SUBCHAPTER III, Part 4, §1232g)
> (4) (A) For the purposes of this section, the term "education records" means, except as may be provided otherwise in subparagraph (B), those records, files, documents, and other materials which
> (i) contain information directly related to a student; and
> (ii) are maintained by an educational agency or institution or by a person acting for such agency or institution.
> (B) The term "education records" does not include
> (i) records of instructional, supervisory, and administrative personnel and educational personnel ancillary thereto which are in the sole possession of the maker thereof and which are not accessible or revealed to any other person except a substitute;

Regulations are based on the statutes. They are issued by executive agencies, not passed by Congress, so they are listed separately, in the *Code of Federal Regulations*. Notice that the definitions are much the same, but perhaps clarified a little:

> *Code of Federal Regulations*, Title 34 §99.3, "What definitions apply to these regulations?"
> *Education records*. (a) The term means those records that are:
> (1) Directly related to a student; and
> (2) Maintained by an educational agency or institution or by a party acting for the agency or institution.
> (b) The term does not include:
> (1) Records that are kept in the sole possession of the maker, are used only as a personal memory aid, and are not accessible or revealed to any other person except a temporary substitute for the maker of the record.

An example of a regulation based on this bill is one that answers a question not mentioned in the statute: whether the records of the campus police are educational records. The federal regulations say they are not:

> *Code of Federal Regulations*, Title 34 §99.8 "What provisions apply to records of a law enforcement unit?"
> (c)(1) Nothing in the Act prohibits an educational agency or institution from contacting its law enforcement unit, orally or in writing, for the purpose of asking that unit to investigate a possible violation of, or to enforce, any local, State, or Federal law.

> (2) Education records, and personally identifiable information contained in education records, do not lose their status as education records and remain subject to the Act, including the disclosure provisions of §99.30, while in the possession of the law enforcement unit.
> (d) The Act neither requires nor prohibits the disclosure by an educational agency or institution of its law enforcement unit records.

Regulations in the *Code of Federal Regulations* must go through the procedures described earlier with OMB approval, public comment periods, and so forth. If a regulation has gone through this process, and someone questions in court whether the regulation is a correct application of the statutes, the courts give the benefit of the doubt to the regulation, and require strong arguments that the regulation is contrary to the statute and should be struck down. This is known as **administrative deference**, or the **Chevron Doctrine**, from the Supreme Court decision *Chevron U.S.A., Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837 (1984), which said:

> If the intent of Congress is clear, that is the end of the matter; for the court as well as the agency must give effect to the unambiguously expressed intent of Congress.
> If the Court determines Congress has not directly addressed the precise question at issue, the court does not simply impose its own construction of the statute . . . rather,
> (2) If the statute is silent or ambiguous with respect to the specific question, the issue for the court is whether the agency's answer is based on a permissible construction of the statute.

Besides issuing regulations, agencies sometimes issue clarifying memos. These are not entitled to full administrative deference by the courts, since they have not gone through the full process, and might even conflict with each other because they have not been so carefully checked. For example, the Secretary of Education issued a "Dear Colleague Letter" on FERPA in 2008:

> The Secretary remains concerned that some educational agencies and institutions are under the mistaken impression that FERPA prevents them from providing parents with information about most "eligible students"... For example, the final regulations clarify that under §99.5 and 99.36 an educational agency or institution may disclose information to an eligible student's parents ... if the eligible student is a dependent for Federal income tax purposes.[8]

Sometimes issues come up that have not been addressed by either the statute or the regulations. The case *Falvo v. Owasso*, 534 US 426 (2002), was about the question of peer grading. The Supreme Court's description of the main issue says:

> Teachers sometimes ask students, including respondent's children, to score each other's tests, papers, and assignments as the teachers explain the correct answers to the entire class. Claiming that such "peer grading" violates the Family Educational Rights and Privacy Act of 1974 (FERPA or Act), respondent filed a 42 U.S.C. §1983 action against the school district and school officials (petitioners).

[8] "Dear Colleague Letter about Family Educational Rights and Privacy Act (FERPA) Final Regulations," (December 17, 2008).

The first stage of the case was that unhappy parents went to the District Court and claimed that FERPA had been violated because the grade a student gave to another student was an "educational record," so the very act of grading violated FERPA by disclosing the grade to the student grader. At the District Court stage, one judge makes the decision, sometimes with a jury, sometimes not, depending on the kind of case. Here, the judge rejected the case using **summary judgement**: saying that the student grades were not "educational records", so even if everything happened the way the unhappy parents said it did, no law was violated, and thus no trial was needed to conclude tha the parents should lose the case.

The second stage is the appeal. The parents appealed to the Circuit Court of Appeals, which uses a three-judge panel to look at issues that are purely legal rather than questions of fact. The Circuit Court ruled that the peer grades indeed were "educational records". The school district appealed to the Supreme Court, however, which reversed the Circuit Court and said the District Court was right in the first place. The Supreme Court said, with all except one judge agreeing (and that judge agreeing in the result but not in the reasoning used):

> Even assuming the teacher's grade book is an education record—a point the parties contest and one we do not decide here—the score on a student-graded assignment is not "contained therein," §1232g(b)(1), until the teacher records it. The teacher does not maintain the grade while students correct their peers' assignments or call out their own marks.
>
> For these reasons, even assuming a teacher's grade book is an education record, the Court of Appeals erred, for in all events the grades on students' papers would not be covered under FERPA at least until the teacher has collected them and recorded them in his or her grade book. We limit our holding to this narrow point, and do not decide the broader question whether the grades on individual student assignments, once they are turned in to teachers, are protected by the Act.

Thus, the Supreme Court evaded the issue, saying that the peer grade was not part of the school's grade records until the teacher wrote it down, so the fact that the peer grader knew it was irrelevant. The Court left unresolved the issue of whether it would be a violation if the teacher told the peer grader afterwards that the peer grade had been accepted and written down. As a result, the Department of Education amended the FERPA regulations in §99.3 by adding that "educational records" does not include:

> (6) Grades on peer-graded papers before they are collected and recorded by a teacher.

One other point that the *Owasso* case illustrates is the way in which the executive branch and the public can influence the judicial branch. Each side in a case submits a **brief** which gives their arguments in writing. Third parties can also, with the court's permission, submit briefs if they too want to address the legal issue. In this case, The Reporters' Committee for Freedom of the Press and the National Association of Independent Schools filed briefs on the side of the school district, and the Eagle Forum, a

libertarian organization, filed one on the side of the unhappy parents. These are called **amicus curiae briefs**, meaning "friend of the court briefs." The Supreme Court asked the Solicitor General to file an amicus brief stating the executive branch's opinion as to how the case should turn out. The Solicitor General is appointed by the President to argue cases before the Supreme Court when the United States is a party to the dispute, but also to give the opinion of the executive branch in cases like *Owasso*. The Solicitor General did so, supporting the school district.

So far we have looked at statutes, regulations, agency "Dear Colleague letters," and court opinions. The last layer of rules we will look at are the self-imposed rules: the policies of the regulated organization. Corporations issue internal directives on how to comply with laws, and so do universities. Here is an example from a university I will leave unnamed.

> "I'm often asked to write letters of recommendation for students for awards, graduate school, or job applications. How does FERPA apply this case?"
>
> Statements based on your personal assessments and observations of the student are not derived from "education records" covered by FERPA. However, you must obtain the student's written consent if our letter includes such information as the student's overall GPA, or grades in specific courses.

Here, the university has interpreted FERPA on a point unaddressed by the statute or regulation: If a student asks for a recommendation letter, has he implicitly consented to release of his grades in the letter? The university policy is the cautious one of saying that it does not, and the instructor can't mention that the student received an A in the class. This is a perverse result, of course, since the student asks for the letter hoping that the instructor will say good things about his performance. A literal interpretation of the law, though, is that professors can't disclose grades without explicit written consent of the student. The surest way of avoiding lawsuits would be to prohibit professors from writing recommendation letters at all; the university chose instead just to prohibit them from mentioning grades. The legal departments of organizations often favor cautious interpretations of the law, since if the organization does run into legal trouble it is they who will have to defend it. The managers of organizations need to recognize this, and strike a balance between imposing extra transaction costs on the organization on the one hand and incurring legal costs on the other. In addition, if some obnoxious person did bring suit, the university could use its policy to defend itself and put the blame on the professor.

4.4: Taxes

Governments need funds to operate, and design of a tax system is one of the central problems of designing a government. Governments can borrow, as businesses do, but just as businesses need sales revenue sooner or later to pay for the borrowing, so

governments cannot rely on borrowing for all of their needs. Governments can also use sales revenue, to a small extent— think of highway tolls, or the land sales by the United States government in the 1800's— but the dominant source of funds is taxation. Part of the design of government is the design of how those taxes are to be collected. This is half of the area of economics called **public finance**, which also studies public goods and how government funds are spent.

Let's think about borrowing, briefly, however, to make a few points about when it is appropriate. First, it is appropriate to borrow to cover unusual costs that happen to arise, when the government has high costs this year and expects to have lower costs in the future. The big example of this is a war. It is better, for reasons we will talk about below, to borrow and spread the cost of a war over many years of taxes to repay it rather than have extremely high taxes during the war. Second, it is appropriate to borrow for long-term projects that will yield benefits to future taxpayers. To encourage present-day taxpayers to authorize long-term projects, it helps to use borrowing instead of current taxes, so the cost, like the benefit, is borne by future taxpayers. Third, a government can get away with a limited amount of borrowing that never needs to be repaid because the economy grows faster than the government debt. If people like holding their savings in the form of such a safe and liquid asset as government bonds, as we will talk about in Chapter 5, then the government should supply that asset.

Taxes, however, are our main subject, and, in particular, the cost of taxes. You might think that the cost of paying in taxes is simple: If your tax bill is $900, that's the cost. But it's not. There is a sense in which the cost of the tax is lower, and a sense in which it is higher.

First of all, the tax is a transfer, not a **real cost** to the economy. You lose the $900 when you pay the tax, but someone else gains. The money doesn't vanish. The government uses it to buy things, and someone benefits from those things.[9] It is not as if a storm damaged your roof and you needed to pay $900 in repairs. That would indeed be a real cost to society, because if the repairman is only earning the same wage he could be earning in another job, the $900 is loss to you and gain to nobody else. A tax is a loss to one person but a gain to others, like the theft that we talked about in Chapter 1. So at a first cut, the $900 tax is no cost at all. It doesn't reduce total surplus; it just transfers it from the taxpayer to whoever benefits from government spending.

On the other hand, just as an act of theft is a pure transfer in itself but creates incentives to take costly measures to avoid the incentives, so taxes create incentive effects. Like theft, taxation is a transfer incentivized not by mutual benefit but by

[9]Well, one hopes someone benefits— we do have to remember government failure. But that's a cost of the spending, not of the tax, except for the transactions costs of the Internal Revenue Service tax collectors and of the taxpayers filling out their tax forms.

the threat of violence. If you don't pay, the government will force you to pay by seizing your property and will immobilize you if you try to stop the seizure. If necessary, it will kill you to get the property. And that is a good thing for surplus maximization. The government has many important uses for tax money. If it backed off whenever someone said, "I won't pay unless you kill me," it wouldn't have the funds for road maintenance and national defense. But people can try to get away from taxes, legally, just as they try to get away from robbery. Buying a gun for self-defense is not much use— the govenment is too strong— but one can buy an accountant and a tax attorney. The government will buy its own accountants and attorneys to counter yours. You might even try to get away from taxes illegally, in which case the government may have the extra cost of feeding you in prison. Tax administration, compliance, and enforcement create huge transaction costs as people try to avoid the transfer of wealth.

The most important cost of taxes, however, is one most people don't think about: taxes, like theft, reduce the incentive to create surplus. If you don't create wealth, the government can't tax it. You can think of someone as buying two goods with his income-producing potential: leisure, and consumption. He can work less and have more leisure, or he can work more and use his earnings to buy consumption. He keeps some of his 24 daily hours for himself, but trades away the rest for money with which to buy goods and services. Having an income tax is like having a tax on consumption but not leisure. The higher the tax, the more people shift from consumption to leisure. By discouraging people from giving up their leisure for paid work, the tax creates a deadweight triangle loss.

Supply and demand analysis shows how this works. Suppose the government imposes a tax on sellers of coal of T dollars per ton— that is, each seller must pay the government T dollars per ton that it sells. Who gains and who loses?

Suppose $T = 3$, and the equation for supply is

$$Q^s = \begin{cases} 0 & \text{if } P < 6 \\ \text{2P-12} & \text{if } P \geq 6 \end{cases} \tag{1}$$

and the equation for demand is

$$Q^d = \begin{cases} 24 - P & \text{if } P \leq 24 \\ 0 & \text{if } P > 24 \end{cases} \tag{2}$$

These equations are different from what you've seen in introductory economics courses and from what I used in the whisky example because they specify what happens at extreme prices too. Here, to make you conscious of the parts of the supply and demand curves that are often overlooked, I've included in the equations the fact that if the price is between 0 and 6, quantity 0 is supplied; and if the price is above

24, quantity 0 is demanded. Usually we take the zero-quantity parts of the supply and demand functions for granted, but I've included them here to remind you that the functions apply to all prices, not just the ones with positive quantities.

We'll use Figure 4.2 for the analysis. You must imagine it being drawn step by step. As we go through each step, look to the diagram to see what is added by that step.

1. Draw the supply and demand curves and find the free market equilibrium price and quantity.

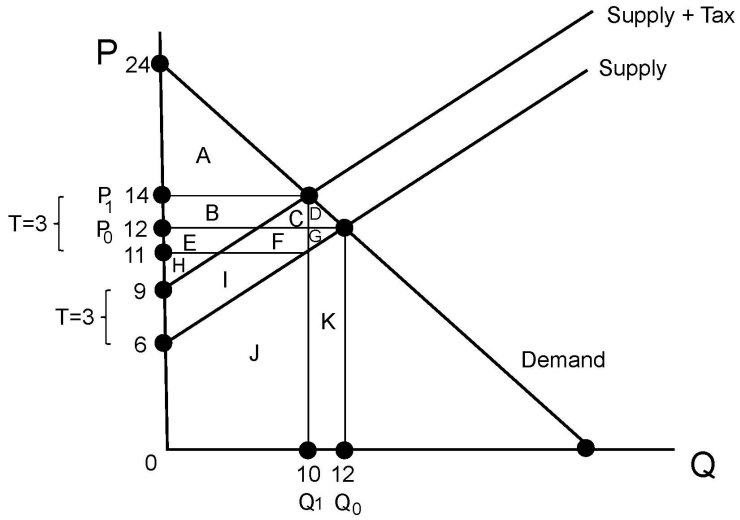
Figure 4.2 draws the supply and demand curves. The supply curve rises along the P-axis from $P = 0$ to $P = 6$ because until the price hits 6, zero coal will be supplied. The demand curve descends along the P-axis from $P = \infty$ to $P = 24$ because until the price drops as far as 24, zero coal will be demanded. The free market equilibrium is where the quantity supplied equals the quantity demanded, points labelled P_0 and Q_0.

To calculate the numbers given for the equilibrium price and quantity in Figure 4.2, equate quantity supplied to quantity demanded:

$$Q^d = 24 - P = Q^s = 2P - 12, \tag{3}$$

which solves to $P = 12$. Using either the supply or the demand curve, we can calculate that $Q = 12$. Thus, $P_0 = 12$ and $Q_0 = 12$.

FIGURE 4.2
A SALES TAX



2. Find the market equilibrium price and quantity after the policy change.

The policy change here is the imposition of the tax of $T = 3$. That will shift the

supply curve up vertically by amount T, since it adds exactly T per unit to a seller's costs. The seller used to receive the full price, P, but now he receives only P-3, so where he used to supply Q = 4 at the price of P = 8, now he needs a price of P=11 to supply that same quantity of 4. There's a difference now between the price that a buyer pays to the seller (P) and the amount that the seller gets to keep (P-3). The new equilibrium price, P_1, and quantity, Q_1, are at the intersection of the old demand curve and the new supply curve.

The equations for the new supply curve are found by replacing the P in the old supply curve with the $P-3$ that the supplier gets to keep for expenses and profit. Also, if the price is less than 9 (the old bottom price of 6, plus 3 to pay for the tax) no supplier is willing to supply anything.

$$Q^s = \begin{cases} 0 & \text{if } P < 9 \\ \text{2(P-3)-12} & \text{if } P \geq 9 \end{cases} \tag{4}$$

Using either of the two cases in the new supply equation, if $P = 9$, the quantity supplied is zero. It's either 0 directly, or $Q^s = 2(9-3)-12) = 0$.

The demand curve hasn't changed. Equating supply to demand yields:

$$Q^d = 24 - P = Q^s = 2(P-3) - 12, \tag{5}$$

so $24 - P = 2P - 18$ and $42 = 3P$. Thus, $P_1 = 14$, and using either the demand or the supply curve for the calculations, $Q_1 = 10$.

The market price has risen because of the tax, but not by the full amount $T = 3$, only by 2. Also, since the price has risen, buyers don't demand as much, so the quantity has fallen from 12 to 10.

3. Cut up the possible surplus area into as many rectangles and triangles as you think will be relevant, labelling them with letters. It's better to make too many than too few.

Since the equilibrium quantity is never greater than Q_0, I've only labelled areas for quantities between 0 and Q_0. We could try computing the area of each rectangle and triangle now, but it's better to wait and figure out which of them will be relevant.

4. Figure out which areas are in producer surplus, consumer surplus, effects on third parties (for example, tax revenue), and total surplus in the free market.

For the free market, there is surplus for quantities in the range between 0 and Q_0. Consumers pay P_0 for each unit, but the demand curve is above the P_0 line, so consumer surplus is A+B+C+D. Producers receive P_0 for each unit, even though some producers would have been willing to accept a lower price if necessary, so they too receive surplus: the area E+F+G between the supply curve and the P_0 line.

CS (laissez faire) = A+B+C+D
PS (laissez faire) = E+F+G +H+I
TS (laissez faire) = A+B+C+D+E+F+G+H+I

Since we have the equations for the curves, we can compute the surplus areas numerically. Consumer surplus is the triangle A+B+C+D. We can save a lot of work by not trying to calculate the value of each letter-labelled triangle and rectangle. Instead, combine the letter-labelled areas into bigger rectangles and triangles. The base of the consumer surplus triangle A+B+C+D is the distance from $Q = 0$ to $Q = 12$, which is 12. The height is the difference between $P = 12$ and the price where $Q^d = 0$, which is 24. Thus, consumer surplus equals .5(12-0)(24-12) = 72.

Producer surplus is the triangle E+F+G+H+I. Its base has length 12. Its height is the difference between $P = 6$ (the price at which $Q^s = 0$) and $P = 12$. Thus, producer surplus equals .5(12)(12-6) = 36.

Total surplus is the sum of producer and consumer surplus, and so equals 108.

5. Figure out which areas are in producer surplus, consumer surplus, effects on third parties (for example, tax revenue), and total surplus in the regulated market.

The consumer surplus is the amount consumers would be willing to pay, still given by the same demand curve, minus the price, now risen to P_1. That is area A.

Producer surplus is more complicated. Producers receive a big rectangle of revenue, $P_1 * Q_1$, which is made up of the little areas B+C+E+F+H+I+J. Area J, below the supply curve, is seller cost, so that isn't part of the surplus and we have to subtract it. The tax $T * Q_1$ also has to be subtracted from revenue to get the producer surplus. It equals the rectangle B+C+E+F. What's left for producer surplus is H+I.

Finally, we need to include the tax revenue as part of total surplus. The producers don't get to keep it, but the government does (or, more accurately, whoever gets the benefit of the government spending). The government's benefit from this market is the tax revenue rectangle B+C+E+F.

CS (sales tax) = A
PS (sales tax) = H+I
Tax revenue (sales tax) = B+C+E+F
TS (sales tax) = A+B+C+E+F+H+I

Consumer surplus is a triangle with base 10 (the new quantity) and height (24-14) (using the new price), so its value is .5(10)(10) = 50.

Producer surplus is a triangle with base 10 (the new quantity). The triangle's height is not the difference between 6 and the price of 14, since the producer doesn't get to keep that entire price. Instead, it is the difference between 6 and the amount

11 that the producer keeps after paying the tax. Thus, the producer surplus triangle's area is (.5)(10)(11-6) = 25.

Tax revenue is the rectangle B+C+E+F. Its area is 30, the tax per unit of 3 times the quantity of 10.

The total surplus is then 50+ 25+30 = 105.

6. See which has the bigger total surplus, the free market or the regulated market.

The free market total surplus is greater by amount 3 (=108-105), which is the deadweight loss triangle D+G, in the diagram. Both producers and consumers lose because of the tax. The government gains, because of the tax revenue, but less than the other players lose.

BOX 4.1: U.S. POLICY ON TRIANGLE LOSSES

" Because taxes generally distort relative prices, they impose a burden in excess of the revenues they raise. Recent studies of the U.S. tax system suggest a range of values for the marginal excess burden, of which a reasonable estimate is 25 cents per dollar of revenue.
a. Analysis of Excess Burdens. The presentation of results for public investments that are not justified on cost-saving grounds should include a supplementary analysis with a 25 percent excess burden. Thus, in such analyses, costs in the form of public expenditures should be multiplied by a factor of 1.25 and net present value recomputed."

We could also compute the area of the deadweight loss triangle D+G directly. The triangle's vertical distance (the base) is 3 (which is 14-11) and its horizontal distance (the height) is the difference between the old quantity and the new, 2 (= 12-10). Thus, the area of D+G is .5(3)(2) = 3, which is the deadweight loss we found in the previous paragraph.

Surplus analysis teaches us two important things about taxes. First, they create inefficiency, by reducing output. This does not mean that all taxes should be eliminated, just that if the government raises tax revenue of 100 million dollars, the cost to people in that market is greater than 100 million dollars, so the government had better have a good way to spend the money. The deadweight loss in the example above was relatively small— a loss of 3 for the 30 in revenue that was raised. Martin Feldstein has estimated the deadweight loss in the United States from taxation at $.30 for each $1.00 raised.[10] Using his estimate, if the government had a project that required 1 million dollars in expenditure and would yield 1.1 million dollars in benefit, the project would reduce social surplus overall. The reason is that the full cost would be 1.25 million dollars, once you included the deadweight loss. On the other hand, if the project would yield 1.4 million dollars in benefits, it would be worthwhile despite the deadweight loss that taxes create.

[10]Feldstein, Martin, "Tax Avoidance and the Deadweight Loss of the Income Tax," *The Review of Economics and Statistics*, 81: 674–680 (November 1999).

This same diagram can be used to estimate the true social cost of a government regulation that raises producer costs by amount T per unit without generating any benefits— say, a coal safety regulation that actually doesn't increase safety. Of course, any policy that just increases costs uselessly is bad, but it is worse than you might think. The loss is not just the increase in producer costs, the rectangle B+C+E+F (or, if you like, the parallelogram C+F+I, which has the same area as B+C+E+F). It also would include the deadweight loss, D+G.

One way to understand this is to think about the extreme case in which the government raises the cost per unit so much that the equilibrium quantity drops to zero, because the price rises above the valuation of the most eager consumer (P = 24 in our demand equation). Someone might say, "Well, this regulation might have imposed a lot of costs on the economy— the cost per unit T times the quantity Q_0. But fortunately, since the quantity has dropped to zero, no producer is having to incur costs to meet the regulation." The fallacy is that this ignores the lost consumer and producer surplus, which in that extreme case would equal the entire surplus from the market.

Professor Mankiw, author of the well-known principles text, makes a good point about the disincentive effect of even inheritance taxes. He works less than he could because he can't leave as much of what he earns to his three children, and he doesn't feel any desire to consume more himself.

> I could go so far as to say I am almost completely sated. One reason is that I don't aspire for much more than a typical upper-middle-class lifestyle. I don't fly around on a private jet. I have little desire to own a yacht or a Ferrari. I own only one home, in which I have lived since 1987. ...
>
> Taxes influence the decisions I make. I am regularly offered opportunities to earn extra money. It could be by talking to a business group, consulting on a legal case, giving a guest lecture, teaching summer school or writing an article. I turn down most but accept a few.
>
> Suppose that some editor offered me $1,000 to write an article. If there were no taxes of any kind, this $1,000 of income would translate into $1,000 in extra saving. If I invested it in the stock of a company that earned, say, 8 percent a year on its capital, then 30 years from now, when I pass on, my children would inherit about $10,000. That is simply the miracle of compounding.
>
> First, assuming that the Bush tax cuts expire, I would pay 39.6 percent in federal income taxes on that extra income. Beyond that, the phaseout of deductions adds 1.2 percentage points to my effective marginal tax rate. I also pay Medicare tax, which the recent health care bill is raising to 3.8 percent, starting in 2013. And in Massachusetts, I pay 5.3 percent in state income taxes, part of which I get back as a federal deduction. Putting all those taxes together, that $1,000 of pretax income becomes only $523 of saving.
>
> And that saving no longer earns 8 percent. First, the corporation in which I have invested pays a 35 percent corporate tax on its earnings. So I get only 5.2 percent in dividends and capital gains. Then, on that income, I pay taxes at the federal and state level. As a result, I earn about 4 percent after taxes, and the $523 in saving grows to $1,700 after 30 years.
>
> Then, when my children inherit the money, the estate tax will kick in. The marginal estate tax rate is scheduled to go as high as 55 percent next year, but Congress may reduce it a bit. Most likely, when that $1,700 enters my estate, my kids will get, at most, $1,000 of it.[11]

[11] N. Gregory Mankiw, "I Can Afford Higher Taxes. But They'll Make Me Work Less," *The New York*

That's a 90% tax rate on the extra $1,000, since without taxes it would grow to $10,000 Professor Mankiw could leave his children. Moreover, at this high a rate, even a small increase heavily reduces the amount left to the taxpayer. Increasing from a 10% rate to 11% reduces the amount the taxpayer keeps by 1%($\approx \frac{.90-.89}{.90}$. Increasing from a 90% rate to 91% reduces the amount the taxpayer keeps by 10%($= \frac{.10-.09}{.10}$. Professors Gruber and Saez found that the elasticity of taxable income with respect to changes in marginal tax rates was 0.4 overall: 0.18 for those earning between $10,000 and $50,000, .11 for those between $50,000 and $100,000, and .57 for those over $100,000.[12]

I said there were two important things to learn about taxes. The first was that taxes create inefficiency. The second is that the burden of a tax is shared between producers and consumers, even if it is the producers who have to give the tax money to the government. Producers do lose— producer surplus fell by E+F+G— but so do consumers— their surplus fell by B+C+D. In fact, consumers lost 22 (which is 72 - 50) more than the 11 the producers lost (=36-25). The reason is that producers pass along part of the tax to consumers in the form of a higher price. This reduces the loss in producer surplus, but increases the loss in consumer surplus. To figure out who is being hurt most by a tax— a very important business and political question— one must do the surplus analysis, not just look at whether the sales tax is paid by sellers or by buyers.

4.5: How to Think about Government

A government is not one godlike person, who makes decisions for the public good. It is a group of normal people, motivated both by duty and by personal objectives.

On the other hand, a government is not a gang of devils. It is a team of people, given a monopoly on the use of force, but subject to a multitude of constraints such as the Constitution, elections, and civil service rules. Once you understand that in your bones, you will both be more suspicious of politicians and bureaucrats, and more sympathetic to them. They are no better and no worse than you, just subject to different

Times, (October 9, 2010). I would cut the effect of the corporate income tax in half, since it has the effect of raising prices and corporate pre-tax profits. Sales tax should be included too, though it would have only a small effect.

[12] "The Elasticity of Taxable Income: Evidence and Implications," Jonathan Gruber, & Emmanuel Saez, *Journal of Public Economics*, 84: 1–32 (2002). See also the survey, "The Elasticity of Taxable Income with Respect to Marginal Tax Rates: A Critical Review," Emmanuel Saez, Joel Slemrod, & Seth H. Giertz, *The Journal of Economic Literature*, 50: 3–50 (March 2012).

incentives.

Review Questions

1. What are the career incentives of people in the executive, legislative, and judicial branches?
2. What are the goals of administrative law?
3. How can a company affect the making of government regulations?
4. Why is the social cost of a dollar of government spending more than a dollar?
5. How can you calculate the cost of a tax?

Readings

1. "Supreme Court Strikes Down Texas Abortion Clinic Regulations," *The Chicago Tribune*.
2. "EPA Wants New Rules to Rely Solely on Public Data; Agency Says Proposal Means Transparency; Scientists See Public-Health Risk," *The Wall Street Journal Online*.
3. "Frustrated State Department Employees Hire Attorneys, Charging 'Political Retribution'," *CNN* (2018).
4. "Justice Alito Oddly Unimpressed with EPA Procedures," *Hot Air*, Ed Morrissey.
5. " 'Showstoppers: Nine Reasons Why We Never Sent Our Special Operations Forces after al Qaeda before 9/11," *The Weekly Standard* .