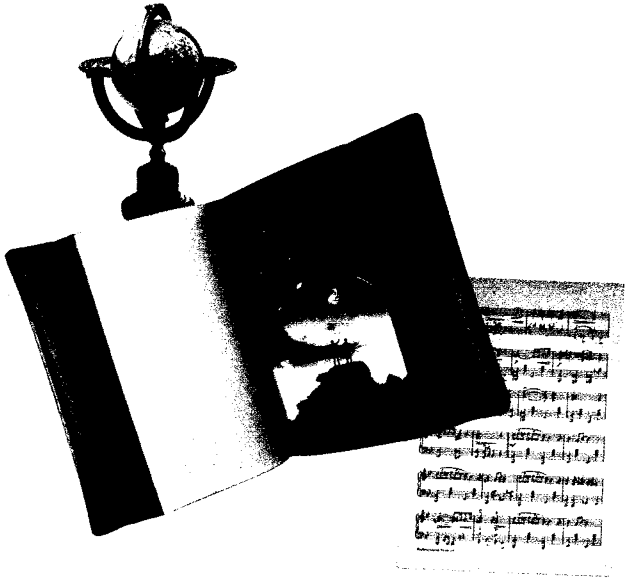
COURSE GUIDEBOOK



Contemporary Economic Issues

Part I

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Contemporary Economic Issues, Part I
Professor Timothy Taylor

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Macalester College

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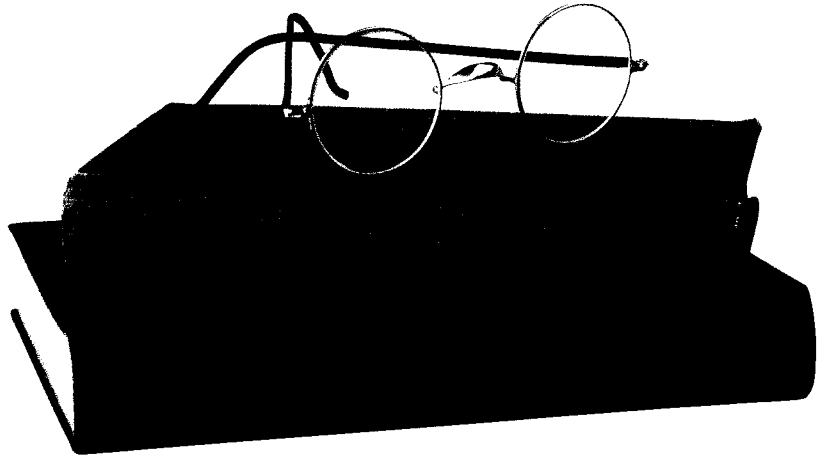

Timothy Taylor

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Timothy Taylor is managing editor of the *Journal of Economic Perspectives*, an academic journal published quarterly by the American Economic Association. The purpose of the journal is to encourage communication and cross-fertilization across the many fields of economics.

Taylor received his Bachelor of Arts degree from Haverford College in 1982, and a Master's degree in Economics from Stanford University in 1984. He then worked as an editorial writer for the *San Jose Mercury News* for two years, before taking the job of starting the *Journal of Economic Perspectives* in 1986.

He has taught introductory economics in a number of contexts. At Stanford University and the University of Minnesota, he taught large lecture courses of 300-500 students. At Stanford, he was winner of the award for excellent teaching in a large class given by the Associated Students of Stanford University in 1992. Since moving to the University of Minnesota in 1994, he has been named a Distinguished Lecturer by the Department of Economics in 1996, and voted Teacher of the Year by the Master's degree students at the Hubert H. Humphrey Institute of Public Affairs in 1997. He has also been a guest speaker for groups of teachers of high school economics, visiting diplomats from Eastern Europe, radio talk shows, and community groups. From 1989 to 1997, Tim wrote an economics opinion column for the *San Jose Mercury News*; many of his columns were disseminated nationally over the Knight-Ridder-Tribune wire. He has recorded several courses for The Teaching Company: *Economics: An Introduction*, *Legacies of Great Economists*, and *A History of the U.S. Economy in the 20th Century*.

Timothy and his wife Kimberley live with their son Nathaniel near Lake Harriet in the southwest corner of Minneapolis.

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Part I

Contemporary Economic Issues

A Few Words of Welcome:

In many public policy issues, there is a gap between the goals desired by a majority of people and the level of expertise about how to reach those goals. Even when most people favor the goal of peace between nations, there are disagreements over when to negotiate, when to sign treaties, and when to fight. Even when people favor the goal of a cleaner environment, most of us do not have the detailed knowledge of what health risks are posed by parts per billion of a certain pollutant in the water or air, nor of what technological options industry has to reduce pollution. In economic issues, even when people support the goals of well-paid jobs for all and a rising standard of living, most people do not have enough sense of how the economy works to have well-developed opinions on contemporary economic issues.

It's a modern fashion to distrust experts in all areas. Indeed, it's always important to remember that experts don't always know best. Experts are only human. They may be focusing on one part of the picture, and missing another part. They may have their own political biases. They may misread the data or believe in the wrong theory. But experts, at least when they are speaking in their own area of particular expertise, do have at least two substantial advantages. One is a greater knowledge base about the facts; in particular, what has actually happened in the past. The second advantage is having spent a lot of time thinking through the sorts of links and interconnections that are likely to occur, and developing an organized framework for considering the consequences of actions.

Economists, like other experts, have no monopoly on truth. In fact, the entire subject of economics is more useful in categorizing and thinking through benefits and tradeoffs, rather than providing definitive answers. But when it comes to talking about contemporary economic issues, economists do have useful expert perspectives to offer. The lectures that follow are divided into six major sections, focusing on "The Forces of Competition," "America's Workers," "Investing in America's Future," "Budget and Monetary Policies," Trade and Exchange Rate Policy," and "A Tour of the Global Economy." The reason for learning how economists view these issues is not so that you can simply agree with them, since as you will see, none of the lectures offer definitive policy options, but rather that you can more intelligently take their expert perspectives into account when forming your own judgments on public policy.

Learning Objectives:

Upon completion of these lectures, you should be able to:

1. *Discuss* how society has attempted to direct the forces of market competition in a variety of industries in ways that will benefit society as a whole, including deregulation of prices and production, but regulation for health, safety, and a clean environment.

2. *Identify* and *analyze* the economic dimensions of key issues facing American workers, including pay, work conditions, unions, immigration, inequality and welfare.
3. *Examine* the policies which might help the U.S. economic growth keep America's standard of living the highest in the world, including policies to increase saving and investment, improve education, build infrastructure, and spur research and development.
4. *Sketch* an overall picture of central economic issues confronting the U.S. federal budget, from both the spending and tax side.
5. *Summarize* the arguments over how, and how aggressively, the Federal Reserve should fight inflation.
6. *Outline* the essential tension that free trade and sustainable exchange rates may require an active government presence, but that same government presence may lead to less free trade and unsustainable exchange rates.
7. *Discuss* the issues and challenges facing many different parts of the global economy: Europe, Russia and eastern Europe, Japan, east Asia, China, India, Latin America, and Africa.
8. *Develop* a sense of mainstream economic insights and an ability to explain them to others.

Supporting Material for the Lectures:

Each lecture is first introduced in this booklet with a few paragraphs of orientation. A complete outline for the lecture is then provided. This is followed by a list of readings, which are divided into "Essential" and "Supplementary." Readings in the first category should be easily accessible and directly relevant, while those in the second category offer greater challenges, and potentially, greater rewards. Finally, there are several questions for further discussion.

I offer a half-hearted apology for the fact that it will require some digging in a library, or some surfing of the Internet, to find some of these readings. I don't mean to put anyone to unnecessary trouble. But many of the easy-to-find popular books or articles in weekly magazines are not very good for the purpose of learning economics. They make fundamental errors in economic theory. They leave out crucial parts of the explanation. They often have an overwhelming political bias in one direction or another. To avoid these problems, I have tried to choose articles that are written by professional economists where possible.

However, most of the writing by professional economists is in academic journals that make no concessions for the novice reader. In fact, such journals are so laden with jargon and mathematics that they are unreadable by those getting started in the field. (If you'd like to sightsee a leading technical journal for professional economists, you might begin by hunting up a copy of the *American Economic Review*, the *Quarterly Journal of Economics*, or *Econometrica*.) In short, finding articles that offer a lucid verbal explanation with a reliably economic point of view isn't easy, which is why I have turned to some sources that may be relatively obscure to the first-time student of economics.

Other Reading and Resources:

Beyond the suggested articles, those who are interested enough in learning about economics to pursue these lectures may wonder where else to turn for basic explanations of economics. Here, let me offer some additional guidance.

To toot my own horn—and that of the Teaching Company—for just a moment, I should note that I have recorded several other courses in economics for the Teaching Company. One course, simply called *Economics: An Introduction*, is an introduction to the insights and terminology economics as a discipline. It is essentially a boiled-down, non-technical version of an introductory college course in microeconomics and macroeconomics. A second course, *A History of the U.S. Economy in the 20th Century*, spends one lecture on each decade of the 20th century, identifying key trends and issues, and remarking on how our perspectives on many of these issues have changed with time. A third course, *Legacies of Great Economists*, offers an introduction to the ideas of Adam Smith, Karl Marx, John Maynard Keynes, Milton Friedman, and others.

As far as coverage of economic events in current publications, one magazine stands head and shoulders above all others for its coverage of economic issues: *The Economist*. Nothing else comes close. If these lectures equip you to be a sensible reader of *The Economist*, I view them as a great success. Of course, reading the news coverage in your daily newspaper or in national newspapers like the *New York Times* and *Wall Street Journal* is also helpful. However, in both cases I recommend sticking to the news coverage, rather than the editorial and opinion pages, for learning about what's happening in the economy with a minimum of personal bias and distraction. If you prefer to absorb your economics with some political bias, the editorial page of the *WSJ* tends to conservatism, while that of the *NYT* tends to liberalism.

Those who are interested in working through an introductory economics textbook have literally dozens of good choices. However, the reader should be warned that while textbooks will discuss a number of economic issues in passing, their main function is to help build the analytic apparatus that will be needed by a college student majoring in economics. This means lots of graphs, arithmetic, lots of definitions, more explicit discussion of different models and assumptions, and a fairly dry style. However, if you feel moved to go this route, let me suggest four possible books here. Two old warhorses are the introductory books by Paul A. Samuelson and by Campbell R. McConnell. Both are simply titled *Economics*. Both of the original authors are old enough that they have taken on co-authors in recent years. The most recent edition of *Economics* by Samuelson and William D. Nordhaus on my bookshelf is the 16th, published in 1998. The most recent edition of McConnell and Stanley L. Brue is the 13th, published in 1997. New editions of these books come out every three years. If you're looking for a book that was conceived more recently, two come to mind. *Economics:*

Principles and Policy is by William Baumol and Alan Blinder. It's a widely used and well-written book by two economists who are both highly respected for their research and for their expository skills. The 7th edition of this book came out in 1997. The other book is *Economics*, by Joseph Stiglitz. I must confess a personal connection here: Stiglitz was for some years my boss in my job as the managing editor of the *Journal of Economic Perspectives*, and I played a role in helping to write and edit the first edition of this book. The second edition of the Stiglitz book was published in 1997.

Lecture One

Economizing, the Economy, Economics, and Economic Policy

Scope: This introductory lecture sets the stage for the lectures that follow. It gives a sense of what economists mean by economics and economizing—which is not always the same as what is meant by those terms in general discussion. Economics is not best thought of as a subject that answers all questions about the human spirit; instead, it focuses on a particular set of decisions concerning buying and selling, working and hiring, and investing. The fundamental motivating assumptions are that people do what makes them happy (which does NOT mean that everyone or anyone puts money first in their lives) and that businesses seek to make money. The goal of economics is to understand people as they are—self-interest and all—not as one might like them to be. Economics recognizes that markets are powerful forces, but also recognizes that the power of markets is inevitably channeled, for better or worse, by laws and social institutions.

The lectures that follow are explorations of six main areas. The first set of lectures looks at issues that arise in regulation of markets, including issues of antitrust law, deregulation of industry, and laws concerning environmental protection and regulation. The second set of lectures looks at issues in the labor market: unemployment, the quality of jobs, inequality of wages, unions, discrimination, immigration, and welfare reform. The third set of lectures focuses on investing in America's future: it considers the growth of national economies, savings, business investment, education, infrastructure, research and development, the stock market, and supply-side economics. The fourth set of lectures examines the federal budgetary issues and how the Federal Reserve conducts monetary policy. The fifth set of lectures focuses on general issues of trade and exchange rate policy. The sixth set of lectures then tours the economies of the world—Europe, Japan, Russia, China, east Asia, Latin America, India, Africa—and offers an overview of how these economies are shaping up to face the 21st century. A final concluding lecture focuses on what economists (and society) know and don't know about economic policy.

Outline

I. Economics as both subject and approach
The subject of economics involves both a subject area, which we refer to as the economy, and a methodology involving certain assumptions about how to approach that subject area, which we can refer to in shorthand as economizing behavior. Economics is not founded upon political belief.

A. Economy as the subject material
Economists believe that the subject material of economics—decisions at the individual, social and government level about consumption, work, and investing in the future—is important stuff. They believe that even though economic issues themselves are often not of supreme importance, such issues are often related to matters of supreme importance.

1. The "ordinary business of life"
The subject material of economics focuses on the ordinary business of live: buying and selling, working and hiring, investing in the future. These issues can be considered at the individual level, or at the level of local, regional, national, and international policy.

2. Economics isn't about all of us, but a part of us.
No academic subject captures all of the human condition, and (most!) economists wouldn't claim that economics accomplishes that impossible goal, either. But economic issues can't be dismissed as merely matters of money or business, either. In one way or another, most human problems, even the most intimate and spiritual, have an important economic dimension to them. Therefore, a basic knowledge of economics is important to understanding life.

B. Economizing as the approach

1. Reacting to scarcity
The fundamental economic problem is that we can't all have everything we want. We live in a world of scarce time and scarce resources. We need to make choices—even if we sometimes make those choices by default—which means that we face tradeoffs. The interaction of many people in dealing with these tradeoffs is what creates the economy.

2. Seeking one's own happiness or "maximizing your utility"
The idea that people seek their own happiness is a central methodological assumption in economics. But it's vital to remember that happiness can be defined differently by each person. People may seek happiness in a life of art or music, or in having the largest possible house and car, or in spending as much time with family as possible. Earning money is only one of many possible goals. Is this selfishness? In an economic sense, yes.

3. The profit-seeking business
Businesses are assumed in economic models to attempt to make profits. In part, this is an assumption of necessity: a business that consistently makes losses will go bankrupt, so making some level of profit is a precondition for continuing to exist. Profits are a social mechanism to punish and reward in the market, a measure that people are or are not willing to pay for a given product or service.

C. Approaching economics and economizing etymologically

1. The derivation of "economy"
The word "economy" is drawn from Greek roots, from the words for one who manages a household. This relates to Alfred Marshall's concept of economy as dealing with the ordinary business of life.

2. The derivation of "economizing"
There is a similarity of sound between "economizing" and "miser," that leads some people to think that an economizer is someone who hoards money. The history of the words is quite different. When the word was used in the 1600s, an economizer was someone who made wise use of resources, in descent from the Greek usage. The word "miser" comes from the same Latin roots as the word "misery." It seems to be in the 1800s that the two words start mixing, and "economizers" are portrayed as misers; e.g., we need only think of Dickens's character, Ebenezer Scrooge, to see the archetypal miser. Bob Cratchit is an "economizer," who makes the most of what he has.

II. Slicing up the subject
Any subject can be divided up in various ways, with the divisions casting some light on the patterns within the subject. Several different divisions are described here, concluding with the scheme used for organizing the lectures that follow.

A. Microeconomics and macroeconomics
Microeconomics is the bottom-up way of viewing the economy. It looks at the decisions of individual consumers, workers, savers, and businesses and how they relate in markets. Typical microeconomic policy issues might include welfare reform, how much to tax cigarettes (or some other good), how to encourage businesses to reduce pollution and increase research and development spending, and so on. Macroeconomics is the top-down way of looking at the economy. It focuses on issues of growth, unemployment, inflation, and foreign trade. Typical macroeconomic policy issues involve questions of the federal spending and taxes, how the Federal Reserve should conduct monetary policy, and trade agreements with other countries.

B. Interactions in markets
A second way of dividing up the field of economics is to look at three sorts of markets: those for goods, labor and capital. At the micro level,

these translate into thinking about buying and selling, hiring and working, and how people save or borrow and businesses invest. At the macro level, these markets get into issues of standard of living, inflation, unemployment, and growth. Markets are the stage on which economizing businesses and individuals interact. Self-interested people interact with profit-seeking firms, but all face the constraint that they must compete with others.

C. Positive and normative economics
Economists try to view the world as it is, and to draw a separation between the way things are and the way one might like them to be. Normative economics focuses on what social goals are appropriate to set. Positive economics focuses on how things are; that is, the business of setting out facts and drawing the possible logical conclusions, and the least-cost ways of reaching the predetermined (normative) goals. The distinction isn't ironclad, of course, but it is helpful nonetheless.

D. An overview of what follows
The lectures that follow are divided into six main areas, which slice across the divisions already discussed: 1) regulation of markets; 2) labor market issues; 3) investing in America's future; 4) the federal budget and the Federal Reserve; 5) trade and exchange rate policy; and 6) a tour of the economies of the world.

III. A preemptive strike against critics of the economic approach
The assumptions and approach of economics may seem dry, inhumane or unsatisfying in some way. But the alternatives to economic assumptions aren't all heroic, either. If you start assuming that people don't seek their own best interests, you are only a small step away from denying that freedom is a good thing, since why not have others define people's interests for them? Two opposing views are offered by Thomas Carlyle and John Stuart Mill. If you start assuming that businesses don't need to make a profit, you are only a step away from assuming that someone will provide capital to cover losses, and you are only a step away from advocating heavy government intervention in economic decisions. Sure, the basic assumptions of economics are an oversimplification. But they are a better oversimplification, at least practically and perhaps even morally, than many of the easy alternatives.

Essential Reading:

Those interested in contemporary economic policy need a place to turn for facts. Let recommend a few sources for general background and basic information about the economy. All three should be readily available in any college or university library, and in many local libraries, as well.

One indispensable resource is the *Economic Report of the President*. This report is published annually (usually in January or February) by the Council of Economic Advisers, which is a group of three economists who are chosen by the president as advisers. The *Economic Report* usually consists of six or seven chapters that provide a broad overview of the economy. Since it is written by administration economists, it usually has a bit of a political slant. But since the members of the CEA are also professionals who will someday return to academia and need to face their colleagues, the politics are generally muted. At the back of the book, there are over 100 pages of basic economic statistics, many going back to the 1950s.

A second useful source is the *Statistical Abstract of the United States*, which is also published annually. The *Statistical Abstract* offers figures about economics and everything else. It also provides, at the bottom of each table, a reference to the official government report where the complete picture is provided. Thus, it is both an indispensable reference work and a handy index.

For global statistics, I usually recommend the *World Development Report* published once a year by the World Bank. Like the *Economic Report of the President*, this begins with an overall discussion of the world economy. Then, it follows up with a discussion of that year's theme (something like health, infrastructure, the environment, work conditions, and so forth). The back of the volume offers several dozen tables of economic, demographic, and environmental statistics comparing most of the countries of the world.

Supplementary Reading:

Those who have access to the Internet may be interested in looking things up there. Let me suggest three sites for starting out. A good starting place for government statistics, especially on macroeconomics, is the "Economic Statistics Briefing Room" run by the White House at <http://www.whitehouse.gov/fsbr/esbr.html>. A good source which gathers together lots of general interest economics articles from many sources, as well as offering new articles and discussion of its own, is at <http://economics.miningco.com>. Finally, if you're interested in a Website of jokes about economists, some of them a little heavy on jargon but a number of them quite accessible to outsiders, try <http://netec.wustl.edu/JokEc.html>.

Persky, Joseph, "Retrospectives: A Dismal Romantic," *Journal of Economic Perspectives*, Fall 1990, 4:4, 165-172. This article provides an accessible introduction to the "dismal science" quotation from the racist essay by Thomas Carlyle and the argument against it at the time from John Stuart Mill.

Questions to Consider:

1. Do the basic postulates of economics—self-interested behavior, profit-maximizing firms—seem believable or plausible to you as a starting point for analysis? What are these starting points leaving out that seems important to you?
2. In economic policy, do you believe that it is at least sometimes possible to separate positive and normative elements of the discussion? Or are all discussions irretrievably normative?

Lecture Two

America's Competition Policy: Antitrust and Mergers

Scope: When two companies propose to merger, or one company proposes to acquire another, there are two possible reasons why the new firm might benefit. Either the new combination will have in some way have lower costs, and thus be able to make more money by being a tougher competitor and selling at lower prices, or the new combination is hoping to benefit from less competition and being able to sell at higher prices. Antitrust law seeks to discourage the anti-competitive outcomes and to encourage the more efficient ones. The trick is telling the difference.

The U.S. economy has experienced three waves of mergers in recent years. The conglomerate mergers of the 1960s involved firms with many very disparate lines of business merging together. Many of these combinations of firms were then undone by the merger wave of the 1980s, which typically involved issuing debt to raise money to buy a firm, then selling off parts of the firm to pay off the debt. The merger wave of the 1990s has been primarily sectoral, focused in industries like telecommunications, health care, banking and defense, all of which are going through extensive economic and/or regulatory changes.

Thinking about the proper role of antitrust has evolved over time, too. In the 1970s and 1980s, there was a substantial shift in antitrust thinking, away from the idea that combinations of firms were usually anti-competitive and toward the idea that regulators could stand back, except in extreme cases, and let the market work. However, antitrust regulators in the 1990s have been somewhat more aggressive in claiming that certain mergers or practices are anti-competitive, and attempting to block them.

Outline

I. The essence of antitrust

A. External markets vs. internal organizations
Much economic activity happens in market exchanges where a buyer and a seller meet, and move on. But much also happens inside organizations called firms. Apparently, there are some occasions when it is more efficient to produce using an organization than it would be to try to set up a market fresh every day. The idea of antitrust law is to encourage markets where they are efficient, but to allow large organizations where *they* are efficient.

B. Implications for antitrust policy

1. Who runs antitrust policy?
Antitrust policy is the government policy for assuring that markets are competitive. This means trying to identify and stop corporate practices which have the effect of shutting out competition. For this reason, all large proposed mergers must be reviewed by the U.S. Department of Justice and the Federal Trade Commission, and approved before the merger is consummated.

2. Lower costs or less competition?
If the merger is happening primarily because combining the two organizations will result in lower costs, and thus a better deal for consumers and a more efficient economy, then it should be allowed. However, if the merger is happening primarily because it will mean less competition and a chance for firms to raise prices to consumers, then it shouldn't be allowed.

3. Government enforcement options
For an existing firm, the government regulators have the power to ban anti-competitive practices, or even to break up the firm. For a proposed merger, the regulators can allow it, disallow it, or allow it with certain conditions—like a requirement that the newly merged firm sell off some of its parts. Of course, any decisions can be challenged in court by the firm involved.

II. The law and economics revolution

A. The antitrust legacy of the early 1960s

1. Fear and block mergers
In the early 1960s, government restrictions on mergers were very tough, blocking even mergers where the newly created firm would have had quite small market shares—less than 10% of the market in several cases. Brown Shoe Co. vs. U.S. and U.S. vs. Vaughn's Grocery are cases in point.

2. Attack "the biggies": the Xerox, AT&T and IBM cases
The antitrust authorities of the time often went after big companies. Xerox was forced to license the patents for the photocopy machine to all other firms. AT&T was broken up. IBM eventually fought off the government, after 13 years of lawsuits. Ironically, IBM has struggled ever since, while Xerox and the offspring of AT&T are healthy firms in the 1990s.

B. An evolution in the 1970s to a stronger belief in economic forces came out of academic free market economists at the University of Chicago.

1. Worry about ability to raise prices, not absolute size
The size of the merged firm shouldn't be the main concern. Instead, what matters is whether the new merged firm has the ability to raise prices. If enough competition remains in the market, then let the merger happen.

2. Remember that markets erode monopolies
If a merger reduces competition for a time, and the firm raises prices, then this will encourage competitors to enter the market, and they will chip away at the larger firm. Thus, this argument holds that the ability to raise price is transient, and government can rely on that when it lets mergers happen.

C. The global economy and expanding the playing field
As international trade has become more important in the U.S. economy in the last few decades, it has often been pointed out that many U.S. firms aren't just competing with each other, but with foreign firms, too. Perhaps if two U.S. firms had no foreign competition, they shouldn't be allowed to merge; but if they do have competition from foreign firms, then perhaps that competition is sufficient to allow a merger.

III. Three recent waves of mergers and acquisitions

A. The conglomerate mergers of the late 1960s and 1970s

1. The conglomerate-pull explanation
One theory behind the conglomerate mergers was that they would reduce costs. It was argued that the top professional managers at the conglomerates would be better at managing almost any business. It was also argued that it made sense for a conglomerate to funnel money from those divisions with high profits but little growth prospect to those with lower profits but more growth potential.

2. The antitrust push explanation
The antitrust regulators of the 1960s hated mergers between firms that produced the same thing—so-called "horizontal" mergers. But they didn't much worry about mergers between firms that produced completely different things, like the conglomerates. So perhaps the conglomerate mergers were just the only way that managers of money-making firms could turn if they wanted to reinvest large chunks of capital in their own companies. Or, maybe it was just "empire-building."

3. Taking the test of time, and failing
In economic terms, the conglomerate mergers of the 1960s didn't work out all that well by a simple test: most (at least 60%) of the unrelated acquisitions were later sold off.

4. The "core competency" buzzword
In business in the 1990s, there is a lot of talk about how firms should identify their "core competency" and stick to it. That belief that firms can't do everything, and should stick to what they do well, is a legacy of the failed conglomerate mergers of the 1960s.

B. The finance-driven mergers of the 1980s

1. The changed antitrust enforcement climate

By the 1980s, the new Chicago-style antitrust thinking had come into vogue, and regulators were far more permissive. Moreover, since horizontal mergers between firms in the same line of business had been so fiercely blocked in previous decades, there was a lot of interest in trying them.

2. Financial innovation, leverage, and junk bonds
Many deals of the 1980s seemed driven by finance. Debt has a tax advantage for a firm: the interest paid on the debt is deductible from taxes. So if a firm issues lots of debt, like junk bonds, and uses the money to buy stock, it can reduce its tax burden. Many buyouts of the 1980s worked with this combination of borrowed money—or "leverage," as the finance people call it—and corporate reorganization. Sometimes, firms did this to themselves; their leveraged buyouts (LBOs) were from the outside.

3. A mixed record for shareholders
The typical pattern of the deals of the 1980s seemed to be that the stock of the acquiring firm didn't change much in value, but the stock of the acquired firm usually rose substantially. So by the measure of the stock market, these deals created value for shareholders.

4. Defusing the worst accusations
The mergers of the 1980s did not usually result in significantly lower R&D spending or lower investment, or lower wages. They did often result in job losses as the firms were restructured. But the driving forces seemed to be the desire to restructure firms and to take advantage of the tax breaks of issuing more debt.

C. The sectoral mergers of the 1990s
The most recent wave of mergers took off in about 1993 and continued growing into the late 1990s. These mergers occur disproportionately in four sectors: telecommunications, health care, financial services (i.e., banking), and defense and technology. These are all industries in which technology or the government's role has been changing dramatically, and so the mergers can be understood as part of an industry restructuring.

IV. Recent perspectives on antitrust in the 1990s

A. The Clinton record on antitrust: big words, nuanced actions
The Clinton administration took office railing against the "greed" of the mergers of the 1980s, but has ended up presiding over an even larger wave of mergers. Of course, the Clintonites would argue that *their* mergers are different and economically useful, and that they have indeed made antitrust enforcement tougher in some ways.

B. Rethinking the Chicago antitrust philosophy: From belief in markets to government activism

1. Worry about higher prices, not size: The Staples-Office Depot case
Two office supply stores, Staples and Office Depot, proposed to merge. Even combined, their share of the overall market in office supplies would have been only about 6%. But using evidence on prices of individual products at individual stores from automatic checkout scanners, antitrust regulators found that prices at Staples were lower in towns where there was an Office Depot. So even though the combined firm would have been small, the regulators worried about higher prices, not size—and blocked it.

2. What if monopolies are fighting not to be eroded by markets: the case of Microsoft
The government has argued that Microsoft is using its monopoly position to perpetuate itself, and must avoid anti-competitive business practices. Microsoft has responded that its practices are not anti-competitive, but the essence of competition. At least in the early going, however, the antitrust authorities are not proposing breaking up Microsoft (like AT&T) or forcing it to license its software to anyone (like Xerox). In that sense, the suit is a relatively limited one.

C. Rules of law or bureaucratic discretion?
A proposed corporate merger or acquisition is often a big business deal, with a lot at stake. It's useful, even essential, for executives to have some idea how the government antitrust regulators are likely to react to a proposed merger before they announce it. Under the new rules, there appears to be a higher degree of uncertainty. Who knows whether an in-depth examination of evidence from cash registers of several firms will tend to show that a merger will raise prices? Who knows whether a certain business practice, like adding a feature, will be deemed uncompetitive?

Essential Reading:

Council of Economic Advisers, "Recent Initiatives in Antitrust Enforcement." Appears as Ch. 6 in *Economic Report of the President*. Washington, D.C.: Government Printing Office, February 1988, pp. 195-214. This useful and well-written chapter lays out the basic structure of antitrust law and what the antitrust regulators are worrying about, using lots of recent cases as illustrations. (However, the case against Microsoft wasn't announced until several months after this report was published, and so there is little mention of it.) The basic focus is on how the regulators can try to decide in which situations a merger is likely to lead to higher prices, and in which cases it will lead to lower costs. Available on the web at <http://www.gpo.ucop.edu/catalog/erp98.html>.

Two articles from the *Economist*. "Microsoft Accused: Play nicely, or not at all," May 23, 1998, pp. 21-23. "The Economics of Antitrust," May 2, 1998, pp. 62-64. As you will note throughout these lectures, readings from the *Economist* show up over and over again. It's the best newsmagazine for covering economics events; nothing else comes close. Here, the first article lays out the government antitrust case against Microsoft. The second article discusses wider trends in antitrust enforcement in the 1990s.

Supplementary Reading:

Stewart, James, "Whales and Sharks," *New Yorker*, February 13, 1993, pp. 37-43. Two of the biggest antitrust cases of recent decades were the government cases to break up IBM and AT&T. The government decided to drop the case against IBM, after 13 long years of litigation. But the case against AT&T resulted in breaking up the company. This article points out that just a decade later, the companies created when AT&T had "lost" its antitrust case were booming, along with the entire telecommunications industry, while IBM, which has "won" its antitrust case, was staggering. Perhaps it would have been better for shareholders of IBM and for competition in the computer industry if the government had succeeded in breaking it up? It's an interesting question.

Oesterle, Dale Arthur, "Method to the Merger Madness: Revisiting the '80s Takeover Boom," *Regulation*, Spring 1997, 20:2, pp. 27-33. This article focuses on looking back at the evidence about the 1980s takeover boom. The author argues that many of the arguments against the takeovers were factually mistaken: on average, they did create value for shareholders of the two firms involved; on average, they did not lead to lower wage or reduced R&D spending. The author refers directly to a lot of the academic research done on the subject, telling you who did it and where it was published, so you can separate the author's own feelings from the facts as they have emerged from the research. Also available on the web at <http://www.cato.org/pubs/regulation/regultn-arch.html>.

The Federal Trade Commission is the government body that reviews proposed mergers and acquisitions for anti-competitive implications, along with the Department of Justice. The FTC Website at <http://www.ftc.gov> has lots of good background on recent cases in the news, giving details on the government position. For a quick general overview of the economics of antitrust, a good place to look on this site is for "Promoting Competition: Protecting Consumers: A Plain English Guide to Antitrust Laws," which is at <http://www.ftc.gov/bc/compguide/index.htm>.

Questions to Consider:

1. How would you say that the philosophy of government antitrust regulators has evolved from the 1960s to the 1990s?
2. When is a merger a success, and when should it be judged a failure. How can you tell?
3. Do you believe that the antitrust authorities should break up Microsoft? Explain your answer.

Lecture Three

The Great Deregulation Experiment: Airlines and More

Scope: In the late 1970s and early 1980s, the government deregulated a number of industries, including airlines, trucking, railroads, long-distance phone service, banking, and more. This meant that the government no longer controlled (to the same extent) the prices charged, or which firms could compete, or which services could be offered in these industries. We now have a couple of decades of experience with deregulation, and can see how it worked out.

Deregulation in a variety of industries seems to have brought with it lower prices and greater efficiency. In the airline industry, fares (adjusted for inflation) have dropped one-third on average since deregulation. The lesson seems to be that regulators often don't hold prices down; instead, they are eventually "captured" by industry interests and lobbying, and they end up doing more to protect firms from competition than to help consumers.

A number of concerns have been raised about deregulation, some of which apply more to certain industries than to others. In the airline industry, the concerns include whether lower consumer prices have been purchased by lower safety standards, or lower quality service, or by lower wages paid to workers. These concerns raise some legitimate issues, but ultimately, none of them is a very strong argument for returning to regulation.

Outline

I. Sketching the great deregulation experiment

A. A wave of deregulation
From the late 1970s until the mid-1980s, a large number of industries were deregulated; that is, government stopped controlling basic economic choices like the prices to be charged, the services to be provided, or which firms were allowed to compete. The share of the U.S. economy that was regulated in these ways fell by 10% of GDP over 10 years from the late 1970s to the mid-1980s.

B. An example: regulation of airlines by the Civil Aeronautics Board
The airline industry provides a vivid example, and one that we will come back to repeatedly as an illustration in this lecture. For 40 years, from 1938 until 1978, a government agency called the Civil Aeronautics Board regulated the airline industry with a firm hand, placing limits on prices charged, routes flown, the entry of new airlines, and more.

C. Why had the regulations been put in place?
In some industries, the fear was that was that firms wouldn't compete with each other very aggressively, and the result of deregulation would be higher prices for consumers. In other industries, the fear was that deregulation would lead to competition that was *too* intense—cut-rate, cutthroat competition that would be so disruptive that both consumers and industry would end up suffering. The pressure for regulation often comes at least as much from industry, which wants to avoid making losses, as from consumers.

II. The effects of deregulation can be seen in various industry segments.

A. Lower prices and expanded output
Economists, with their belief in competition, argued that increased competition would reduce prices and that the lower prices would raise the quantity people buy. This prediction turned out to be quite true. In the airline industry, fares have dropped by one-third since deregulation and the number of passengers has more than doubled. Other deregulated industries have seen similar drops in price—and similar benefit to consumers.

B. Improved incentives for innovation and productivity growth
Deregulated industries are more likely to compete by seeking out new innovations. In the airline industry, few of the innovations are technical ones, like new planes. Instead, perhaps the biggest change is inventing a new type of network for carrying passengers, the hub-and-spoke system, and using scheduling flights and fares to keep the planes flying full.

III. The theory of "regulatory capture"
The theory of "regulatory capture" points out that an industry being regulated is the entity with the strongest incentives to spend time and money in influencing the regulators. The result is often that over time, the regulators act more to defend industry profit levels and to prevent any potentially disruptive change—which means nearly all change—rather than to protect consumers.

IV. Are the gains really just tradeoffs?

A. Have we traded off safety?

1. On the numbers, no
Airline safety, when measured in ways like accidents per mile traveled, has been improving for decades, and there is no evidence at all that deregulation affected this trend.
2. The hidden safety bonus of airline deregulation
Deregulation brought lower fares, which encouraged air travel rather than car travel. Since air travel per mile is far, far safer than car travel, the shift from car travel to air travel that has taken place saves hundreds of lives each year.

3. Regulating fares and departures is hardly a sensible approach to airline safety
   If we care about airline safety, then let's make sure there are lots of people to inspect planes—paid for by taxes on industry, according to how many planes they fly. Surely, regulating all prices and air routes would be a peculiar way to pursue safety. The same notion applies to other deregulated firms that pose safety concerns, like trucking or railroads.

B. Decline in quality of service?
Has the decline in airline prices been purchased at the price of a decline in the quality of air service? This is hard to judge. The simple ways of measuring quality of service, like number of available flights, have typically gone up. Things like late and canceled flights, lost baggage, bad food and so on seem to go in cycles; when the airlines are especially busy, more problems occur. But there is little evidence that they are getting worse over time.

C. Economic harm to airline workers?
Another possible economic effect is that the lower prices for consumers were paid for, at least in part, by lower wages for airline workers and generally making those workers worse off. There is some evidence that this is true. However, the lower wages for airline workers explains only about one-quarter of the gains to consumers. Moreover, the number of jobs in the airline industry rose dramatically with the new business from deregulation. It's not clear that a policy of fewer jobs, but even more highly paid, would have been the better policy.

D. A return to monopoly?
A final concern about deregulation is that while it may have brought competition in the short run, it can lead to mergers and increased industry concentration in the long run. Deregulation is often a time of turmoil; some companies have what it takes, others go broke or merge. A common result to see is larger firms, but also more intense competition between them, which seems to be what has happened in the airline industry. The pain of deregulation is an incentive to increase productivity.

Essential Reading:

Winston, Clifford, "Economic Deregulation: Days of Reckoning for Microeconomists," *Journal of Economic Literature*, September 1993, pp. 1263-1289. I've typically tried to steer away in these readings from suggesting too many articles that are in the professional economics journals. But this article doesn't have any mathematical equations or anything like that, and it should be pretty readable. Winston summarizes all the studies he can find about the results of deregulation over time, and finds substantial gains to consumers of about $40 billion per year.

Winston, Clifford, "U.S. Industry Adjustment to Economic Deregulation," *Journal of Economic Perspectives*, Summer 1998, pp. 89-110. In this article, Winston goes behind the estimates of how deregulation has provided gains, and discusses in-depth how the different industries have adapted to deregulation. He picks out common trends: regulation doesn't keep prices low; deregulation leads to faster development and use of innovations to hold down costs; deregulation leads to better adjustments to unexpected events. He argues that the costs of deregulation tend to be short-term disruption, while the benefits continue to accumulate for years or decades into the future.

Supplementary Reading:

Council of Economic Advisers, "Airline Deregulation: Maintaining the Momentum." In *Economic Report of the President*, February 1988, pp. 199-229. At the end of the 1990s, this chapter is aging a bit. But for those who would like a good overview of airline deregulation—that is, changes in fares and passenger traffic, arguments over how it affects safety and wages—this chapter gives a very nice summary. If you're wondering about how airline deregulation has worked at the end of the 1990s, just assume that the trends identified here have pretty much continued!

If you want more information about the airline industry in particular, one place to start is the web-page of the Air Transport Association, the trade group for the airlines at <http://www.air-transport/org>. Of course, there's a certain amount of industry propaganda on the site. But if you look under "Industry Information," there a quick history and overview of the industry in the "Airline Handbook," and a collection of basic data about numbers of passengers, prices, and so on in the "Annual Report." Another place to start is the Webpage of the Office of Airline Information at the U.S. Department of Transportation, at <http://www.bts.gov/programs/oai>, for a whole lot of statistics.

Questions to Consider:

1. Why don't economic regulators do a better job of protecting consumers' interests?
2. If you can remember back to the 1970s and early 1980s, were you a supporter or opponent of deregulation at that time? Have your views shifted or evolved since then?
3. Do you favor a return to at least limited regulation of the airline industry? If so, what sort of regulation would you favor?
4. Would you favor extending the great deregulation experiment to any other industries you can think of? (Hint: A future lecture will discuss deregulation of local telephone service and electricity provision.)

Lecture Four

Frontiers of Deregulation: Telephones and Electricity

Scope: Just a few decades ago, even economists with strong free-market orientations would have believed that certain industries were likely to need strong government regulation. These industries were "natural monopolies," a term which means that their average costs of providing service decline steadily as the size of the company increases. As a result, any smaller company that tried to compete with these firms would have higher costs—and could not succeed. Two industries commonly thought to have this natural monopoly trait were electricity and telephone service.

In the 1990s, both electricity and telephone service are being deregulated, opened up to competition. The two industries have many differences, of course, but there are also some underlying similarities. Both used to be regulated in ways that tended to encourage heavy building of capital, with little pressure for efficiency. Both went through reforms that challenged and then changed these methods of regulation. Both have been going through technological innovations that make it possible to think of electricity and telecommunications not just as single businesses, but rather as a combination of a number of businesses, some of which can be split off and opened up to competition. It seems likely that the pressure from deregulation will prove substantially beneficial to the economy.

Outline

I. The economics of natural monopoly

A. What is a natural monopoly?
A natural monopoly is an industry in which the average costs of providing service decline steadily as the size of the company increases. As a result, it is difficult for any smaller firm to compete; in this situation, the smaller firm will have higher costs and will not be able to match the prices of the larger firm. The electricity and telephone industry have long been thought to have natural monopoly characteristics.

B. The dangers of competition in a case of natural monopoly

1. Inefficiency and higher prices
In a world of natural monopoly, smaller firms need to charge higher prices, because they have higher costs, and they need to overlap and duplicate physical facilities in a wasteful way.

2. No unified system
In a world of many different phone companies, how can one be sure that you could actually reach the party you wanted, regardless of which company each one of you had, at a reasonable price. Of course, for electricity, this concern matters little.

3. Universal access
With telephones and electricity, there is also a broader social judgment that everyone—rich or poor, urban or rural—should have at least a basic level of access to these services. There is a corresponding fear that if they were provided by an unregulated profit-maximizing company, the company would leave out the poor, or neglect to provide service in rural areas.

II. The evolution of the regulatory approach

A. A seemingly obvious solution: cost-plus regulation
The historical solution to these concerns about regulation has been to have regulators, typically at the state level but sometimes at the federal level, oversee the operations of electricity and phone companies. The regulators assured that these natural monopolies wouldn't charge too much or make too high a level of profit. On the other side, the regulators wanted to assure that investors would be interested in putting money in these industries, so they could build up their infrastructure. The usual tool was "cost-plus" regulation, which looked at the costs incurred, and then set rates so that the phone and electrical companies would make only a moderate level of profit from these investments.

B. Missing incentives for efficiency

1. Overbuilding and overpaying
When profits are based on costs, the economic incentive is to keep costs high—because it leads to higher profits. The results were building many huge power plants, rather than, say, encouraging energy conservation. Or the results were paying the unions representing the telecommunications workers pretty much whatever they asked for. Why argue? After all, the costs were just going to be passed along to consumers.

2. Cross subsidies and unexamined choices
A variety of internal subsidies and not fully unexamined choices were built into these regulatory systems. For example, long-distance phone charges were kept high to subsidize local calls. Utilities focused on building large power plants rather than conserving energy. We see "regulatory capture" here.

C. New technology and splitting the indivisible
The long-held assumption was that either electrical and telecommunications firms couldn't be divided: they had to operate as unitary wholes. Moreover, there was an assumption that regulation meant control and oversight of all operations and choices. But as new technology developed, it became apparent that these industries could

indeed be usefully divided, and that even if not all parts were competitive, some parts could be made so. Electrical service can be divided into four segments: generation; long-distance, high-voltage transmission; low-voltage distribution grids; and actual local/industrial delivery to the customer. Phone service can similarly be divided.

III. First steps toward improved incentives

A. Improvements in regulation
Regulators began to recognize the possibilities of the new market structures, and the problems with cost-plus regulation. They began using new forms of regulation that offered better incentives to firms.

1. Price cap regulation set an aggressively low price—but let the firm make extra profit if it could beat that price.
2. Benchmark regulation required that a firm sell at a price related to, say, the average of similar firms in other areas.
3. Sliding scale regulation meant that if the firm made efficiency improvements, it got to keep some of the profit from doing so.

B. Legal steps toward telecommunications deregulation

1. The break-up of AT&T
In the early 1980s, after a length court battle, AT&T signed a consent decree which broke it up into several pieces: AT&T became a long-distance company; seven geographically separate "Baby Bells" were to provide local service; and the equipment and research piece was spun off as a separate firm, too. Many commentators predicted disaster when this happened.
2. The actual record of partial deregulation
The record of the partial deregulation of phone service to having competition in long-distance is fairly clear. With the subsidies removed, local service became more expensive, but the price of long-distance plunged. The overall price of phone service fell by about 20 percent over 10 years, saving consumers hundreds of millions of dollars, and leading to an explosion of new telecommunications services.
3. The Telecommunications Act of 1996
The Telecommunications Act of 1996 was intended to set in motion a process where local, long-distance, cable TV, and other firms would all begin to compete in each other's markets. Although the returns aren't all in, the law seems to have frozen most of the big competitors in place, instead.

C. Legal steps toward electricity deregulation

1. Federal legislative steps
Two federal laws are often mentioned as starting the trend to allowing more competition in the generation of power: the Public Utilities Regulatory Policy Act of 1978 (PURPA) and the Energy Policy Act of 1992.
2. State-level regulation, state-level reform
There is a Federal Energy Regulatory Commission which regulates power prices at the wholesale level, but most of the regulation of electricity happens with state level agencies, which have traditionally controlled prices charged, which generators can enter the market, and who a power company is allowed to serve. The states with the highest electricity rates—which are often high because past state regulators allowed or required the companies to make some very expensive investments in power generation—are the same states where the pressure for deregulation is highest, namely, the New England states and California.

D. Nagging problems

1. Stranded costs
Electrical and phone companies made a number of investments under regulation that will not be profitable under deregulation. To what extent should they be compensated for these "stranded costs"? After all, there was an implicit promise made under cost-plus regulation that they would not lose money for these investments.
2. Open access for competitors
As many different power and phone companies become connected to each other, there will be strong arguments over how much firms need to pay to be connected to the network. If the charges are too high, they will discourage competition; if they are too low, they won't pay for the costs of maintaining the network.
3. Universal access and helping the poor
If society wants to assure that the poor have access to basic telephone and electrical service, how should it do so? If society wants to assure that those in harder-to-serve rural areas have access to telephone and electrical service, how should it do so? Without regulation, it will be necessary to face directly the question of the extent to which such subsidies are desirable, and how to provide them. This is opposed to regulating the entire industry.

IV. Electricity and telecommunications in the future

A. The shape of a competitive electricity industry
The deregulated electricity industry will probably have considerable competition in the generation of power, and perhaps some competition in sales and service. However, for technical reasons it appears likely that there will be a heavily regulated entity that will continue to deal with transmission and distribution of power.

B. The shape of a competitive telecommunications industry
The shape of a deregulated telecommunications industry may be very fluid, depending on the direction of new technological innovations. The more competitors are available for local service, the less regulation will be needed. Chile, a leader in phone deregulation, worth studying.

Lecture Five

Financing the Health Care Industry

Scope: The U.S. health care industry provides some of the finest health care in the world. It also costs enormously more than the health care industry of any other country, while not providing measurably better health for Americans, nor indeed any health insurance coverage for tens of millions of Americans. The United States is the only industrialized country in the world without some sort of nationally organized health care system.

When economists look at the health care system, they see a system where it is rather unclear who has the responsibility to make decisions about balancing costs and benefits. Insured consumers have an incentive to demand even care that is of little or no value. It seems difficult to design a system for health care providers which doesn't lead either to under-provision or over-provision of care. But one way or another, often unexamined, decisions do get made. Other industrialized countries like Britain, Canada and Germany have very different systems for financing health care, and their experience may offer some insights for the United States.

Most of the prominent proposals for reforming the U.S. health care system, from Clinton-care on the political left to medical savings accounts on the right, have some gaping flaws. Rather than trying to spell out a single plan to solve all the nation's health care woes, it may be useful to focus on spelling out some incremental steps and directions that could be followed.

Outline

I. Sketching the concerns with the U.S. health care system

A. High cost
The U.S. health care system costs far more than that of any other country. On a per person basis, a U.S. citizen consumes about twice as much health care spending as someone in Britain, Germany, or Japan, and about 75% more than someone in Canada. Put another way, five percent of the world's population accounts for 40% of the health care costs. This could eat up a large portion of GDP (perhaps 25%) as the U.S. population ages in the early 21st century.

B. Millions of Americans lack health insurance
Perhaps 40 million Americans lack health insurance, which can lead to less use of early medical care, and health conditions that become unnecessarily worse.

C. The health status of Americans is not especially outstanding
By standard measures of overall health, such as life expectancy and infant mortality, America's health doesn't seem to be higher than that of other industrialized nations. This isn't really a big surprise, since the primary determinants of overall health status are probably factors like diet, exercise, clean water, and genetics, rather than number of visits to doctors.

D. Wide disparities in treatment for similar illnesses
A number of studies over several decades have shown that doctors in different cities or states can have vastly different treatment patterns. Even common operations like tonsillectomy, hernia, appendectomy, hysterectomy may be performed literally three or four times as frequently in some areas as in others. Often, these studies find no overall health gain from performing the operations more frequently, just increased cost.

E. Too much "flat-of-the-curve" medicine being delivered
Think of a graph with the amount of money being spent on health care on the horizontal axis, and the amount of health benefit being derived on the vertical axis. As one spends more on health care, the amount of health benefit rises, but each additional dollar spent on health care provides less additional benefit. We may be in a position in the United States where the curve is flat: that is, a great deal of money spent on health care is providing very little benefit at all. We may be wasting billions of dollars for no measurable benefit.

II. The incentives for balancing health care needs and dollars

A. Patient incentives
A fully insured patient has no reason to hold back from demanding care. Even small levels of co-payments—like $10 a visit—seem to reduce the demand for care quite a lot, with no measurable impact on health status.

B. Provider incentives

1. Fee-for-service
In a fee-for-service system, health care providers have a financial incentive to provide as much care as they can conceivably justify, because more care means more money to them.
2. Capitation
In a pure capitation system, health care provides are paid a certain amount per person, regardless of how much care they provide. The financial incentives in this system are to provide as little care as possible—as long as it doesn't result in an undeniable need for more care later! – and to try to avoid responsibility for treating those who are at high risk for substantial medical expenses.
3. Intermediate options?
Neither pure fee-for-service nor pure capitation plans have incentives that are altogether comfortable to contemplate. But it is possible to mix certain elements of the two approaches. For

example, using fee schedule that is set in advance encourages keeping costs down for a particular procedure. Capitation can be combined with requirements to assure that patients have a certain number of checkups, or a certain amount of care is received.

C. Technological complications
The main cause of ever-higher health care expenditures is improvements in technology, which come at higher cost. Even procedures that are adopted originally because they are cheaper than the alternatives sometimes end up raising costs—because more people use the cheaper procedure. Research can be directed toward improving health care, as opposed to chemical research, etc.

III. International comparisons

A. National health care in Britain, Canada and Germany: They aren't at all the same.

1. Nationally centralized British health care
Britain's National Health Service is funded by taxes, and payments for doctors and hospitals are set by the national government. The system has been very successful—perhaps even too successful? – at holding down costs. Capitation is an incentive system for doctors, but there are downsides in terms of quality.

2. Decentralized federalist Canadian health care
Canada's health care system is run at the provincial level, and funded by a mix of state and provincial dollars. Doctors are paid primarily fee-for-service; hospitals have an annual budget. There is no private insurance to compete with the government plan. The Canadian system, of course, has the U.S. system as an outlet, and Canada has not been especially successful at controlling costs.

3. Germany's decentralized "sickness funds"
Most Germans (90%) receive health insurance through a private "sickness fund," which they typically join for life, and which are funded by a payroll tax. You can opt out and receive private insurance—but then you can't go back.

B. Although these systems are quite different, they do have some unifying characteristics that are worth considering. They all (except for the U.S. system) offer universal insurance coverage for basic care. They all have compulsory payment into the health care system, and do not adjust the payment (much) based on age or previous illness. Most countries separate the general practitioner from the hospital, and give the GP no financial incentive or link for moving the patient into a hospital. In all of these countries, sharp differences persist in health status and use of health care according to socioeconomic status.

IV. Possible policy initiatives

A. Medical savings accounts
The idea of a medical savings account is that a family would put some amount, say $4000, into such an account. Then, if medical expenses were less than that amount at the end of the year, the family could draw the money out. The family would also buy a catastrophic health insurance policy just in case expenses were more than that amount. The good part of medical savings accounts is that people face a financial tradeoff for seeking medical care. The bad part is that they allow the healthy to pull money out of the health care system each year—which means that those who are unlucky enough to get sick will have to pay more of the cost themselves.

B. "Clinton-care"
In 50 words or less, what exactly was the Clinton health care plan? It's hard to say, which was part of the problem. It was big on promises about providing more care and at the same or lower cost, but how those goals would be accomplished was shrouded in 1300 pages of fine print, which was justifiably worrisome.

C. Eliminating paperwork, fraud and abuse
Politicians love to promise to solve cost problems by eliminating paperwork, waste, fraud and abuse. Such promises are easy to make, and hard to carry out. But the fundamental problem with them in this context is that they are one-time savings only—and the problem of medical costs is that they get continually higher every year. A one-time cost reduction can slow down a rise in costs for a year or two, but it can't solve it in the long run.

D. A nationalized health care system
America has a very decentralized health care system, and a very individualistic ethos. It's easy to design a national system on paper, but hard to believe that Americans and their doctors would be very willing to accept it—especially when it becomes clear that any such system won't just give everyone everything that they want, but will have some restrictions on what care gets provided and to whom.

V. A shadowy outline of a reformed U.S. health care system

A. Clarify to consumers the cost of health insurance
At a minimum, tell people what they're paying for health insurance every pay period on their pay slip, right next to the other taxes. Even better, if somewhat unrealistic, start treating what the employer pays for health insurance as income, where people have to pay taxes on that income. The present system subsidized health insurance by allowing employers to provide it tax-free.

B. Encourage a long-term commitment to a given health insurance company, separate from one's employment relationship
When people move frequently between health insurance care companies, the companies will try to protect themselves from having extra-sick people dumped on them. Moreover, having health insurance

linked to jobs means that losing a job can also mean losing health insurance.

C. Give sophisticated third parties a say in what care is provided to patients and at what cost
America needs structures for talking through what the limits on care will be. One can imagine a consensus-building framework that might include health care firms, insurance companies, doctors, patient representatives, and state or regional government representatives. Such a group wouldn't solve everything, nor would it even agree on everything, but it would be a start toward thinking these issues through on a broader basis.

D. Guarantee basic health coverage for everyone
The important word here to emphasize is "basic," not gold-plated coverage. One model might be for the government to subsidize the purchase of a basic health care plan on a sliding scale, where the poor get the greatest subsidy, and then the subsidy phases out as income rises.

E. Stop demonizing those who set limits
The U.S. has managed to ignore many of the tough questions about how much medical care is worth it by simply spending more on care, and not questioning it much. Whoever brings the bad news that there are limits to the amount to be spent on health care is sure to be reviled.

Essential Reading:

Peet, John, "Health Care: A spreading sickness," *Economist*, July 6, 1991, special section in middle of issue, pp. 1-18. These special surveys in the middle of the Economist are almost always quite good. This one is especially useful because it takes an international perspective on the health care systems of different countries: Britain, Canada, Germany and Japan, as well as the United States. It also provides a good grounding in the basic economic issues surrounding the provision of health care.

Aaron, Henry J., ed., *The Problem that Won't Go Away: Reforming U.S. Health Care Financing*. Washington, D.C., Brookings Institution, 1996. This thoughtful collection of essays from a variety of social scientists was written in the aftermath of the Clinton health care debacle. With that vivid failure on their minds, one set of the authors offer essays about what happened to the Clinton plan, offering perspectives from history, survey research, interest group analysis, and so on. Another group of authors begin from the presumption that sweeping health care reform is off the agenda, and then offer their proposals for incremental reform from a wide range of ideological perspectives.

Supplementary Reading:

Fuchs, Victor, *Who Shall Live?* New York, Basic Books, Inc., 1974. Fuchs is one of the first economists to make a serious research commitment in the area of health economics. This book is a minor classic. It lays out the issues of what the problems are with the U.S. health care system, how the incentives of the system operate, and how it might be reformed. What is remarkable is how much of the book could be written in just the same way today, about 25 years later, just by updating the numbers and years! Fuchs is a supporter of universal insurance to be provided through a decentralized and competitive system, but the focus of this book is on understanding the dilemmas of the system, not pushing a particular policy solution.

Aaron, Henry, *Serious and Unstable Condition: Financing America's Health Care*. Washington, D.C.: Brookings Institution, 1991. This readable and intriguing book is full of insights about what has been going wrong with America's health care system. Aaron is the sort of writer who, even when you think you're pretty familiar with a subject, gives you some new information or a new twist that pushes your thinking further. Aaron is a supporter of universal insurance to be provided through a single-payer centralized system, but as is usual with good economists, the focus of this book is on understanding the dilemmas of the system, not pushing a particular policy solution.

The Health Care Financing Administration is the part of the federal government that administers Medicare and Medicaid, and also that collects a number of statistics on health care in America as a whole. At the HCFA Website at <http://www.hcfa.gov>, click on stats and data on the bar at the left for up-to-date general information about America's health care system.

Questions to Consider:

1. What do you view as the major strengths and weaknesses of the U.S. health care system?
2. From what you know of the health care systems of other countries—Britain, Canadian, Germany, others?—do they have any facets that you would like to bring to the U.S. system?
3. Do you believe a significant reduction in U.S. healthcare costs is necessary or desirable? If so, how would you go about it?

Lecture Six

Competitiveness in Banks and Savings and Loans

Scope: Banks are an important industry. They hold people's savings. They provide loans to people for homes and cars. They provide loans to local businesses, too. The insolvency of a number of banks can cause substantial hardship for a local economy; at the large level, the many bank failures of the early 1930s contributed to the terrible economic breakdown of the Great Depression. Because bank failures can have such dramatic hurtful effects, banks have been for some decades wrapped in a cocoon of regulations. They have been limited in what interest rates they could pay, where they could loan their money, how they could expand geographically, and what non-bank services they might provide. For a long time, these rules made banking a safe, secure, slightly boring industry.

But the 1980s and 1990s have shaken up the nation's depository institutions. First came the collapse of the savings and loan (S & L) industry. The underlying causes were a combination of those same government regulations with a series of unlucky events, like high interest rates, which drove many S&Ls into insolvency. Then, the same government regulations, combined with a general unwillingness to be too brisk about shutting insolvent institutions, allowed some of the S&Ls to take gambles with depositor money that multiplied their losses. The eventual bill for the government was about $150 billion. However, under the new regulatory rules that emphasize capital requirements and quick regulator reactions when these rules are breached, the deposit insurance fiasco seems unlikely to repeat itself.

But another trend that started in the mid-1980s, the shrinkage in the number of banks, seems set to continue. In part, this is a response to the rules requiring that institutions have more capital. But in addition, the other rules that put geographic and product-line restrictions on banks seem to be falling as well. The result may be "universal" banks, which can provide a broad range of financial services. The bank industry at the end of the 1990s seems quite healthy, but its future shape is uncertain, as firms and regulators struggle to decide what form of depository institution will be the most powerful competitor in the future.

Outline

I. Banking: an important industry under stress

A. Why banking is important to the economy

Banks (and savings and loans) are institutions that collect savings and use those resources to make loans. They are financial "intermediaries," standing between those who supply capital and those who demand it. A well-functioning banking system helps assure that businesses with the most potential for success get the investment capital they need, and that people can borrow to purchase big-money items like cars and homes. If banks get sick, on the other hand, people's life savings can be imperiled, their ability to purchase big-ticket items diminishes, and businesses can have their flow of capital shut off. The result can be a macroeconomic slowdown or even a depression. The collapse of banks may have largely caused the Great Depression of the 1930s.

B. A policy framework for a secure industry

1. Deposit insurance
To protect people's savings, a system of deposit insurance was set up in the 1930s. Depository institutions paid insurance premiums into a fund; if an institution went broke, then the fund would make sure that depositors up to $100,000 (that is, most individuals) wouldn't lose their money. There were separate deposit insurance funds for commercial banks, for savings and loan institutions, and for credit unions.
2. Glass-Steagall
The Glass-Steagall Act, passed in 1933, prevents commercial banks from also participating in many other financial businesses: dealing in stocks and other securities, owning parts of companies directly (as opposed to giving loans), selling insurance, and so on. The notion was to make banks safer by preventing them from investing in risky activities.
3. Geographic limitations
Also in the 1930s, rules were passed to limit the geographic spread of banks. Interstate banks were largely prohibited, and many states had rules that even prevented banks from having many branches within a single state. The ideal was apparently to have a "community bank," receiving deposits from the community and lending them back to the same community.
4. Price restrictions and service requirements
Various rules restricted how much interest banks and other depository institutions were allowed to pay on savings and checking accounts, and also required that they make loans in certain areas. For example, savings and loan institutions were required to make most of their loans for home mortgages, rather than for other purposes.

C. Recent stresses in the banking industry

In the 1980s, hundreds of savings and loans went bankrupt. The deposit insurance fund for the S&Ls also went bankrupt, leaving the federal government on the hook to pay off $150 billion or so in depositor's money. There has been an enormous wave of bank consolidations and mergers going on since the mid-1980s, which raises questions of why this is happening, and whether it will mean better or worse service for customers. Many of the legal restrictions on banking have either ended, or seem about to end. The long-peaceful industry of banks and savings and loans has been dramatically shaken up.

II. What really happened in the S&L bailout

A. Trapped by the course of events
Savings and loans used to be restricted by law in paying no more than 5¼% interest, and required by law to loan most of their funds for home mortgages. When interest rates went up in the late 1970s, they got hit two ways. People started withdrawing their funds so they could invest in something that paid higher interest. But when the S&Ls tried to get the funds to pay off their depositors by selling off their home mortgages, they found that no one much wanted to pay much for the right to collect the interest on a 6% (or some low percentage) fixed rate home mortgage loan at a time when interest rates were up around 14%. The S&Ls didn't have the money to pay off their depositors; that is, they were bankrupt.

B. A forced deregulation
Faced with an S&L industry that was almost completely broke, the U.S. government was more-or-less forced to deregulate; that is, to let the S&Ls pay higher interest rates and to make more loans in areas other than home mortgages. Commercial banks, which didn't have these restrictions, fared much better.

C. Some get well, some on life support
The new regulatory flexibility, combined with a drop in interest rates and general economic recovery in the mid-1980s, meant that many of the S&Ls (about 1,000) recovered and were no longer bankrupt. In 1985, closing down the ones that were bankrupt and paying off the depositors might have ended up costing the government perhaps $20 billion.

D. March of the "zombie thrifts"
But the regulators were slow to shut down the bankrupt S&L'; they didn't want to look like “meanies,” and many S&L owners were important local businesspeople and campaign contributors. As the regulators dallied, some of the bankrupt S&Ls began to take a high-risk strategy: get deposits by promising to pay high interest rates, make high-risk loans that promise to pay high interest rates, and see what happens. If the high-risk loans come through, then the S&L might no longer be bankrupt. If the high-risk loan fails, then the losses to the government were increased.

E. The fraud red herring
There is a widespread public belief that if $150 billion was lost, someone must have committed fraud or stolen it – and so the solution to the S&L mess was to find those criminals and sue them for them money. Some fraud did occur. But by most estimates, the real problem wasn't outright fraud, but rather a regulatory and economic environment that encouraged high-risk loan behavior, on the philosophy that if the gamble succeeded, the S&L owner did well, and if it failed, the government paid.

F. The capital requirement solution
The long-term regulatory solution, eventually adopted by a 1991 law, was to require that owners of a S&L, or a bank, constantly have enough capital so that if they needed to pay off all their depositors, they could do so, with a margin of safety besides. If that margin of safety is breached, and a depository institution is in financial danger, the new laws require prompt and immediate reaction from regulators.

G. The lesson of taking prompt and decisive action
By failing to act quickly to close down ailing S&Ls in the mid-1980s, the government allowed a $20 billion problem to turn into a $150 billion problem. However, once it was decided to address the problem aggressively by shutting down and selling off the bankrupt S&Ls, the issue was resolved relatively quickly.

III. The tidal wave of bank consolidations: causes and consequences
This rosy picture may seem more or less to contradict the main topic I want to discuss in this lecture: the incredible drop in the number of banks since the mid-1980s.

A. The shape of the consolidation rage
The number of banks in the United States was over 14,000 in 1980. The number started dropping around 1985, and by the end of 1998, it looks as if the number of banks will be less than 9,000. The downward trend shows no particular sign of flattening out. This is the biggest decline in the number of banks since the Great Depression of the 1930s.

B. Financial reasons for the shakeout
One reason behind the mergers is the bankrupt S&Ls going out of business, and the new capital requirements, under which many weaker institutions with less capital were pressured to either shut down or to merge with stronger institutions with more capital.

C. Geographic freedom
The federal laws preventing interstate banking have been lifted and the state laws blocking intrastate branching of banks have largely been removed, as well. Many of the mergers are a response to the newfound freedom to spread out. This actually increases competition. The number of branches is rising, giving greater accessibility to customers.

D. Universal banking

Since the 1930s, commercial banks have been prevented from getting involved in other non-bank businesses – and non-bank businesses have been prohibited from owning banks (Glass-Steagall Act). These walls are crumbling. Through holding companies and joint ventures, it is more and more common to see commercial banks with close ties to firms that sell stock, sell insurance, do investment banking, and so on. This is known as "universal banking." The key question now appears to be how to build "firewalls" between basic banking and these other services, so risk-taking in other areas doesn't put deposits at risk. Universal banking is fairly common in other countries (e.g., Germany).

E. What's the deal for banking consumers?

1. Is the banking industry becoming overly concentrated?
   At least so far, despite all the mergers, the banking industry is not yet particularly concentrated. In fact, with the removal of geographic restrictions, many customers have more choice between banks that are doing business in their town than they had in the past. Deposits and market share of top banks have increased as "deregulation" has gone on.
2. Will there be administrative cost savings from consolidation?
   Many of the bank mergers have promised large savings from administrative consolidation. This has sometimes happened, and sometimes not. At least so far, it doesn't appear that the average deal has produced substantial cost savings that will benefit bank consumers.
3. Will there be risk diversification benefits from consolidation?
   Larger banks, spread over a number of different geographic areas, may be less fragile and likely to fail. Because the merged banks are larger, they may also be more able to take risks, rather than strictly playing it safe, which could help lending to local businesses and entrepreneurs.
4. There are many benefits to accrue from deregulation, when you think of the financial intermediary role played by banks. There still needs to be controls, but the requirements of the twenty-first century required a new look.

Essential Reading:

Furlong, Fred, "New View of Bank Consolidation," *FRBSF Economic Letter*, July 24, 1998. Furlong, Fred, "Getting the Jump on Interstate Banking," April 25, 1997. Kwan, Simon, "Cracking the Glass-Steagall Barriers," March 21, 1997. These short newsletters from the Federal Reserve Bank of San Francisco offer a good compact glimpse of important topics. The one discusses the consolidation of the banking industry, some of its underlying causes, and the mixed evidence on whether it is leading to greater efficiency. The second takes up the arrival of interstate banking. The third looks at changes in the Glass-Steagall rules about separating commercial banks from other financial function. A subscription to these newsletters is free from the FRBSF; they are also available on the web at <http://www.sf.frb.org>. Click on "Economic Research," then on "Publications and Resources," and then scroll down to heading for "Economic Letter."

The Website of the Federal Deposit Insurance Corporation at <http://www.fdic.gov> has lots of good analysis of how the industry is doing, basic statistics about the industry, and analysis of trends and policy issues. For example, click on "Bank Data" and then look for the report on "An Examination the Banking Crisis of the 1980s and Early 1990s," for an in-depth discussion of many of the issues raised here. To be specific, the report is at <http://www.fdic.gov/databank/hist80/contents.html>.

Supplementary Reading:

Barth, James R., *The Great Savings and Loan Debacle*. Washington, D.C.: American Enterprise Institute, 1991. This book is a nice review of the events leading up to the savings and loan disaster, with a particular emphasis on the role of misguided incentives of the regulatory system and lackadaisical regulators. The writing style is perhaps a bit florid—but after all the dry reports I've recommended in these reading lists, perhaps that will be a relief!

Nakamura, Leonard, "Small Borrowers and the Survival of the Small Bank: Is Mouse Bank Mighty or Mickey?" Business Review: Federal Reserve Bank of Philadelphia, November/December 1994, pp. 3-15. This article makes the case that even as the overall number of banks shrinks, there will remain a place for the small, nimble "mouse bank" that offers special services to a well-defined segment of customers.

Questions to Consider:

1. How is it that rules which were meant to keep the savings and loans safe and secure ended up making them risky and broke? You may want to discuss the general relationship between good intentions and actual outcomes, too.
2. It has been argued that capital requirements, if properly enforced, will make deposit insurance obsolete. Explain the logic behind this argument. Do you agree with it?

3. Would you favor allowing universal banking, at least under certain regulatory conditions?

Lecture Seven

Re-Inventing Regulation

Scope: No society completely trusts the free market. There are a variety of valid reasons for government regulations, including environmental concerns, product and occupational safety, fighting monopoly, and so on. The U.S. has developed over time an extensive regulatory apparatus, with a number of regulatory agencies responsible for implementing and interpreting the laws passed by Congress. Overall estimates of the costs of these regulations run into the hundreds of billions of dollars; fortunately, overall estimates of the benefits are even larger.

But the matter doesn't end there. The regulations presently imposed by are a wild mix of those that are relatively low cost and high benefit (which is assuredly good) and high cost and low benefit (which is more questionable). If we could reduce some of the regulations that impose high costs for little gain, and instead expand those regulations that have high benefit at low cost, we could save tens of thousands of lives while keeping the overall regulatory costs in the economy about the same as they are now.

This opens up the question of actually measuring costs and benefits for each regulation. There are a variety of reasons this is bound to be difficult and controversial: for example, business will always tend to claim that the costs are high, while the regulators who seek to impose the regulation will disagree; many benefits of regulations like human life or environmental protection are not easy to quantify; and people and businesses tend to adjust to regulations after they are imposed in ways that make the earlier estimates obsolete. It is unrealistic to hope for perfect measures of costs and benefits. However, without attempting in some way to justify why regulations are worth their costs, it is difficult to see why society should regulate at all. Policy-making necessarily involves choices, even uncomfortable choices like deciding that some regulations simply cost too much for their level of benefit to be worthwhile.

Outline

I. The shape of the overall regulatory apparatus

A. The need for regulatory agencies
There are a variety of sensible economic reasons for imposing government regulations: to avoid monopoly power and encourage competition; to protect the environment; to reduce product safety and occupational risks; to assure accurate disclosure of inflation; and more.

They are *intended* to make the competitive market work better than it ordinarily would.

B. An alphabet soup of agencies
A variety of regulatory agencies have been established over time to implement and interpret the legislation passed by Congress. Some examples include: Interstate Commerce Commission, Federal Reserve Board, Federal Trade Commission, Food and Drug Administration, Federal Deposit Insurance Corporation, SEC, Environmental Protection Agency, Occupational Safety and Health Administration, National Highway Traffic Safety Administration, Federal Aviation Administration Consumer Product Safety Commission, and many more. Many of these agencies are so familiar to those who read follow the daily news that they can frequently be referred to by their abbreviations.

C. The overall size of the regulatory bureaucracy
There are about 60 federal regulatory agencies, employing about 130,000 people, issuing about 4,000 new regulations each year. The Code of Federal Regulation is 130,000 pages long, and that doesn't count the court and administrative law rulings about those regulations.

II. Estimating total costs and benefits of federal regulation

A. The OMB: Keeper of the cost-benefit analysis
Going back to the Nixon and Ford administrations, the Office of Management and Budget (OMB) in the White House has had the task of prodding the regulatory agencies to consider costs and benefits. It has gradually been given more resources and authority to do this, and to suggest ways of reducing costs, although it can't actually override what a regulatory agency wants to do.

B. Estimates of total annual costs and benefits of regulation
The Office of Management and Budget was recently charged with the task of coming up with an overall estimate of the total benefits and costs of regulation. It found total costs of environmental, social, and economic regulation to be about $280 billion dollars, but the benefits of such regulation to be about $300 billion. These costs seem to have stayed in the range of 3.5% to 4% of GDP over the last decade or so. This is roughly the size of the defense budget or Social Security.

Estimated total costs and benefits of regulation in 1997 (in billions of dollars)

	Costs	Benefits
Environmental	$144	$162
Other Social	$ 54	$136
Economic	$ 71	---
Paperwork/disclosure	$ 10	---
TOTAL	$279	>$298

Source: Office of Management and Budget

1. Environmental area
In the environmental area, mainly the laws administered by the Environmental Protection Agency, costs were estimated at $144 billion and benefits at $162 billion.
2. Other social regulation
The area of other social regulation includes health and safety, consumer safety, auto accidents and safety, disclosure of information. The biggest benefits in this area seem to come from lives saved by safer cars and traffic.
3. Economic regulation
Economic regulation includes cases where the government sets prices and quantities for various goods. The amount of this regulation has diminished over the last few decades, because of the great deregulation experiment, but regulations remain in many areas. OMB did not try to estimate benefits in this area; the assumption seems to be that the benefits aren't high.
4. Process regulation
Administrative and paperwork costs are included here. However, costs of preparing taxes are not included, for several reasons: taxes aren't really a regulation in the sense the term is used here; it wouldn't make sense to assume that the alternative to spending time on taxes was spending *zero* time on taxes; the benefits of having a tax code—that is, of having a government with revenue—are difficult to estimate.
5. A few limitations specific to the OMB approach
The OMB study is one of the first times this sort of tabulation of the costs and benefits of regulation has been done systematically; it will be revised over time.

C. The difficulties of doing cost-benefit analysis

1. Differing estimates
Regulators, affected businesses, consumer advocates, and environmentalists are all likely to have their own slant on costs and benefits.
2. Businesses don't and can't itemize costs of regulation
Businesses can't specify easily what the costs of complying with a regulation are, because it's difficult to separate those costs out from their other costs of doing business. Moreover, it's very hard to say what sorts of innovation or flexibility might have occurred in the absence of the regulation.
3. Costs shift, and probably decline, over time
As business learns to deal with regulations, it will find ways of minimizing the cost of complying with them. Therefore, regulatory costs will tend to fall over time.
4. Many benefits can't be easily monetized

When the benefits of a regulation can be readily translated into dollars, it is said that the benefit is "monetized," so that it can be compared with costs. It is possible to use a variety of economic approaches to get a value for a life or for sickness. But how is one to value an endangered species, or the ability to see the sunset through unpolluted air?

5. Benefits shift, and may decline, over time
People often react to reductions of risk in one area by adjusting their behavior so the overall risk doesn't shift. For example, when childproof bottles were mandated, many people started being less careful about shutting the bottles away from children, and the number of accidental poisonings didn't fall by much. Seat belt laws are another example. People in belts seem to drive more recklessly, according to some studies.

6. The act of following regulations imposes health and safety costs of its own
One estimate is that every $100 million of imposed regulatory costs creates about $3 million in accident and death costs. Moreover, cleanup of one sort of environmental problem, say by burning trash, may create another problem, like air pollution.

7. Cost and benefit estimates all have uncertainty, but some estimates have more uncertainty than others
Most economists argue that the appropriate way to judge a cost-benefit estimate is by its average value. But this can be tricky when there is a large spread between the low and high estimates.

III. Transferring resources to get more bang for the regulatory buck

A. A world of low-cost/high-benefit and high-cost/low benefit
A recent study at the Harvard Center for Risk Analysis reviewed all the published studies it could find about different regulations that were aimed at saving lives, and looked at the cost per year of life saved. It found an enormous range: some regulations gain a year of life at a cost of $1000 or less, some only at a cost of hundreds of thousands of dollars or more.

Some estimates of the cost of flammability standards per year of life saved

For children's sleepwear size 0-6X	$0
For upholstered furniture	$300
For children's sleepwear size 7-14	$45,000-$160,000

Some estimates of the cost of natural disaster preparedness per year of life saved

Soil testing and better site-grading in landslide-prone areas	$100 (???)
Strengthen un-reinforced masonry in San Francisco to Los Angeles standards	$21,000
Triple the wind resistance of new buildings	$2,600,000
Construct sea walls to protect against 100-year storm surge heights	$5,500,000
Strengthen all buildings in earthquake-prone areas	$18,000,000

Some estimates of the cost of school bus safety measures per year of life saved

Raise seat back height from 20" to 24"	$150,000
Add external loudspeakers to school buses	$590,000
Seat belts for passengers in school buses	$2,800,000
Staff school buses with adult monitors	$4,900,000

Some estimates of the cost of various kinds of asbestos control per year of life saved

Ban asbestos in brake blocks	$29,000
Ban asbestos in pipeline wrap	$65,000
Ban asbestos in roofing felt	$550,000
Ban asbestos in clutch facings	$2,700,000
Ban asbestos in reinforced plastics	$8,200,000
Ban asbestos in yarn and thread	$34,000,000
Ban asbestos in automatic transmission components	$66,000,000

Source: Tengs et. al., 1995. Article in supplementary reading list below.

B. Huge differences mean something
Whatever one's qualms about the specifics of doing cost-benefit analysis, absolutely huge differences, like multiples of 1000 or more, are telling you something about which regulations make more or less sense. One study found that maybe half of the government's regulations would fail a cost-benefit test, using the government's own numbers.

C. Focusing regulatory resources to do more good
One study found that maybe half of the government's regulations would fail a cost-benefit test, using the government's own numbers. Another study found that by cutting back on the high-cost low-benefit

regulations and expanding the low-cost, high-benefit regulations, we might save 60,000 lives a year at the same regulatory cost.

IV. A plea for regulatory reform

A. The absolute necessity of cost-benefit analysis
Some people find cost-benefit analysis is uncomfortable, almost even sacrilegious. But in its most general form, all cost-benefit analysis means is that it is necessary to justify your decisions. If you aren't willing to try cost-benefit analysis in any form, you are effectively saying that you don't need to give a reason for your actions. If you can't measure it, maybe the regulation should be revoked. We need to make choices in line with priorities. Reduction of risk may impose too high a cost.

B. Knitting together a fractured system
America's regulatory system is a hodgepodge, with dozens of different agencies and little oversight. Given that we are passing regulations that cost on the order of $280-$300 billion per year, it would be worth thinking a little more about some common standards of cost-benefit analysis to knit the system together. The current (???) of analyzing on rules and regulations is under-funded, in view of the high costs.

Essential Reading:

Office of Management and Budget, "Report to Congress on the Costs and Benefits of Federal Regulations," September 30, 1997. This report is the first attempt by the government to estimate the overall costs and benefits of regulation in the economy. As you'll see, it's heavy on warnings about how uncertain the estimates are, and somewhat light on hard conclusions. But it will assuredly be updated in years to come, and it's a good introduction to the complexities of trying to figure out these issues. It's available on the web at <http://www.whitehouse.gov/WH/EOP/OMB/html/rcongress.htm>.

Weidenbaum, Murray, "Regulatory Process Reform: From Ford to Clinton," *Regulation*, Winter 1997, 20:1, pp. 20-26. Weidenbaum is an eminent economist who has spent much of his career watching the interplay between government regulation and the economy. Here, he reviews the path of how cost-benefit regulation has been used (or not) in the government since the Ford years, and offers a gentle plea for spending more resources on evaluating the regulations we've got. Available on the web at <http://www.cato.org/pubs/regulation/regultn-arch.html>.

Supplementary Reading:

Tengs, Tammy O., "Dying Too Soon: How Cost-Effectiveness Analysis Can Save Lives," National Center for Policy Analysis Idea House, May 1997, available only on the web at <http://www.public-policy.org/~ncpa/studies/s204/s204.html>. Tengs was a leader of a study done at the Harvard Center for Risk Analysis where a group of researchers collected *all* the studies they could find which did serious cost-benefit analysis of government regulations where a primary object of the regulation was to save human lives. They converted the results of the various studies into a common metric—cost per year of life saved—and then published a list of the results. (The reference for the list is in the immediately following citation.) This article discusses some of her thoughts about the findings of that study, and how transferring resources from the less cost-effective regulations to more cost-effective ones can save lives.

Tengs, Tammy O., et al., "Five-Hundred Life-Saving Interventions and Their Cost-Effectiveness," *Risk Analysis*, 1995, 15:3, 369-390. This article has a short technical text at the start, and a long, long reference list of studies at the end. In between is the interesting stuff: a list of the results of many cost-benefit studies that have been done in many areas, with the estimate of how much each regulation cost per life saved.

Viscusi, Kip, "The Value of Risks to Life and Health," *Journal of Economic Literature*, December 1993, pp. 1912-1946. This is a research article in a professional economics journal, and so it has too much mathematics to be readable by non-economists. However, I list it here because it has several tables that may be of interest to readers. Table 2 (pp. 1926-1927) summarizes the results of more than a dozen studies that have been done to estimate the economic value of a life, while Table 4 (pp. 1932-1933) summarizes many studies of the economic value of injuries on the job.

Questions to Consider:

1. Knowing what you now know about cost-benefit calculations, how much do you trust such calculations?
2. Would you favor setting up a federal agency to review all major regulations for whether their benefits exceed their costs? Consider different possibilities. What if all the agency does is to publicize its calculations? What if the agency could require agencies to submit further information if benefits looked out of line with costs? What if the agency had actual veto power over the decisions of agencies?

Lecture Eight

Issues in Environmental Regulation

Scope: Over the last several decades, the United States has adopted a cavalcade of environmental laws. In general, these laws have set lofty environmental goals without a lot of guidance on how those goals should be met or much coordination between the different goals or much funding for implementation and enforcement.

But judged by results, the system has done well. Over the last few decades, the environment in the United States has improved substantially in terms of measured air and water pollutants, control over hazardous materials, and more. Over the last few decades, the United States has shown that it is quite possible to have both an expanding economy and environmental protection at the same time.

Of course, a number of environmental issues remain controversial. Three of them are discussed briefly here: Superfund, the Endangered Species Act, and dealing with the greenhouse effect. The overall lesson of these three issues is that sensible policy will focus on the main goal of environmental preservation, and not be sidetracked by sentimentality or guilt trips.

Outline

I. The overall shape of environmental legislation

A. Nine major laws, and many small ones
There is no *unified* law about environmental protection. Instead, there are about nine major environmental laws all aimed at different issues: air, water, pesticides, toxic substances, current use of hazardous materials, cleanup of past hazardous waste dumps, and so on. States also have their own regulations.

B. EPA resources
The Environmental Protection Agency really controls two sets of resources: one is its own budgeting about $7 billion a year; the other is the money it can require private parties to spend, which is now in the range of $150 billion to $200 billion a year.

C. Political fuzziness and under-funding
Many environmental laws are the result of a compromise between liberals who write lots of often grandiose goals and rules and regulations and conservatives who provide little money to fund the interpretation and enforcement of these rules. Little wonder that half or more of EPA regulations are challenged in court, either by environmentalists or by business.

D. Shaky prioritizing
According to EPA, its big priorities should be water quality, air quality, and disposal of present hazardous waste. Its budget, largely dictated by Congress, ends up requiring that more than half of spending be on water quality, and then a large chunk on Superfund cleanup of old hazardous waste sites, leaving fewer resources for air quality and hazardous waste.

Percentage of Total of Pollution Control to Society and in EPA Budget

	Projected share of cost to society	Share of EPA budget in 1997
Water quality	37%	54%
Superfund	4%	29%
Air	28%	5%
Hazardous waste	22%	4%
Drinking water	4%	2%
Pesticides	1%	2%
Toxic substances	1%	2%
Leaking underground storage tanks	2%	1%
Radiation	5%	5%
Indoor air pollution and radon	not available	.5%

Source: Environmental Protection Agency, as compiled by J. Clarence Davies and Jan Mazurek, *Pollution Control in the United States*, 1998.

II. Can one be an optimistic environmentalist?

A. Seems to be something in the subject that encourages a feeling of doom, yet the environment *seems* to be getting cleaner.
It sometimes seems that the hallmark of caring about the environment is to predict that it is in a disastrous crisis state, and getting worse every moment. But surely, one should be able to care about the environment, and want laws leading to a cleaner environment, and still be allowed to believe that in general we're already headed in that direction.

B. The environment is getting measurably cleaner on many dimensions

1. Air quality
Air quality has improved dramatically in the last few decades; a number of major pollutants have declined, thanks to controls on cars and on industry. Carbon monoxide < 23%; Lead < 98%; particulates < 78%; ozone, however, is still too high.

2. Water quality
Water quality has also improved by most measures, thanks to better sewage treatment plants, controls on industrial emitters, and rules

about the pesticides and fertilizers that farmers can put on their fields.

3. Hazardous materials, chlorofluorocarbons, and other concerns
The Resource Conservation and Recovery Act requires careful handling of all hazardous materials from cradle to grave. An international treaty has banned chlorofluorocarbons, because they were found to harm the atmosphere's protective ozone. Wetlands are diminishing, but at least their rate of decline has slowed. In many dimensions, the environment looks either somewhat better, or not too much worse, than 20 or 30 years ago.

C. Areas for future concern
Of course, we can do better on these pollutants, and there are other issues. For example, some areas for future concern identified by an EPA study a few years ago include: protection of ecosystems; health of the oceans; human health effects that are *not* cancer; nontraditional environmental stresses, like non-point groundwater contamination; and how the combination of air pollutants affects us, not just each individual pollutant.

III. Superfund

A. Focus of the law
The so-called Superfund law is aimed at cleaning up old toxic waste sites, those created before 1980, when RCRA was passed regulating "from cradle to grave" how hazardous materials are to be handled and disposed of. There are presently about 1,300 such old sites on the National Priorities List.

B. Peculiar and costly funding mechanisms

1. A bundle of small industry taxes
We wanted to fund the chemical industry to pay for the Superfund. The result is a bundle of small, highly complex Superfund taxes: a small tax on oil refiners; a "chemical feedstock" tax imposed on 11 organic chemicals, 31 inorganic chemicals, and 73 imported chemicals; and an "environmental income tax" which is an add-on to the corporate alternative minimum tax.

2. Making polluters pay: joint and several liability
The other funding mechanism was to make anyone responsible for the pollution pay the bill for clean-up. The liability provisions in the bill make any party that contributed to the site in any way liable for up to the entire cost of cleanup. This has led to a blizzard of lawsuits: various estimate are that one-third of the money raised by Superfund has gone to lawyers. Liability also works against companies buying old industrial sites.

C. Human safety or environmental purity
Many of these sites are buried underground already, so the chances that they would have affected anyone's health are not high. If they were surrounded with clay, the chances that they would affect anyone's health get even lower. However, you wouldn't want to sink a drinking water well into the middle of one of these sites by mistake! However, the cost is very high to meet these priorities.

IV. Endangered Species Act

A. Trying to save species one at a time
The current Endangered Species Act tries to identify and save species one at a time. In a world with perhaps 100 million species, most of them as yet uncatalogued, this isn't a very workable approach. About 1,100 are currently covered. Almost 100 a year are added, with a backlog of 3,000 species. Hundreds are going extinct yearly.

B. Protecting ecosystems instead
The alternative approach would be to identify and protect ecosystems instead. Protect species by the truckload, not one at a time.

C. Work with private landowners, not against them
More than half the endangered species have more than 80% of their habitat on private land. Politically, the government just isn't going to seize all that land. So we need to find ways to encourage private landowners to protect habitat (such as environmental easements).

V. The "greenhouse" effect

A. Uncertainties of science
Whether the burning of fossil fuels will actually raise global temperatures is scientifically uncertain (maybe 3° C in 100 years). But it is a risk, and when faced with a risk, it makes sense to take out some insurance—which in this case means to make plans for reducing such emission somewhat.

B. What should a greenhouse insurance policy look like?

1. Where are the emissions coming from?
A majority of the world's carbon emissions are coming from the developing nations of the world, not the industrialized economies—and most of the growth in emissions is coming from the developing nations, too.

2. Not goals, but actions
Global treaties about carbon emissions are long on setting goals for what each nation will do, but short on actual promises of what will be done. As a result, little happens. One proposal would be for the poor nations of the world to take the step of not subsidizing fossil fuels any longer, while rich countries would take the lead in reducing their own emissions, and paying for additional pollution reduction in the poor nations.

VI. A mix of exasperation and encouragement over environmental laws. The economy has shown an ability to come to grips with environmental law.

Essential Reading:

Easterbrook, Gregg, *A Moment on the Earth: The Coming Age of Environmental Optimism*. New York, Viking, 1995. This book is a tome, 700 pages long. However, it is written in a light and airy manner, with the occasional witty or snarky comment, and it's well-organized, so you can dip in and out of it if you wish. The author is a hard-headed liberal, and if that's not enough of a contradiction in terms, he's also an optimistic environmentalist. For a discussion of topics in this lecture, see pp. 601-618 for a discussion of Superfund, pp. 551-576 for a discussion of endangered species, and global warming from pp. 268-316.

"Environmental Scares: Plenty of gloom," *Economist*, December 20, 1997, pp. 19-21. This cheerful article takes pleasure in reminding the dark prophets of environmental doom and gloom that their predictions were far, far, far overstated, and argues that many environmentalists see it as in their own self interest to spread such stories, even in the face of what good news does exist about the environment..

Davies, J. Clarence, and Jan Mazurek, *Pollution Control in the United States*. Washington, D.C., Resources for the Future, 1998. Davies was one of the people who helped create the new Environmental Protection Agency back in 1970. In this book, he and Mazurek take a long hard look at the higgledy-piggledy way that the U.S. system of pollution control has evolved, with dozens of separate laws, conflicting or nonexistent priorities, and limited resources. The book carefully walks through both the successes of even this mixed-up system, like control of municipal sewage and reduction in lead emissions, along with many of the absurdities and confusions of the system. This isn't so much a book about economics, as about better administration. There is room to do so much better.

Supplementary Reading:

A good source on the web for basic information on environmental issues is the Council on Environmental Quality, which is a White House Office. Its Website is <http://www.whitehouse.gov/CEQ/About.html>. There's a certain amount of press-release propaganda here. But if you click on "Environmental Links" it offers all sorts of jumps to detailed environmental information from throughout the government. If you go over to <http://ceq.eh.doe.gov/reports/reports.htm> you will find the electronic versions of the annual reports of the CEQ. These always seem to come out a couple of years late, and they don't come out every year. But the report for the 25th anniversary of the CEQ (in 1995) is available on the web at this site, and it has all sorts of detailed discussion of a vast range of environmental issues. However, it is in a portable display format or .pdf file, so you'll need to use Adobe Acrobat (which can be downloaded free on the web) to read it.

If you are interested in environmental issues, I'd recommend that you take out a subscription to *Resources*, a newsletter/magazine published by Resources for the Future, a sensible environmental Washington think-tank. The articles are variable in quality, but almost every issue has one or two that are quite good. Best of all, individual subscriptions are available for free, if you request it from RFF at 1616 P St. NW, Washington, D.C. 20036-1400. Or if you'd like to check out RFF on the web, its address is <http://www.rff.org>.

Litvin, Daniel, "Development and the Environment," *Economist* March 21, 1998, special section in middle of issue, pp. 1-16. This essay takes up a question not address in the lecture: what about the environmental problems faced in the poor countries of the world, which are often much worse than those in rich countries? Litvin argues that poor countries need to start getting a grip on those problems now. Part of the answer is investment in sewage treatment facilities and the like, but another part is to avoid subsidizing economic development schemes that have disastrous environmental consequences—and perhaps not much benefit for the economy, either.

Questions to Consider:

1. Are you an environmental optimist or a pessimist? What's the evidence for your belief?
2. Would you favor cleaning up all the Superfund sites, or capping them with clay, if you were certain that the money saved would be used for other environmental or social priorities?
3. What steps could or should the U.S. take to encourage reducing carbon emissions in China?

Lecture Nine

Privatization: Steering, not Rowing

Scope: Privatization and its close cousin, contracting out, have grown from darlings of the conservative movement in the 1980s to become part of the mainstream orthodoxy in the 1990s. Countries around the world, as well as states and localities across the U.S., are experimenting with having the government decide what it wants to happen and then get someone else to do it—rather than having the government try to manage all such tasks itself. There is a wide range of proposals for further privatization efforts in the U.S.

The main argument for privatization or contracting out is that it provides better incentives for the managers of organizations to think up new and cheaper ways of providing service. A government manager, after all, doesn't stand to benefit much on a personal basis from pushing through an innovation. The best arguments against privatization and contracting out in certain cases occurs when the service being provided is difficult to quantify, because then a risk exists that the provider will try to skimp on quality of service to make more money. The bottom line is that privatization and contracting out are no magic bullet: the new firms or the new contracts will still require government oversight and regulation. But there is reason to believe that even so, they will work more efficiently than a state-run operation.

Outline

I. The global wave of privatization

A. The magnitude of privatization around the world

1. A global perspective
Over 100 countries have made some efforts at privatization; the amount of assets privatized each year has been in the range of $50 billion-$80 billion/year in the 1990s. Much is in Eastern Europe, but Latin America is a leader.

2. The British example
Perhaps the leading example of privatization in an industrialized country is indeed the United Kingdom under Margaret Thatcher, which sold off many government-owned companies, including oil, gas, electricity, car, phone, hauling, water, airline, and other firms. This represented 10% of the U.K. GDP; now government control is only 2%.

B. How does it actually happen?

1. Sale of stock
One approach to privatization is to sell stock in the company, just like any other firm starting out in the stock market. In this case, though, the government gets the proceeds of the stock sale.

2. Preferential deals for workers or citizens
When such sales are carried out, either workers for the firm to be privatized or citizens are sometimes given a preferential deal. This can take the form of either being able to buy shares more cheaply, or being given vouchers free of charge that can be used to purchase shares. This sort of subsidy can make some political and economic sense.

3. Contracting out
Contracting out is what happens when a particular service is provided by outside contractors, rather than directly by government employees. An example would be whether the cafeteria in a government office building is staffed by government employees, or whether the service is provided by an outside firm under contract.

C. The U.S. privatization picture

1. Less affected as a country
In the United States, the impact of privatization has been less, because the U.S. government didn't own as much of the economy as in many other countries. So privatization efforts here have been somewhat milder.

2. Potential targets for federal privatization
Some of the commonly given potential targets for federal privatization include selling off the federal agencies that produce and sell energy, as part of electricity deregulation; selling the postal service; selling off federal lands that are now being used for commercial purposes anyway; selling off much of the federal government's loan portfolio, and more. All of this might raise as much as $350 billion dollars or more.

Federal enterprises and assets for possible privatization

	Estimated market value
<u>Enterprises</u>	
Tennessee Valley Authority	$12 billion
Five power marketing agencies	$14 billion
Federal dams	$20 billion
Other government energy facilities	$10 billion
U.S. Postal Service	$ 8 billion
Global positioning system	$ 7 billion
National Weather Service	$ 3 billion
<u>Assets</u>	
Commodity lands	$160 billion

Loan portfolio	$108 billion
Strategic petroleum reserve	$13 billion
Broadcast frequencies	$9 billion
Government buildings/land	$10 billion

Source: Robert Poole, chairman of the Reason Foundation.

3. State and local privatization: potential and actual
A considerable amount of contracting out has happened at the state level, largely in areas like printing, custodial service, nursing homes, sludge hauling, job training and drug treatment. Some of the more imaginative privatization or contracting out efforts include private companies that provide fire protection, municipal water treatment, administration of the welfare program, of prisons, and of public libraries.

State and local assets for potential privatization

	Estimated market value
Highways and bridges	$102 billion
Wastewater treatment	$31 billion
Commercial airports	$29 billion
Water systems	$24 billion
Electric utilities	$17 billion
Ports	$11 billion
Parking structures	$7 billion
Waste-to-energy plants	$4 billion
Gas utilities	$2 billion

Sources: Estimates collected from various sources by staff of Joint Economic Committee (1996).

II. Goals of privatization

A. Raising revenue
Perhaps the most common political argument for privatization is to raise money. From an economic point of view, this isn't much of a reason. Selling government property is just an asset swap: the government used to own an asset, and now it has cash. It now has a more liquid asset, but it isn't any better off. Moreover, the revenue gains are one-time events.

B. Reduction in government subsidies
Many state-owned companies or operations are soaking up government subsidies. Privatization or contracting out makes it more politically difficult to give such subsidies.

C. More efficient management
The primary economic reason for privatization or contracting out is to encourage more innovation and efficiency. If a government manager fights to make an operation more efficient, the reward is that the government has more money, and the manager maybe gets a certificate of appreciation. But private managers make profits when they make an operation more efficient. There is a lot of evidence that privatized operations are more efficient and productive.

III. Arguments against privatization—from weaker to stronger

A. Don't sell the family silver
The leading rhetorical argument against privatization is that it is "selling the family silver" or "selling the crown jewels." This argument apparently has emotional weight, but it's a little silly. The family silver doesn't require good management and technological updating, after all.

B. Potential monetary costs to workers in the firms
There's no question that privatization and contracting out can cause dislocation and even job loss for workers. But if a public enterprise has been overstaffed, then cutting back should be considered a benefit, not a cost.

C. Natural monopoly
Some industries are thought to be "natural monopolies," which means that it would be economically inefficient to have everyone get their own service completely separate from those around them. For example, it wouldn't make sense to have eight different sets of water pipes running through a neighborhood, so that everyone could choose from eight water companies. However, even in such cases the government can get bids and contract out the service for limited periods of time, or have competition between different jurisdictions.

D. Privatization just enriches the insiders
There is always suspicion that when a firm is sold off, it's the fat cats and insiders who get rich. In some privatizations in developing economies (like Russia), this has happened. But if the government can't run a privatization fairly, what makes one think that it can run the firm every day fairly, either?

E. Concerns over quality of service
This is potentially the most important concern about privatization. If for-profit firms take on certain tasks where it is hard to draw up a contract guaranteeing a level of quality—education and health care are often given as examples—then perhaps the firm will make money by cutting back on quality of service. This insight implies that privatization will work best where consumers can switch between alternative suppliers, and contracting out will work best if the contract comes up for bid on a regular basis. It also implies that in many areas, there will still be a need for regulation and oversight even after the privatization or contracting out.

IV. Why not pursue a sensible regulatory alternative?
In the end, why not simply regulate, rather than privatize? The two aren't mutually exclusive, of course. Privatizing or contracting out still means that there is a need for antitrust authorities to assure competition, for health and safety regulation, for oversight of the tasks that have been contracted out, and all the rest. But regulation, even of the clever sort, doesn't provide quite the same incentives as pure market competition.

Essential Reading:

House of Representatives, Committee on the Budget, "Privatization: Hearings held in Washington, D.C., February 28 and March 1, 1995." Washington, U.S. Government Printing Office, 1995. Serial no. 104-6. These short hearings featured three speakers who make the case for which federal assets should be privatized: Scott Klug, a Congressman from Wisconsin; David Linowes, a professor who was formerly chair of a President's Commission on Privatization; and Robert Poole, who is head of the libertarian Reason Foundation. If you're not familiar with how these sorts of hearings are printed, they first have a transcript of what was said, with a transcript of the discussion that followed. Then they publish the prepared statement of the speaker, which is often the easiest and clearest thing to read, since some speakers tend to ramble when they start talking. So check out the prepared statements of Klug, Linowes and Poole.

Joint Economic Committee Staff Report, "The $7.7 Billion Mistake: Federal Barriers to State and Local Privatization." February 1996. Available on the web at <http://www.senate.gov/~jec/privatiz.html>. This short report, prepared by the staff of the JEC, suggests a number of targets for state privatization efforts, and also discusses how various federal laws can have a tendency to discourage such privatization without necessarily intending to do so. The title refers to a calculation that if the state did privatize these enterprises, they would pay as much as $7.7 billion annually in taxes to the federal government; as government-run enterprises at the state and local level, they aren't subject to federal corporate taxation.

Supplementary Reading:

Kemp, Roger L., editor, *Privatization: The Provision of Public Services by the Private Sector*. Jefferson, North Carolina: McFarland and Company, Inc., 1991. This is a very easily readable set of essays, most of them originally printed elsewhere and then collected into this volume, about various aspects of privatization. (I imagine the collection was originally put together as a reader for an undergraduate college course.) I especially recommend Part Three on "Applications of Privatization," which offers short articles about the experience of privatizing fire service, parks, prisons, garbage collection, street sweeping, wastewater treatment, and more.

World Bank, *Bureaucrats in Business*. New York: Oxford University Press, 1995. This report focuses on the reform of state-owned enterprises in countries around the world. Privatization is one of the reform options considered, but there are also other options considered like different kinds of management contracts.

Council of Economic Advisers, "Natural Resource Policy Reform." Appears as a section of Chapter 6 in *Economic Report of the President*. Washington, D.C.: Government Printing Office, February 1997, pp. 216-227. This is a discussion of federal land ownership and management. It points out, for example, that the federal government owns 240 million acres of land that is now leased for use in grazing animals. It discusses how the federal government subsidizes grazing and timber production on federal lands, without much of a justification for doing so, and how a more sensible land policy might be formed. Available on the web at <http://www.gpo.ucop.edu/catalog/erp97.html>.

Questions to Consider:

1. Are there areas where privatization has been used that are surprising to you? Which ones, and why do you think you find them surprising?
2. Which of the arguments for privatization do you find most persuasive, and why?
3. How would you respond to someone who says that privatization of a state-owned firm is "like selling the family silver"?
4. In what industries mentioned in this lecture do you think the potential quality problems of privatization are likely to be most significant?

Lecture Ten

Medicine for Unemployment: What Works, What Doesn't

Scope: There are two deep misconceptions that many people hold about the nature of jobs and unemployment. The first fallacy arises because many people think of the economy as having a fixed number of jobs to be done, or a fixed number of hours to be worked. This is sometimes called the "lump of labor" fallacy. Those in the grip of this belief tend to worry that someone is taking the jobs that should be available for others. They tend to offer proposals like having everyone work fewer hours, so that the fixed number of hours to be worked is spread out over more people. However, the evidence is abundantly clear that the economy is not stuck with hiring a predetermined lump of labor, but rather that the number of jobs and people hired expands readily over time—at least if appropriate public policies are followed.

A second fallacy arises because unemployment, at least in economic terms, isn't just about "jobs," but about a voluntary relationship between a willing employer and a willing worker. In popular discussions, it is sometimes said that government should "guarantee" everyone a job, or that welfare recipients should be "required" to work. But in a relationship where the employer (perhaps the government) is delivering a check for the some reason other than the quantity and quality of work done, or where the recipient of that check is required by law to show up, there can only be the form of a job, not the substance. Such relationships will have a hard time lasting.

These insights suggest that policies designed to divide up a supposedly predetermined lump of labor are unlikely to work well in creating employment. However, policies which focus on assuring that that potential employers and workers have the ability and incentives to meet together have a better chance of success.

Outline

I. Exploring the "lump of labor" fallacy

A. Stating the lump of labor fallacy
The economy has a fixed number of jobs or hours to work, and the policy issue is how to divide them up among workers.

B. Policy manifestations

1. Restricting jobs from women
In the great Depression, and again after World War II, women were shut out of certain jobs because it was presumed that men, who were after all supporting families, needed them more. Echoes of such policies are sometimes heard today in the United States, and also in other countries.

2. Shutting out the outside world: trade deficits and immigration
It is sometimes feared that jobs are being taken by foreigners: either directly by immigrants, or indirectly when Americans buy foreign products. There is no question that trade and immigration can cause economic disruption and dislocation; more on that in later lectures. But unless the number of jobs is fixed—the lump of labor fallacy—there is no reason they should affect that number. The U.S. unemployment rate of the late 1990s shows the opposite: lots of immigration, high trade deficit, but *low* unemployment.

3. Limiting technology
There has often been a fear expressed that new technology, by making production more efficient, will reduce the number of jobs. This is referred to as the Luddite phenomenon.

4. Limiting the work-week to add jobs
It has been a common proposal to limit the number of hours that individuals can work, with the idea of turning the supposedly fixed amount of work into more jobs.

C. Analytical problems and practical difficulties

1. Evidence of U.S. unemployment rate over 20th century
The U.S. unemployment rate goes up and down from year to year. But in a good year at the beginning of the century, it was around 5-6%, and that's roughly where it is in a good year at the end of the century. The U.S. economy has added a huge number of jobs over that time, despite growth in population, despite women entering the workforce in larger numbers, despite immigration and foreign trade, despite new technology. Moreover, the growth in jobs hasn't slowed in recent decades. This rather debunks the "lump of labor" fallacy.

2. The greater labor force participation of women
A higher proportion of adult Americans is working as opposed to past decades. In the 1950s and 1960s, a little less than 60% of adult Americans participated in the labor force; at the end of the 1990s, the figure is approaching 68%. Jobs have been growing faster than the population!

3. Experiences with lower hours
Europe's workers typically work a much shorter year than American workers; hundreds of hours less. The lump-of-labor argument would be that European unemployment should be lower, but it's much higher. Over the 20th century, the length of the U.S. workweek has fallen, but America's unemployment rate hasn't changed much as a result.

4. Practically, you can't always substitute workers easily.

The idea of dividing up a predetermined lump of labor among workers only works if lots of workers have interchangeable skills. But if a group of software engineers are restricted to a 35-hour week, it seems unlikely that this will create jobs for the hard-core U.S. unemployed.

5. Doesn't lump of labor also mean lump of wages?
   It's a fairly firm economic connection that, on average, people get paid roughly according to their productivity. If people work fewer hours, their pay will then have to drop—unless they suddenly have a spurt in productivity.
6. Are we really going to restrict voluntary agreements between adults?
   Restrictions on hours worked, or restrictions on who can be hired to do certain jobs, are restrictions on freely agreed-to employment arrangements. Are we really going to prohibit people from working overtime or taking a second job? Interfering in such arrangements tends to go against the grain of American philosophy.

II. The labor market as a voluntary matching process

A. The fallacy: real jobs can be a matter of decree
In an economic sense, a job is a match between a willing employer and a willing worker. Having the government require that people show up at a certain time and place, and then give them a check regardless of whether they have worked well, is the shadow of a job, but not the substance.

B. Policy manifestations of the fallacy: policies to "save jobs"
A variety of proposals are made by state and federal government to "save jobs," by which it is usually meant to have taxpayers and consumers pay, through higher taxes and/or higher prices, for saving identifiable jobs of people who can be interviewed on television. The economic cost is where that money would have otherwise gone, to workers in other industries who often cannot be as easily identified. A related policy is to try to save jobs by passing laws that make it very difficult to fire or lay-off employees.

C. The reality: unemployment as a matching process
The U.S. labor market involves a lot of shuffling and churning. In any given month, about 3% (about 4,000,000) of those who had a job in one month don't have one the next month; conversely, an equal number of the unemployed find jobs in each month. In a given year, perhaps 10% of all job slots are eliminated by firms, but another 13% of job slots are newly created. This indicates a dynamic, even chaotic, process, as opposed to the static "lump of labor" fallacy.

D. Reducing unemployment by increasing job matches
The policies that will work to add jobs will take advantage of this churning process of the labor market and try to make job matches easier.

1. Job search assistance: speeding up the matches
   Job search assistance involves spending public money to help the unemployed identify and apply for jobs.
2. Priming the demand side of the labor market: encouraging firms to hire
   At the microeconomic level, this involves rethinking regulation of markets to assure that firms do not face unpleasantly high extra costs when they hire, and that firms have flexibility to expand in the ways they see best. At the macroeconomic level, this means that during times of recession, when firms aren't doing much business and don't want to hire, that the government should use tax cuts, higher spending, or interest rate cuts to stimulate the economy.
3. Priming the supply side of the labor market: making work worthwhile
   Consider a person who is unemployed and receiving welfare assistance, but thinking about working. If they work, they face explicit taxes on earnings—income taxes, Social Security taxes, sales taxes and so on. They also will have their benefits reduced. If the benefits are quite generous, it may not be worth trying to hard to find a low-paying job, instead.

E. A caution: is goal to have everyone work?
About 30% of adults in the U.S. between ages 21-64 don't have a job, and aren't looking for one. These may be people who have a spouse who works, and maybe they are staying home with the kids. It seems clear that the policy goal should not be to aim blindly for more jobs, but rather to smooth the matching process so that those who want to work have a plausible chance of finding work.

III. Illustrating the principles: Europe and the United States

A. The fact of high unemployment in Europe, low in the United States
European unemployment has been stuck at high levels—double digits in many countries—since the 1970s. Meanwhile, the U.S. economy has created tens of millions of jobs and unemployment in the late 1990s is under 5%. There may be some policy lessons here!

B. Drawing lessons from the European and U.S. employment experiences
Too much of Europe is in the thrall of fallacies about unemployment: that a nation can have more jobs be restricting the hours people can work; or by having shutting out immigrants or women; or by having government "save" identifiable jobs with subsidies to huge companies, at cost of unidentifiable ones; or by having rules against firing workers. In addition, many European nations have laws that restrict firms from

operation, and have high benefits structured in a way that discourage some workers from looking too hard for a job.

C. Lower unemployment isn't everything, but it is something
The U.S. labor market has its problems: higher wage inequality than Europe, lower benefits, less guarantee of keeping a job once you have it. But when it comes to raw numbers of jobs created, the U.S. is doing something right. It is not interfering in the market matching process.

Essential Reading:

Four articles in the *Economist* magazine: "Schools Brief: One lump or two?" November 25, 1995, pp. 67-68. "Labour pains," February 12, 1994, pp. 74-75. "Europe and the Underclass: The slippery slope," July 30, 1994, pp. 19-21. "How regulation kills new jobs," November 19, 1994, p. 78. The release of the *OECD Jobs Study*, listed as supplementary reading below, led to a wave of useful articles on causes of employment and unemployment. The *Economist*, which is published in London, is particularly close to the issue of high unemployment in Europe. These articles all take on that issue from different directions: the lump of labor theory, why unemployment happens, how it is creating an underclass of jobless in Europe, and how regulation can kill new jobs.

Council of Economic Advisers, "The Labor Market." Appears as Chapter 4 in *Economic Report of the President*, February 1997, pp. 139-162. Available on the web at a number of places; one good connection is at <http://www.gpo.ucop.edu/catalog/erp97.html>, and then click on Chapter 4. This chapter is focused on the U.S. labor market. It gives a good overview of many of the topics that will come up not only in this lecture, about the number of jobs, but in the next lecture about the quality of jobs in the 1990s.

Supplementary Reading:

The *OECD Jobs Study: Evidence and Explanations*. Paris, OECD, 1994. Appears in two volumes: "Part I: Labor Market Trends and Underlying Forces of Change;" "Part 2: The Adjustment Potential of the Labor Market." The Organization for Economic Cooperation and Development is mainly a statistics and research organization, which focuses on the economies of the world's industrialized economies. In this report, the OECD economists took on the question of why unemployment rates in Europe have been stuck so much higher than rates in the United States for the last couple of decades. The answer, carefully presented with waves of graphs and evidence, is that European governments have set up any number of well-meaning laws that have had the effect of strangling employment growth in their countries. This report is intended for public consumption; it's clearly written and should be quite accessible to anyone who wants to really get into these issues.

On the web, the Bureau of Labor Statistics is the part of the U.S. Department of Labor that, like its name implies, collects data. Its Website is <http://www.bls.gov>. The Website offers a variety of studies and reports, as well as access to data reaching back several decades and brought as up-to-date as possible on employment, unemployment, wages, productivity, and much more.

Questions to Consider:

1. Would you favor a government rule restricting the work-week to 35 hours, or fewer? What do you imagine would be the arguments for and against such a rule?
2. Draw up a list of policies that are promised to reduce unemployment, and then divide your list into those policies that you think are likely to work and which ones aren't likely to work.
3. Explain how "saving jobs" at one large employer in an area might lead to fewer jobs at other places.

Lecture Eleven

Are America's Jobs Decreasing in Quality?

Scope: The U.S. economy has certainly had success in the last few decades in creating raw numbers of jobs. However, a sense of unease exists about many of these jobs. One hears concerns expressed that too many of them are low wage, without benefits, require unpleasantly long hours, are part-time, temporary, or of shorter duration than jobs in the past.

This lecture examines each of these concerns about job quality. It finds that wages have indeed been relatively flat for non-supervisory workers, and the share of workers receiving employer-provided benefits does seem to be decreasing. However, significant changes do not appear to have taken place in the overall averages of hours, part-time work, or length of a typical job—although some shifts have occurred between how women and men are affected by these factors.

Outline

I. Wages
One complaint about the quality of jobs is that wages haven't risen faster, or indeed much at all.

A. Evidence on wages
Consider evidence for the average private-sector, non-supervisory worker. The average hourly or weekly wages for such workers, adjusted for inflation, show a small *decrease* since the early 1970s. To be sure, other ways of adjusting for inflation would show a small increase, but no matter how you slice it, such workers have not seen much of a rise in wages in the last two-plus decades.

B. Productivity: the cause of, and solution for, wage slowdowns
Ultimately, wages come from productivity. Businesses can't pay more than what workers produce, or they'll go broke. Businesses that try to pay workers less than they produce, in a competitive market environment, will lose their workers (especially their best workers) to other employers. U.S. productivity growth slowed dramatically in the early 1970s, and so did wage growth. The only way to raise wages in a sustained way over time is to increase productivity growth, which will be discussed in a later lecture.

II. Benefits
Another complaint about the quality of jobs is that employer-provided benefits are becoming less common.

A. Evidence
Between the mid-1980s and the early 1990s, it does appear that the proportion of full-time workers receiving health and retirement benefits from their employers diminished substantially.

B. The connection from total compensation and benefits to take-home pay
A company cares about how much it pays in total compensation to its workers, and as explained above, it will pay according to productivity. The company does not especially care whether it pays in the form of take-home pay, or in the form of benefits like health insurance or pensions. Economic theory argues persuasively that even if employers sign the checks for such benefits, it ends up coming out of what would have been paid to employees. Thus, wages plus benefits equals total compensation.

C. Policy responses?
Are there better ways to provide health insurance and retirement benefits than relying on employers to provide them? Probably. Employer provision of such benefits has problems when people switch jobs, when they don't have long-term employers, and when different employers offer different packages of benefits. At a minimum, we need some good alternative ways—parallel to the employment relationship—for people to become attached to the health insurance system and to save for retirement, since the burden seems to be shifting to the workers to do this for themselves.

III. Long hours, part-time status, temporary work

A. Just what's the complaint here?
One sometimes hears complaints that jobs are taking too much time, and not leaving enough for family. One also sometimes hears complaints that too many jobs are part-time or temporary. It's of course fine for different individuals to have different complaints, but blaming the economy as a whole for all of these problems—too many hours and too few—is a bit self-contradictory.

B. Evidence on hours
It doesn't appear that hours worked for the average worker have changed significantly over the last few decades. However, there has been some shift toward women working more hours; since the average has stayed the same, this implies that men are working fewer hours.

C. Evidence on part-time status
The share of workers in part-time jobs has drifted up just a bit since 1970 or so, and hovers in the range of 17-18%. However, only 3-4% of all workers—that is, roughly one-fifth or so of the part-timers—say that they would prefer to be working full-time, and that number hasn't changed much of the last few decades. However, more women are doing full-time work, and more men are doing part-time work than a few decades ago.

D. Use of temporary workers

The use of temporary workers has risen substantially, but the overall total still remains quite low —in the range of 2 million workers. It seems likely that much of this raise has occurred because the temp industry has gotten itself organized: people are more ready to work for it, and firms are more willing to use it. It often seems that temporary work is a way for a firm to try someone out, let them go after a few months if they aren't working out, but perhaps keep them on. About half of temp workers in one year have permanent jobs in the next year.

IV. Job tenure

A. A hard fact to prove

Job "tenure" is the term economists use in talking about how long people stay at their jobs. There is a widespread belief that jobs have become more unstable, but a number of credible studies on the subject have found that overall job tenure hasn't decreased.

B. Explaining why what everyone knows isn't necessarily so

1. Longer job tenure for women

Job tenure appears to have risen somewhat for women, and decreased for low-skilled male workers. So the belief that job tenure is down overall may come from a focus on male workers.

2. Nostalgia for a stability that never was

Young workers have always switched jobs a lot. Among older workers, perhaps half end up at some point in a job that they stay in for 20 years or more—but the other half never do end up in such a job. It may be that we have some nostalgia for the "good old days" when everyone had a job for life—but those days never really existed.

C. Summary

1. Wages have been flat; this is a real issue. The answer is to raise productivity and growth.

2. Benefits need to be portable and people need to take their responsibilities seriously.

3. Part-time status, etc., seems to be overstated. It might be related to perception of risk.

Essential Reading:

U.S. Department of Labor, *Report on the American Workforce*. Washington, Government Printing Office, 1997. For basic facts and information about jobs, wages, part-time status, benefits, and so on, this annual report provides a useful source. It always has a few chapters about various issues in the labor market, followed by pages of statistical tables often going back to about 1960. This data can also be supplemented by using the *Economic Report of the President* or the *Statistical Abstract of the United States*, two overall sources referred to in the introduction to these lectures.

McGrattan, Ellen R., and Richard Rogerson, "Changes in Hours Worked Since 1950," *Quarterly Review: Federal Reserve Bank of Minneapolis*, Winter 1998, pp. 2-19. This useful article offers exhaustive detail, perhaps more than some students will want, on how overall hours worked haven't shifted much, but the hours have been reshuffled to some extent according to sex, age, and marital status.

Supplementary Reading:

Valletta, Rob, and Randy O'Toole, "Job Security Update," *FRBSF Economic Letter*, Number 97-34, November 14, 1997. The Federal Reserve Bank of San Francisco (FRBSF) publishes these short letters on a wide-ranging set of topics. They are available on the Website of the San Francisco Fed at <http://sf.frb.org>. This letter looks at the weak evidence for declining job security, focusing on data using quits and dismissals.

Council of Economic Advisers, "The Labor Market." Appears as Chapter 4 in *Economic Report of the President*, February 1997, pp. 139-162. Available on the web at a number of places; one good connection is at <http://www.gpo.ucop.edu/catalog/erp97.html>, and then click on Chapter 4. This chapter was also listed as required reading in the previous section. It focuses on the U.S. labor market and gives a good overview of many of the topics that arise in this lecture concerning the quality of jobs in the 1990s.

Questions to Consider:

1. Taking all the evidence into account (and feel free to use your own impressions or evidence not presented in the lecture), would you say that typical jobs today are worse or better than the jobs of 25 or 30 years ago?
2. Why can't the government simply require that the quality of jobs be higher: that is, why not pass laws for higher pay, more benefits, shorter hours, no layoffs, and so on? (Hint: Consider the substance of the previous lecture in answering this question.)

Lecture Twelve

The Growing Inequality of Wages

Scope: From the mid-1970s into the mid-1990s, the inequality of the wage distribution increased in the United States; that is, high-income folks received a larger share of the pie. This move toward greater inequality was not offset by a greater degree of mobility in the income distribution.

A number of different explanations have been proposed for the rise in inequality, some more persuasive than others. Among the unpersuasive explanations are government tax and welfare policy, and immigration. Two factors that seem to have contributed to growth in wage inequality, without being the major force, are changes in family structure and foreign trade. But the primary factor, most economists seem to agree, are change in the technology of production, many of them related to computers and information technology, that have made high-skilled labor worth relatively more compared to low-skilled labor.

This is a case where trying to solve a problem by eliminating its causes seems an unwise way to proceed: trying to solve wage inequality by restricting technology, trade, and choices about families is not a promising policy agenda! Perhaps the U.S. system of taxes and support for the poor could take a little more from the rich and give a little more to the poor, but there are limits to how far those policies can go before becoming counterproductive. There is some hope, however, that market forces will react to the wage inequality and reduce it over time—perhaps with a discreet push from public policy.

Outline

I. An overview of the wage distribution

A. Inequality by quintiles
A common way to look at the wage distribution is to split it into pieces—into separate percentiles, or tenths, or fifths—and then look at how much of the overall income in a year is received by each group. If the distribution is split into fifths, or quintiles, the share of income received by the top fifth increased from about 41% to 46%.

B. The unexpectedness of the rise in inequality
A shift of this size in income inequality was very unexpected; the proportions of income going to various parts of the income distribution moved a little from year to year, but hadn't shifted substantially since before World War II up to about the 1980s.

C. How much should this inequality bother us?
There are lots of potential reasons for inequality: some people may work longer hours, or take more entrepreneurial risk. Some may be at later points in their career, and so get more pay to go with their greater experience. Some may have had a family and educational upbringing that didn't prepare them well for the labor force. People will differ on how much they are bothered by inequality, but there seems a rough consensus on two points: 1) To the extent that the inequality is predetermined by social factors, rather than choices and abilities of individuals, it is a greater problem; and 2) Greater inequality is somewhat more worrisome than lesser inequality.

D. Mobility in the income distribution
Many of us would worry less about inequality if it appears that a number of poor people are working their way up the income distribution. However, mobility across the income distribution is relatively limited; one study (at the University of Michigan) showed that of those who start in the bottom fifth of the income distribution, half are there 10 years later. Of men, two-thirds were still at the bottom or second quintile over time. "Rags to riches" seems to be a myth, based on these data.

II. Candidates for the cause of higher wage inequality

A. Tax and welfare policy
Since the wage distribution was becoming more unequal during much of the 1980s, Democrats liked to blame it on the tax and welfare policies of the Reagan administration. But the changes predated the Reagan administration and continued into the Clinton administration. The changes also occurred in before-tax income and wages, not after-tax, after benefit income, and occurred in many countries. It seems highly unlikely that all of this was somehow Reagan's fault.

B. Changes in family structure
There has been a growth of single-parent (especially women), one-earner families. In addition, there has been something of a social shift toward men and women who are both highly paid professionals marrying each other, rather than the old stereotype of the male doctor or businessman marrying a nurse or secretary. Both of these changes should tend to increase inequality for households, but they amount to a relatively small part of the change, perhaps one-fifth or so.

C. Unions
Unions have declined steadily in the proportion of the workforce that they represent since the mid-1950s. (Union members are now about 14% of the workforce.) Since unions tend to promote more equal wages, this decline may have increased inequality. However, unions were already so weak by the early 1980s that it is hard to imagine this effect was especially large.

D. Minimum wage

The real value of the minimum wage diminished substantially, by perhaps 20% to 25% in actual buying power, from the late 1970s until the early 1990s. For those at the bottom of the wage distribution, this could have reduced their earning power. This assumes, of course, that businesses would have kept them on the same number of hours even at the higher minimum wage, a point of some controversy. It may account for 10% or less of the wage inequality.

E. Globalization: trade and immigration

1. The trade hypothesis and counter-argument

U.S. imports from poor developing nations, where rates of pay can be very low, have risen in the last few decades. This would seem to imply that U.S. workers are having to compete with very low-paid workers elsewhere. But the overall effects may be small. Say that 20 percent of workers in the U.S are low-skilled, but probably 90 percent of them are not in import-competing work. As a result, imports would affect the wages of only 2 percent of the workforce. Remember, wages are set primarily by productivity. Mainstream estimates are that this factor might account for 20% of the rise in inequality.

2. Immigration

Low-skilled immigrants will compete with low-skilled U.S. labor, and perhaps drive down their wages. The economic studies of this effect find that it is real, but small—typically only 1-2% of wages, which isn't enough to explain much of the overall impact.

F. Technology and shifts in the production process—the primary factor? There are a lot of new ways of running and organizing production out there, many of them interrelated to the development of new computer and information technology. As technology becomes more important, high-skilled workers who can make good use of that technology are worth more; conversely, low-skilled workers may sometimes find themselves replaced by that technology, or the technology will find ways of reorganizing work that requires less low-skilled labor. A dynamic like this is typically cited by economists as the most likely reason for the increase in wage inequality.

III. Solutions to the rise in wage inequality

A. The unproductiveness and futility of going after underlying causes

The case of wage inequality is one situation where it doesn't make sense to try to address a problem by reversing its underlying causes. Trying to block new technology, or trade, or shifts in family patterns isn't much of a policy agenda.

B. Higher taxes and transfer payments? There are three reasons that this is not a desirable solution.

1. Politically unlikely

The political tides are clearly running against a substantial increase in redistribution to the poor.

2. Incentive issues

Taxing the rich reduces their incentives to work and increases their incentives to find legal ways of investing to evade taxes. Subsidies for the poor, depending on how they are designed, can discourage work. There are ways to sidestep these problems, to some extent, with clever design of taxes or subsidies, but there are also limits to how far society can go.

3. Redistribution isn't involvement

Redistribution can move income around. But if the underlying purposes is to get people involved in the ebb and flow of the economy, and to help the poor and unemployed become willing employees for eager employers, higher taxes and welfare payments won't have that effect.

C. Can government give market forces as push to reduce inequality?

1. The education response

Historically, at times when the returns to higher skill were high, people were encouraged to get more education, until the higher supply of high-skilled labor reduced the inequality.

2. The labor market response

For the same reason that a large majority of people can never be in the top quintile—it's mathematically impossible—it's also true that a majority of workers are never going to be "high-skilled." The challenge isn't just creating some additional high-skilled workers, but also figuring out how to have worthwhile and acceptable lifetime career paths for the many people who don't complete a four-year college degree, much less an additional professional degree. The country may need to think about better organization of internships, support of community colleges, and better ways to connect workers to jobs.

Essential Reading:

Council of Economic Advisers, "Inequality and Economic Rewards." Appears as Chapter 5 in *Economic Report of the President*, February 1997, pp. 163-188 Available on the web at a number of places; one good connection is at <http://www.gpo.ucop.edu/catalog/erp97.html>, and then click on Chapter 5. This helpful chapter summarizes the recent trends in inequality and mobility across the income distribution, looks at underlying causes, and suggests some policy solutions. Since the report is written by economists for a Democratic administration, it tends to be fairly optimistic about how helpful a higher minimum wage or federal job training efforts can be, while the lectures on these subjects (later lectures will take these subjects up in more detail) is somewhat less optimistic. But this chapter does a fine job of laying out the basics of the issue.

Supplementary Reading:

Three articles from the *Economist* magazine: "Inequality: For richer, for poorer," November 5, 1996, pp. 19-21. "Schools brief: Workers of the world, compete," April 2, 1994, pp. 69-70. "First among unequals," January 14, 1994, p. 73. These three articles address the issues of inequality from different angles. The first summarizes the facts over rising inequality and a number of the arguments over causes. The second and third articles focus on the issue of the extent to which trade with developing economies may be increasing wage inequality in the United States. The answer seems to be that it is one of the contributing factors, but not a primary one—and that the best policy answer is not to respond by attempting to restrict trade.

Krugman, Paul, "Technology's Revenge," *Wilson Quarterly*, Autumn 1994, pp. 56-64. Krugman is an eminent academic economist. In this article, he presents the argument that technology is the most likely cause of growing income inequality during the 1980s. However, he then offers a provocative historical twist: an argument that even if technology is bringing greater inequality just now, technological waves of the past have sometimes brought greater equality, as when the assembly line helped millions of workers reach upper-middle-class status during their careers. He predicts that information technology will also, eventually, bring about a wave of greater equality.

Questions to Consider:

1. How much does rising inequality of wages bother you personally? Why or why not?
2. Which causes of rising wage inequality do you find most plausible and least plausible?
3. Would you support a substantial increase in taxes on the rich and payments to the poor for the purpose of reducing inequality?

Notes