Contemporary Economic Issues
Part I
Professor Timothy Taylor
Timothy Taylor
Managing Editor, *Journal of Economic Perspectives*
Macalester College

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.
# Table of Contents

**Contemporary Economic Issues**  
**Part I**

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professor Biography</td>
<td>i</td>
</tr>
<tr>
<td>Foreword</td>
<td>1</td>
</tr>
<tr>
<td>Introduction</td>
<td></td>
</tr>
<tr>
<td>Lecture One</td>
<td>4</td>
</tr>
<tr>
<td>I. Competition and Regulation</td>
<td></td>
</tr>
<tr>
<td>Lecture Two</td>
<td>8</td>
</tr>
<tr>
<td>Lecture Three</td>
<td>12</td>
</tr>
<tr>
<td>Lecture Four</td>
<td>15</td>
</tr>
<tr>
<td>Lecture Five</td>
<td>19</td>
</tr>
<tr>
<td>Lecture Six</td>
<td>23</td>
</tr>
<tr>
<td>Lecture Seven</td>
<td>27</td>
</tr>
<tr>
<td>Lecture Eight</td>
<td>32</td>
</tr>
<tr>
<td>Lecture Nine</td>
<td>36</td>
</tr>
<tr>
<td>II. Labor Markets</td>
<td></td>
</tr>
<tr>
<td>Lecture Ten</td>
<td>40</td>
</tr>
<tr>
<td>Lecture Eleven</td>
<td>44</td>
</tr>
<tr>
<td>Lecture Twelve</td>
<td>47</td>
</tr>
</tbody>
</table>
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 trade-offs 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 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, 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

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.
   C. The payoff to deregulating electricity and telephones
      The payoff from deregulating telephones and electricity could be a savings of billions of dollars a year to consumers. Even further, savings in these key industries will boost many other U.S. firms, since many companies rely heavily on telephones and electricity!

Essential Reading:
Cairncross, Frances, "Telecommunications: The Death of Distance," *Economist*, September 30, 1995, special survey in center of magazine, pp. 1-28. The surveys in the center of the *Economist* are almost always fine stuff; this one certainly is. It gives a fine overview of the issues facing telecommunications, not only in the United States but in an international perspective, too. It discusses how the technology of telecommunications is driving down costs, making the natural monopoly argument obsolete, and opening up markets to pressures of new competition. Cairncross also argued persuasively that within a few years, it will cost not much more to provide a call half-way around the world than it will to call across town.

Brennan, Timothy J., Karen L. Palmer, Raymond J. Kopp, Alan J. Krupnick, Vito Stagliano and Dallas Burtraw, *A Shock to the System: Restructuring America's Electricity Industry*. Washington, D.C., Resources for the Future, 1996. This reader-friendly relatively short book was put together as a basic introduction to the issues of electricity deregulation. It does a very nice job of setting the stage for what is happening, laying out the range of issues and possible policy response, and all the while introducing and defining key terms as they arise. If you are willing to invest a few hours, this book can go a long way in getting you up to speed on what the issues here are all about.

Supplementary Reading:
Crandall has been an advocate of sweeping deregulation of the telephone laws. He believes that the technological changes in the telephone industry are such that with minimum deregulation, quite a lot of competition would occur quite quickly. The first article, written before the Telecommunications Act of 1996, gives a sense of the possibilities for telecommunications competition. The second piece argues that the telecommunications law as passed doesn't go nearly far enough toward true deregulation of telephone services.

"Chopping up America's power," *Economist*, May 3, 1997, pp. 21-22. This useful article offers a crisp recent overview of events and issues about electricity deregulation. It focuses on how the political issues are being fought out, what compromises are being made on stranded costs, and offers a sidebar on the issue of whether it makes sense for the federal government to keep offering subsidies to rural electrical cooperatives.

**Questions to Consider:**

1. Explain the rationale for cost-plus regulation in the telephone and electricity industry? Explain why it seemed to make so much sense to so many people for so long—and why it stopped making so much sense.
2. How would you suggest resolving the problems of stranded costs and equal access? How should these issues be decided?
3. Discuss what you think the future of the electricity and telecommunications industry will look like. Can you imagine having a choice of multiple local phone companies or electricity providers?
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 providers 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&Ls; 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 their 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. Geographical 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)

<table>
<thead>
<tr>
<th></th>
<th>Costs</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental</td>
<td>$144</td>
<td>$162</td>
</tr>
<tr>
<td>Other Social</td>
<td>$ 54</td>
<td>$136</td>
</tr>
<tr>
<td>Economic</td>
<td>$ 71</td>
<td>---</td>
</tr>
<tr>
<td>Paperwork/disclosure</td>
<td>$ 10</td>
<td>---</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$279</td>
<td>&gt;$298</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>For children's sleepwear size 0-6X</td>
<td>$0</td>
</tr>
<tr>
<td>For upholstered furniture</td>
<td>$300</td>
</tr>
<tr>
<td>For children's sleepwear size 7-14</td>
<td>$45,000-$160,000</td>
</tr>
</tbody>
</table>

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

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

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

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raise seat back height from 20&quot; to 24&quot;</td>
<td>$150,000</td>
</tr>
<tr>
<td>Add external loudspeakers to school buses</td>
<td>$590,000</td>
</tr>
<tr>
<td>Seat belts for passengers in school buses</td>
<td>$2,800,000</td>
</tr>
<tr>
<td>Staff school buses with adult monitors</td>
<td>$4,900,000</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ban asbestos in brake blocks</td>
<td>$29,000</td>
</tr>
<tr>
<td>Ban asbestos in pipeline wrap</td>
<td>$65,000</td>
</tr>
<tr>
<td>Ban asbestos in roofing felt</td>
<td>$550,000</td>
</tr>
<tr>
<td>Ban asbestos in clutch facings</td>
<td>$2,700,000</td>
</tr>
<tr>
<td>Ban asbestos in reinforced plastics</td>
<td>$8,200,000</td>
</tr>
<tr>
<td>Ban asbestos in yarn and thread</td>
<td>$34,000,000</td>
</tr>
<tr>
<td>Ban asbestos in automatic transmission</td>
<td></td>
</tr>
</tbody>
</table>

©1998 The Teaching Company Limited Partnership
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

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


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 cleanup. 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.doc.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

<table>
<thead>
<tr>
<th>Enterprises</th>
<th>Estimated market value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tennessee Valley Authority</td>
<td>$12 billion</td>
</tr>
<tr>
<td>Five power marketing agencies</td>
<td>$14 billion</td>
</tr>
<tr>
<td>Federal dams</td>
<td>$20 billion</td>
</tr>
<tr>
<td>Other government energy facilities</td>
<td>$10 billion</td>
</tr>
<tr>
<td>U.S. Postal Service</td>
<td>$ 8 billion</td>
</tr>
<tr>
<td>Global positioning system</td>
<td>$ 7 billion</td>
</tr>
<tr>
<td>National Weather Service</td>
<td>$ 3 billion</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Assets</th>
<th>Estimated market value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commodity lands</td>
<td>$160 billion</td>
</tr>
<tr>
<td>Loan portfolio</td>
<td>$108 billion</td>
</tr>
<tr>
<td>Strategic petroleum reserve</td>
<td>$13 billion</td>
</tr>
<tr>
<td>Broadcast frequencies</td>
<td>$ 9 billion</td>
</tr>
<tr>
<td>Government buildings/land</td>
<td>$10 billion</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Estimated market value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highways and bridges</td>
</tr>
<tr>
<td>Wastewater treatment</td>
</tr>
<tr>
<td>Commercial airports</td>
</tr>
<tr>
<td>Water systems</td>
</tr>
<tr>
<td>Electric utilities</td>
</tr>
<tr>
<td>Ports</td>
</tr>
<tr>
<td>Parking structures</td>
</tr>
<tr>
<td>Waste-to-energy plants</td>
</tr>
<tr>
<td>Gas utilities</td>
</tr>
</tbody>
</table>

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.


**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 no 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 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:

Counsel 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—to 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:

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?
Contemporary Economic Issues
Part II
Professor Timothy Taylor
Timothy Taylor
Managing Editor, Journal of Economic Perspectives
Macalester College

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.
# Table of Contents

## Contemporary Economic Issues

### Part II

<table>
<thead>
<tr>
<th>Section</th>
<th>Lectures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Professor Biography</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Foreword</strong></td>
<td></td>
</tr>
</tbody>
</table>

## II. Labor Markets

<table>
<thead>
<tr>
<th>Lecture</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thirteen</td>
<td>The Rise and Fall (and Rise?) of American Unions</td>
<td>4</td>
</tr>
<tr>
<td>Fourteen</td>
<td>Discrimination against Women and Minorities in the Labor Market</td>
<td>7</td>
</tr>
<tr>
<td>Fifteen</td>
<td>Taking the Economics out of Immigration</td>
<td>11</td>
</tr>
<tr>
<td>Sixteen</td>
<td>Welfare Reform</td>
<td>14</td>
</tr>
<tr>
<td>Seventeen</td>
<td>Raising Wages for the Working Poor: Minimum Wages, Wage Subsidies and Job Training</td>
<td>18</td>
</tr>
</tbody>
</table>

## III. Growth and Productivity

<table>
<thead>
<tr>
<th>Lecture</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eighteen</td>
<td>The Race for Global Economic Leadership</td>
<td>21</td>
</tr>
<tr>
<td>Nineteen</td>
<td>Can We Increase U.S. Savings and Investment?</td>
<td>24</td>
</tr>
<tr>
<td>Twenty</td>
<td>Reform of K-12 Education</td>
<td>27</td>
</tr>
<tr>
<td>Twenty-One</td>
<td>The Delicacies of Investing in Infrastructure</td>
<td>30</td>
</tr>
<tr>
<td>Twenty-Two</td>
<td>Technology, Research and Development</td>
<td>33</td>
</tr>
<tr>
<td>Twenty-Three</td>
<td>Is the Stock Market Headed for a Crash?</td>
<td>36</td>
</tr>
<tr>
<td>Twenty-Four</td>
<td>The Supply-Side Economics Movement</td>
<td>39</td>
</tr>
</tbody>
</table>
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, nontechnical 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 Thirteen
The Rise and Fall (and Rise?) of American Unions

Scope: The peak of America's union movement was from the mid-1930s to the early 1950s, when about one American worker in three belonged to a union. Since then, unions have been in steady decline. By the end of the 20th century, only about 14% of American workers belong to unions; in the private sector, the proportion has fallen below 10%. No other industrialized nation has seen such a dramatic and sustained fall in its unionization rates.

A number of reasons have been proposed for the decline of unions: industry deregulation, globalization, improved government protections for workers, a broad economic shift away from union-style jobs, the tone and substance of U.S. labor law, and the mixed-to-poor public image of unions. Perhaps the most important of these factors is the U.S. law governing union elections, which give management considerable leeway to fight off a union.

The economic effects of unions are mixed. Union workers receive higher wages, other measurable factors equal. Unions impose more restrictive work rules, which can sometimes block productivity increases. Unions tend to have compressed pay scales, which promotes greater equality in the wage distribution. In high profit industries without much competition, unions tend to reduce profits. They offer workers a voice in how their work is done, a factor that can improve productivity. One's judgment about unions comes down to how one weighs and balances these many factors.

Outline

I. Snapshots of America's unions
   A. Declining rates of unionization
      Union density grew from 12 percent of workers in 1930 to a peak of 35 percent in 1945-46, when government encouraged unionization as part of the push to increase production during World War II. The 35 percent unionization figure was matched in 1954, but since then, unionization has steadily declined to about 14% of the workforce in 1997.
   B. International comparisons: unions vs. collective bargaining
      There are two important dimensions to looking at what share of a country's workforce is unionized. One is what percentage of workers belong to a union; the other is what share of workers have their salaries determined by collective bargaining. In the United States, these are much the same. But in many other countries, a number of workers have their salaries determined by collective bargaining without officially belonging to a union. France is the extreme example, where only 10% of the workforce officially belongs to a union, but 92% of workers have wages determined through the collective bargaining process. By either measure, U.S. unionization rates are among the lowest in the world. The theory of American "exceptionalism" is that we have never had a strong class-based movement in the U.S.
   C. Characteristics of union workers
      A higher proportion of mid-career workers, age 34-55 belong to unions as opposed to other age brackets. Men are more likely to belong to a union than women. Sectors of the economy like government, transportation and public utilities, construction and manufacturing are more highly unionized; industries like agriculture, services, and finance, insurance and real estate are less likely to be highly unionized.

II. Why this decline?
   A number of complementary reasons have been proposed for why American unions have declined.
   A. Economy has shifted away from union-style jobs
      The historical roots of unions seemed to be in blue-collar manufacturing jobs: cars, steel, factories. But manufacturing jobs have not increased in the United States over the last few decades; all the job growth has been in other sectors like services and government. So the union base as it existed back in the 1950s and 1960s did not expand by much. Only 15% of jobs were in manufacturing in 1997.
   B. Increased competition from deregulation
The United States has deregulated a number of industries since the 1970s that had a strong union presence: trucking, airlines and telecommunications are three examples. The union share of the trucking workforce fell from 49% in 1973 to 23% by 1996. Over that same time, unionization in the airline industry fell from 46% to 36%, and in the telecommunications industry from 59% to 29%.

C. Increased competition from globalization
Other traditionally highly unionized sectors, like automobiles and steelmaking, have faced greater competitive pressure from global competition. To meet and match the competition, non-union auto and steel producers have also opened up in the United States. Unions now tend to oppose free trade initiatives, as opposed to their earlier position.

D. Increased government protections for workers
Government has intervened in labor markets to assure safe workplaces, to offer protections against discrimination and harassment, to pass laws against overtime without extra pay for hourly workers, and much more. As a result, some of the impetus for unions has been reduced; when workers are upset, they lobby their Congressman, not their union representative.

E. The tone and substance of U.S. labor law
Many of these economic factors and government protections exist in other industrialized countries, too—but their unionization rates are far higher than that in the United States. This implies that something is different about the United States. One possibility is that labor law in the United States makes it more difficult to organize a union than in many other countries.

F. The public image of unions
People don't have a lot of trust in unions as institutions; in fact, they trust them about the same amount as they trust media and big business! Clearly, this doesn't help union credibility when it comes time to organize.

G. Unions aren't trying as hard
The amount of money and energy that unions spend on organizing seems to have diminished somewhat from the 1960s into the 1980s, although there are some tentative signs of a rebound in the later 1990s.

III. What is gained and what is lost with unions?

A. Higher wages
Union workers seem to be paid higher wages; about 20% more after adjusting for factors like age and experience. These higher wages for union members don't seem to come at the expense of lower wages for nonunion members.

B. More restrictive work practices
Unions restrict the flexibility of management to adjust work practices. There are some vivid examples of where this has led to craziness, but overall, it seems more of an annoyance to management than a genuine substantial hindrance.

C. Greater equality of wages
Unions members receive higher wages, which might add to inequality. But those within unions receive more equal wages, which tends to diminish inequality. Of these two factors, the predominant force is to diminish inequality.

D. Lower profits in some industries
In highly competitive industries, which tend to have low profits, union and nonunion firms have about the same level of profits. Less highly competitive industries, like many of the industries before globalization and deregulation, tend to have higher profits. In these industries, unionized firms have lower profits than nonunion; in other words, union firms redistribute some of those higher profits to workers.

E. Strikes
Strikes are bad for both unions and management. However, they are typically not as bad for the economy as a whole, because the economy is flexible enough to adjust. The number of strikes and days lost to strikes fell between the 1970s and 1980s.

F. The ambiguous effects on productivity
1. Less turnover
Union workers stay longer on the job, which means that union employers save money on lower turnover costs. Also, because they stay longer on the job, union workers tend to have accumulated more specific training and experience for that job. This might save 1% - 2% a year.

2. Ambiguous effect on adopting new technology
Unions sometimes try to block new technology, for fear it will cost jobs, and other times try to encourage new technology, recognizing that it will bring higher wages and more long-term job security. Also, union workers may feel more secure in their jobs, and trust their leadership to look out for them, so they may resist new technology less. There are examples of both forces; they probably roughly counterbalance each other in aggregate.

3. The higher wage/higher capital adjustment
Because union workers get higher wages, union employers try to conserve on this high-priced labor by buying more machines. The result is that union employees tend to be working with more capital than nonunion employees, which in turn means that the output of union employees is higher.

IV. "Voice and exit" (from Hirshman's 1971 book)
Most corporations operate on the premise of "exit," and offer incentives on the notion that if you don't like it, you can go get a job somewhere else. Unions operate on the notion of "voice"—that the worker will be staying with the company, and has an incentive to work with the organization, at least to some extent. There are any number of important issues in the workplace—flex-time, parental leave, flexible benefits, worker safety, codes of conduct and respect, adopting new technologies—and workers as a group probably have some useful input to offer in these decisions. Unions don't seem to be dealing with these issues, however, putting them somewhat on the fringe. There is some economic reason to hope that unions can pull themselves together to mount at least a minor comeback.

Essential Reading:
Freeman, Richard B., and James L. Medoff, What Do Unions Do? New York: Basic Books, Inc., 1984. This is one subject where there is clearly a single best book to read to get the perspective of economists, and this is the book. This book isn't always an easy read. But it offers rich rewards in the way it moves beyond simple-minded reactions to unions, and carefully thinks through the issues of the impact of unions on organizations in a wide variety of dimensions. A good way to tackle a book like this is to read the introductory and concluding chapters, and then dip into the chapters in the middle, which spell out the evidence and reasoning, according to your time and interests.

Recommended Reading:
Check out the AFL-CIO Website, at <http://aflcio.org>. For example, click on "The Union Difference" for a number of helpful fast facts and graphics about how organized labor sees itself, its membership, and some of the issues surrounding unions.

"Beer, sandwiches, and statistics," Economist, July 12, 1997, p. 70. This short article discusses how unions have declined somewhat internationally. This offers economists a chance to study the effects across different countries. Interestingly, the decline in unions seems to have little effect on unemployment, but it does seem to have produced greater inequality.

Puddington, Arch, "Is Labor Back?" Commentary, July 1998, pp. 39-42. This article focuses on whether organized labor seems likely to see a resurgence. The analysis is more political than economic in a number of places, but the answer is clearly "no." I find it especially troubling for the political future of organized labor that unions seem to be turning away from the broad center of American politics.

Questions to Consider:
1. What are the most plausible reasons to you for the decline of American unions? What are the least plausible reasons?
2. Do you think that unions raise or lower productivity? Evaluate the arguments on each side.
3. Do you agree with the conclusion of the lecture? Would you welcome the arrival of the right type of union leader, together perhaps with a change in U.S. labor laws that would make it easier to form unions?
Lecture Fourteen

Discrimination against Women and Minorities in the Labor Market

Scope: The economics of discrimination begins with an argument that some will find peculiar: a free and competitive market should be a powerful weapon for ending discrimination. The logic is that discriminatory employers will be cutting themselves off from good workers, which will force them to accept lower profits, or in the end, even drive them out of business. This theoretical argument runs smack-dab into the reality of discrimination in America. Whatever the arguments over the extent of discrimination in the 1990s, there is no doubt whatsoever that discrimination against minorities and women in the labor market was common for many decade of U.S. history, and the free and competitive market didn't make it go away.

This lecture discusses the economic theory of discrimination, and how it has been tweaked and adjusted to fit the reality; the evidence of discrimination and how it has shifted over time; and the range of policy alternatives for reducing discrimination in the future. The focus is on women and African-Americans, rather than on other ethnic minorities.

Outline

I. How competitive markets can fight discriminatory wage patterns
   A. The Becker hypothesis
      Gary Becker of the University of Chicago, who would later win a Nobel Prize, pointed out some years ago that profit-seeking employers in a free market should exert pressure against discrimination, because they will have an incentive to pay workers according to their productivity.
   B. Limitations to market power
      1. Trading profits for discrimination
         Becker's approach does not assure that discrimination disappears. An employer who is willing to accept somewhat lower profits, for example, can continue to practice discrimination.
      2. The possibility of a segregated labor market
         Another possible outcome of the Becker approach is that discriminatory firms will refuse to hire blacks or women, and so non-discriminatory firms may end up with disproportionate numbers of blacks and women. At an extreme, companies could end up being segregated, but if they all pay according to productivity, then no one is directly economically injured.

II. Evidence on labor market discrimination
   A. The undeniable existence of historical discrimination: How far have we come?
      There is simply no denying that labor market discrimination against women and blacks existed openly for decades. It also seems plausible for most people that the extent of such discrimination has diminished in recent decades. But there is considerable controversy over how much the extent of discrimination has fallen.
   B. More recent evidence on women's wages and employment prospects
      1. Employment figures and the wage gap
         Women exploded into the paid workforce in substantial numbers in the 1960s and 1970s, as a result of a substantial shift in social customs. The "raw" wage gap between men and women—that is, the gap unadjusted for other factors—has closed to some extent in the 1980s and 1990s. In 1960, 38% of American women were in the workforce, of whom 31% were married and 28% had children. By 1997, 60% of women were working, of whom 62% were married and 71% had children.
      2. How much of the raw wage gap is discrimination?
         A variety of statistical studies have found that factors like education, job experience, and whether the person has done full- and part-time work can explain all or almost all of the wage gap between men and women. Tenure and experience help explain the early persistence of the gap.
      3. The persistent "family gap"
For one group of women, however, the wage gap has remained and seems to be widening; women with children. The straightforward explanation seems to be that women have a disproportionate share of the child-birthing, child-caring, and child-rearing responsibilities, and that these factors translate into lower wages. Men with children earn 10% to 15% more.

4. The glass ceiling
The "glass ceiling" refers to a phenomenon in which women rise through the organization—up to a point. Then, they bump against the "glass ceiling" and rise no further. It is surely true that in large companies, the top managers remain disproportionately male. What is difficult to say is whether this will change in the next decade or so as women who entered the workforce in the 1970s and 1980s reach the age when men usually ascend to the top of the management ladder. One consequence of this is growth in women-owned businesses.

C. More recent evidence on African-American wages
1. Employment and wage gap evidence
Blacks have higher unemployment rates than whites, even in times of high employment. They also have lower wages, and statistical studies have found that these lower wages cannot be easily explained by differing levels of education, job experience, or other easily measurable factors.

2. How much of the raw wage difference is discrimination?
Statistical studies that seek to sort out how much of the wage gap is due to different levels of education, job experience, and so on, typically find that these other factors leave 10-15% of the gap in black male wages unexplained, and a smaller share for black female wages.

3. Other evidence on discrimination: audit studies and skin color studies
Audit studies, where matched pairs of people apply for jobs, also show some evidence of discrimination. Studies have also been done that look at people from a common neighborhood or high school according to skin color; such studies often find that among blacks or Hispanics, even after adjusting for education and experience, those with darker skin earn less.

III. Adjustments in economic theory
A. "Statistical" discrimination and slow learning
The theory of statistical discrimination is that employers know that they don't know everything about job applicants. They also believe that, on average, the credentials of a black applicant like a high school diploma or college degree are of lesser quality than those of a white applicant, because of a lower quality of school. They act on this belief—which need not be true!—and thus discriminate out of a broader statistical belief while trying to hire the "best" employee for the job.

B. Social pressure and sanctions
If society as a whole wishes to discriminate, it may direct business away from firms that are run by minorities or women, or away from employers who promote women and minorities aggressively. This would mean that a profit-seeking business might lose money by trying equal treatment!

C. The self-fulfilling aspect of discrimination
Discrimination can bring about a self-fulfilling prophecy. When you expect to be discriminated against, you may try less hard. When things get difficult, the pressure from discrimination may make it harder to tough it out and work through. The result can be that those who are discriminated against end up having less experience or lower levels of education; however, those are not separate factors, but rather another aspect of discrimination.

IV. Public policy responses
A. Anti-discrimination laws
A variety of anti-discrimination laws have been passed in the last few decades, perhaps most notably the Civil Rights Act of 1964 and the Equal Pay Act of 1963, which have been expanded over time by both federal and state laws. Enforcement actions under these laws continue in the 1990s, and have led to some large and well-publicized legal settlements. However, it seems unlikely that most of the remaining discrimination is of the sort that will be rooted out by these sorts of laws.

B. Affirmative action laws
The evidence on economic effects of affirmative action is not extensive. It does appear to have had a mildly positive effect on the hiring of blacks and women in the 1970s, but not much of a measurable effect since then.

C. Policies focused on equality for women workers
   1. The controversies over "comparable worth"
      "Comparable worth" is the general name for proposals to figure out what each job is worth by ranking jobs on a scale that includes factors like the experience and education needed to do the job, whether the job is physically taxing or unpleasant, and so on, and then setting pay according to this ranking—even if the ranking disagrees with the market wages. With a few exceptions, economists are not typically big fans of such schemes. They tend to discourage breaking down the gender groupings of jobs, which are presumably the underlying problem. They also cause difficulties for organizations that are trying to pay more than the market wage for some jobs and less than the market wage for other jobs.
   2. Counterbalancing the economics of motherhood
      Policies aimed at reducing the economic costs of motherhood, or at making it easier for mothers to keep some attachment to the workforce, might help reduce the family gap. Such policies would include extended maternity leave; government-supported child-care; support for flex-time and part-time work; and so on.

D. Policies focused on equality for blacks: aggressive early outreach
   A growing body of evidence is finding that those who have problems with getting a good education, or being socially well-adjusted, often start having those problems very early: certainly before high school, perhaps even before grade school. However, aggressive efforts in early childhood to assure that children have a good diet and a good foundation for learning can have significant payoffs later in life.

Essential Reading:
Beck, Barbara, "Women and Work: For better, for worse," Economist, July 18, 1998, special section in center of issue, pp. 1-16. This is yet another of the fine surveys that appear occasionally in the center of the Economist. As is typical of the Economist, it offers a usefully international perspective. It describes the massive movement of women into the workforce; raises the persistent questions of nagging discrimination and issues raised by child-bearing; and lays out some of the public policies that might be effective in redressing these issues. But most of the article is just a good, vivid description of the changes that have occurred and their underlying social and economic causes.

Supplementary Reading:
U.S. Department of Labor, Equal Pay: A Thirty-Five Year Perspective. June 10, 1998, U.S. Department of Labor website: <http://www.dol.gov/dol/wb>. The Equal Pay Act of 1963 was one of the first laws to guarantee equal pay for men and women who held the same job. This report was written to describe the progress that has been made since then, and what remains to be done. The report itself is fairly short, and an easy read. It has useful illustrative figures throughout—and the actual data behind the figures, for those (like me) who like to see the numbers, is at the end of the report.
U.S. Department of Labor, Report on the American Workforce. Washington, U.S. Government Printing Office, annual report. For an overview of statistics on wages according to gender and ethnicity, see the tables in the back of this annual report. In the 1997 issue of the report, for example, it's Table 33.
Questions to Consider:

1. Recent court cases have gone against affirmative action programs in college admissions. What impact will this have on the ability of minorities to compete in the workplace? What do you see as the future of affirmative action in hiring policies and such programs as minority business set-asides?

2. Why what extent do you think the Becker Hypothesis is operative in today’s labor market? If it is not, what public policy steps should be taken, if any?
Lecture Fifteen

Taking the Economics out of Immigration

Scope: Immigration is a subject of strong images, like the Statue of Liberty, and it brings with it strong emotions. Many of the central issues about immigration transcend economics, and will not be dealt with in this lecture. Instead, the goal here is to focus in on the economic issues.

A first set of issues concerns the impact that immigration has on the economy, on jobs, and on wages. The impact on the economy is typically positive, but modest. The impact on the number of jobs is negligible. The impact on wages will tend to be slightly negative for those with whom immigrants are competing for jobs—primarily low-skilled workers—but slightly positive for those who find it useful to hire immigrants or purchase products they have made—primarily high-skilled workers. A second set of issues concerns the impact of immigration on the public purse; that is, what do immigrants pay in taxes, what sort of government benefits do they receive, and how does the balance look at different levels of government.

Most people do not believe either in closing the border to immigration altogether, nor in opening it without restrictions. If we are going to limit the number of immigrants, then we will need to pick and choose and set some limits. A variety of judgments should go into this decision, many of them not economic in nature, but economics can play a role, as well.

Outline

I. Levels of immigration in perspective
   A. Perspectives on immigration over time
      The actual number of immigrants to the United States was quite high in the first two decades of the 20th century, and then declined with war and Depression, before rebounding in the last two decades to similar real numbers as at the beginning of the century. Since population grew during the century, immigration in proportion to population is lower at the end of the century than at the beginning.
   B. What about illegal immigration?
      There are a variety of indirect methods of estimating the total number of illegal immigrants in the United States; typical estimates run between 4 – 5 million total (not yearly).

II. Immigration and the overall economy
   A. A hypothetical replication example
      Imagine that immigrants as a group had exactly the same profile of age, work experience, education, and all other socioeconomic characteristics as the rest of the U.S. population. In this hypothetical case, the arrival of immigrants would make the U.S. economy bigger, but probably wouldn't have much affect on the per capita GDP, or the standard of living.
   B. Economic effects of immigration must come from differences
      Economic gains from immigration (as with all economic gains) must come from shifting patterns of economy. For example, low-skilled immigrants may work at jobs, like child care, housecleaning, and food preparation, that allow high-skilled America women to participate more aggressively in the paid workforce. Or high-skilled immigrants may introduce innovations that benefit economic growth. Immigration adds $7 to $10 billion to the GDP (only 1% of the total GDP).
   C. Immigration and the overall level of jobs
      There is no empirical evidence or theoretical reason to believe that immigration reduces the number of jobs or raises the unemployment rate; indeed, there are compelling reasons to believe otherwise. This is a good time to review the "lump of labor" fallacy from Lecture Ten.
   D. Immigration and wage disparities
      A number of studies have found that immigrants affect wage patterns. Since immigrants are relatively low-skilled, they compete for low-skilled jobs, and drive down wages of low-skilled workers. However, low-skilled immigrants are also complementary with high-skilled workers, and thus their presence tends to raise the wages for high-skilled workers. The overall size of these effects is quite small, usually about 1%, and...
disappears altogether in some studies. The negligible effect seems to be true for black unskilled labor and also geographically.

III. The effect of immigration on the public purse

A. Taxes paid, services rendered, the uncertain balance
   Figuring out what immigrants pay in taxes is a relatively straightforward, back-of-the-envelope approach, due to George Borjas: look at their income, and multiply by a reasonable percentage that takes into account all the taxes people face. However, figuring out which services to charge immigrants for is trickier. For example, if immigrants are charged only for the school, medical, and welfare benefits they consume directly, they certainly pay for themselves—but this implies that immigrants are making no contribution to any other government spending programs. The issue of how much relatively low-paid workers like immigrants should be expected to contribute to other government programs doesn't have an obvious answer, but how you answer that question will determine whether immigrants as a group pay enough in taxes to cover what they receive from government.

B. An aside on illegal immigration
   Since illegal immigrants aren't eligible for welfare, the main costs they impose on the state and local governments are schools, health care, and law enforcement. However, even when they don't file income tax forms, they typically do have Social Security taxes withheld, and they of course pay sales taxes, and many pay property taxes. From the standpoint of the public purse, it's not clear that illegal immigrants are more or less of a drain than legal ones.

C. A life-cycle perspective
   Although a number of estimates find that current immigrants are either a balance or a drain on government budgets, this perspective changes if one looks over a lifetime. Most people use more in government assistance when they are young, attending school and not working, and when they are old, receiving retirement benefits, and not working. In between, most people pay more in taxes than they receive in benefits. The same pattern holds for immigrants. Those who arrive very young are a drain on the public purse for a time; those who arrive after retirement are nothing but a drain on the public purse. However, those who arrive early in their working years may contribute a fair amount. Those who have more education will also contribute more in taxes and depend less on government assistance. In the long run, with these various factors taken into account, the fiscal impact of immigrants is substantially positive.

D. The imbalance between federal tax revenues and state and local tax burdens
   The taxes paid by immigrants are disproportionately federal taxes, especially for Social Security and income tax. Since immigrants are poor, they are less likely to own property and pay property taxes. However, the benefits that immigrants receive from government, school, health care, welfare, are disproportionately provided by state and local government. Thus, there is an argument for compensating the state and local governments that bear the highest share of immigration. Targeted programs may be difficult, however.

IV. Setting limits on immigration means choosing between candidates

A. The unlikelihood of completely open or completely closed borders
   It's unlikely that the U.S. will close its borders completely to immigrants, or that it will open its borders completely. There are good reasons not to pursue either policy in the extreme. But if we avoid the extremes, then we will have to decide which people are allowed to enter, and which we will turn away.

B. Criteria for entry?
   Some possible criteria for ranking potential immigrants include ties to family in the United States, level of skills, and age. At present, the U.S. immigration system mainly admits according to ties to family. There is some argument for giving family ties less weight, and giving skills and age more weight in the decision about who to allow to immigrate.

C. Economic issues aren't decisive in this argument
   Both supporters and opponents of immigration should realize that the economic arguments concerning immigration aren't especially decisive. Immigration does seem to bring small economic gains, but an opponent of immigration probably wouldn't mind losing those gains in pursuit of other objectives. Similarly, most supporters of current or higher levels of immigration probably view the economic gains as
a plus, but not as their main reason for support. Gains and losses are all small in terms of the U.S. $8 trillion GDP.

Essential Reading:
Borjas, George J., *Friends or Strangers*. New York, Basic Books, 1990. Borjas is perhaps the leading academic economist who studies the subject of immigration. In this reader-friendly and thoughtful book, he traces through the economic issues involved with immigration. While not hostile to immigration in general (Borjas is an immigrant from Cuba), he is concerned that the education level of immigrants to the U.S. seems to be falling, and thus that their contribution to the economy and to tax revenues may be lower than in the past.

National Research Council, *The New Americans: Economic, Demographic, and Fiscal Effects of Immigration*. Washington, D.C., National Academy Press, 1997. The National Research Council is a private organization that brings together groups of distinguished scholars to examine questions of public interest. This is their report on immigration, written and produced by a panel of distinguished economists. It's a long book; about 400 pages. But it's clear and straightforward to read, and it does a fine job of summarizing the mainstream economics view on the issues raised in the lecture.

Supplementary Reading:
Brimelow, Peter, *Alien Nation*. Random House: New York, 1995. Brimelow is an immigrant himself, from the United Kingdom. He's not an economist, but rather a journalist with conservative leanings. This book is the best and most persuasive anti-immigration manifesto. It's written clearly, with evidence of someone who has really worked through the questions in depth, and who points out almost gleefully the contradictions and obfuscations that have characterized U.S. immigration policy over time. If you oppose more immigration, this book will be the best ammunition you'll find; if you support more immigration or are fairly comfortable with present levels of immigration (as I am), Brimelow will challenge your beliefs. It's a fun and involving and interesting read.

U.S. Immigration and Naturalization Service, *1996 Statistical Yearbook*. Washington, D.C., 1998. The immigration statistics are always published in a comprehensive form a couple of years late. For historical statistics going back to the birth of America, ranging up to the present, this volume is the place to look. In theory, this book can also be downloaded at the website of the INS, <http://www.ins.usdoj.gov>, and read with Adobe Acrobat. I've had no luck in doing that myself, but maybe your computer will work better than mine and the government will improve the link.

Questions to Consider:
1. Are you from a part of the country with relatively high levels of immigration? Which jobs do you observe immigrants doing? How has their presence altered your community, if at all?
2. Review the arguments concerning the impact of immigration on growth, jobs, and wages. Do you find the arguments persuasive? Or do they seem to you to overstate or understate some of the issues?
3. Would you favor proposals for the federal government to subsidize parts of the country which have especially high inflows of immigrants?
4. There is a spectrum from closing the borders, to less immigration, to the present amount of immigration, to somewhat more immigration, to open borders. Where on the spectrum would you put yourself and why? Economic arguments may be only part of your answer!
Lecture Sixteen
Welfare Reform

Scope: Welfare has been a controversial subject in recent decades. This lecture begins by sketching the facts: how much has been spent on benefits, the size of recipient families, how the average welfare payment has changed over time, how it varies across states, the relationship of AFDC to food stamps and other programs to help the poor, and so on.

In 1996, the Aid to Families with Dependent Children (AFDC) program—which had been the primary welfare program since the 1930s—was abolished. It was replaced by a program called Temporary Assistance to Needy Families (TANF). In some ways, TANF simply carried forward a number of changes that had been happening with AFDC in the last few decades: for example, it gave states great authority to design their own programs, and put limits on how long welfare could be received before the recipient was required to work. In other ways, TANF marked a break from earlier practice. The most striking change was that welfare was no longer to be an "entitlement." It used to be that once the benefit levels and rules were set, anyone who qualified was entitled to receive AFDC. But under TANF, if a state runs out of money in a given budget year, no one is entitled to receive any particular welfare benefit.

TANF has started off on a good footing, helped by the strong U.S. economy in the second half of the 1990s which has made it somewhat easier for many people to find jobs. However, potential problems are lurking around the corner. Whenever the next recession hits, it will be harder to place welfare recipients in jobs. It also seems likely that those who have been the first to find jobs are the easiest cases, and the remainder of those receiving TANF may be harder to place. TANF is an ongoing experiment, and there is considerable uncertainty about how either the federal or state government will react when the system comes under stress.

Outline

I. The shape of the nation's primary welfare programs
   A. Basic facts about the evolution of AFDC
      Total spending on AFDC (in real dollars) jumped sharply (nearly tripled) in the 1960s, but hadn't moved much since about 1980, even though the number of recipients had gone up somewhat. The average size of an AFDC recipient family had contracted over time, from 3.9 people in 1970 to 2.8 people in 1996. The average monthly AFDC payment had fallen over the last few decades, declining in real buying power by almost half from 1970 to 1996. The share of U.S. families with children receiving AFDC has been rising (about 3% in 1960 to about 13% in 1996). Nonworking mothers older than 24 form the bulk of adult AFDC recipients.
   B. Variation across states
      AFDC was a joint federal-state program, and states could largely determine how much they wished to spend. The differences across states were in some cases very large. The monthly AFDC payment in southern states like Alabama and Mississippi was less than half the payment in the median state, and only about a third of the payment in high-paying AFDC states like Connecticut and California. (TANF represents little change in this respect.)
   C. Length of time on welfare
      It can be tricky to get an accurate reading on how long the "typical" recipient is on welfare, because there isn't really a "typical" recipient. It's true that most episodes of welfare end in less than 12 months. It's also true that most people who leave welfare end up going back on within 2 years. It's also true that the average time someone starting off on welfare in 1996 would have received over their lifetime, based on existing trends, was about 6 years.
   D. Intergenerational attachment to welfare
      Many people have an impression that welfare has become intergenerational; that is, that daughters of welfare mothers are growing up on welfare themselves, and are raising daughters who will end up on welfare, too. There is some truth in this perception, in the sense that studies have found that daughters of
welfare moms are more likely to end up on welfare than women who were not daughters of welfare moms. However, it is also true that most of the daughters of welfare moms end up not being on welfare at all.

E. AFDC and food stamps
1. What is the food stamp program?
The food stamp program is a federally funded program in which poor people get coupons that they can use to purchase food, with the amount of assistance declining as the person's income rises.
2. The interaction of food stamps and AFDC
The value of food stamps is actually quite comparable to the value of AFDC payments in many states; in the states with especially low welfare payments, food stamps can far exceed the value of the welfare check. Total spending on food stamps is comparable to total welfare spending, federal and state (about $23 billion in 1996).
3. Viewing food stamps as income
To economists, food stamps are virtually the same as income. After all, when a poor family can purchase some of their food with the food stamps, it frees up whatever other income the family has for other purposes. In this sense, food stamps feel very much like extra cash.

F. AFDC and other programs for supporting the poor
Many welfare families receive assistance from a variety of other public assistance programs other than food stamps, including subsidized school lunches, housing assistance, Supplemental Security Income (for the elderly, mostly), Medicaid, and so on (WIC, etc.).

G. The creeping welfare-to-work requirements
Since the late 1980s, federal law has been pushing states in the direction of having work requirements for welfare recipients. Throughout the 1990s, 46 states were granted waivers by the federal government from AFDC rules to experiment with different kinds of eligibility guidelines, work incentives and work rules.

II. The arrival of TANF
A. How TANF diverged from AFDC
1. Block grants, not entitlements
The Temporary Assistance for Needy Families program that replaced AFDC in 1996 did change the fundamental design of welfare in certain ways. The federal contribution to welfare became a block grant scheduled to be $16.5 billion per year until 2002; that is, the states received the money and had considerable freedom to experiment with it. Poor people had no entitlement to receive assistance checks; each state could experiment with the eligibility and incentive rules it preferred.
2. The strings that remain
States do not have complete freedom under TANF; they still need to meet a number of federally imposed rules. For example, 25% of welfare recipients must be in a work activity in 1997, rising by 5% per year to 50% by 2002. There are limits on how long TANF money can be paid in one stretch (2 years) and over a lifetime (5 years).
3. The state money escape hatch
All the rules for TANF money apply, of course, only to the federal money, which as noted earlier has historically been about 55% of welfare expenditures. The state remains free to use its own funds—the 45% share—in whatever ways with whatever guidelines it wishes.

B. Similarities to the recent trends in AFDC
TANF also had a number of similarities to the way in which welfare programs had already been evolving; for example, great variation across states would remain; states would continue pushing their own welfare-to-work programs; and the odds seem good that the average level of welfare payments will continue to decline over time.

C. TANF and other public assistance programs
Programs like Medicaid, subsidized school lunches, and food stamps are largely unaltered by the change from AFDC to TANF. In addition, part of TANF was an additional block grant of $2.3 billion per year in federal money distributed to states to provide child care support.

III. How will the new welfare system work?
A. The very positive early returns
The welfare reform started off looking great. The number of welfare recipient families dropped dramatically in the first year (from 4.3 million in 1996 to 3.5 million on the same date in 1997—a drop of 800,000 in a year), and by most accounts, little suffering resulted from the lower number of welfare recipients.

B. Stresses lurking around the corner
   1. Recession
      Sooner or later, a recession will hit again. Unemployment rates will rise, and it will be very hard for states to meet their targets of having half their welfare recipients in working activities. Costs of the welfare system typically rise dramatically in this situation—but the federal block grant is capped, with only a small and inadequate reserve fund.
   2. Skimming the cream
      Those who were among the first to leave welfare for work are usually those whose lives are in the best order, and who have the most employable skills. The hard-core, long-term welfare recipients will be much harder to move into the labor market (perhaps due to thorny problems like mental illness, drugs, and alcohol).
   3. Health care, child care, transportation problems
      Many welfare mothers face certain key difficulties if they get a job. Will they still have health insurance, or will they lose Medicaid coverage and not get private health insurance? What child care arrangements will they use? How will they get to and from their job, if they don't own a reliable car and public transit isn't available?
   4. A race to the bottom?
      States have an incentive to get tough on the poor, to discourage poor people from locating within that state. Some fear that states will use stringent work requirements as a sort of attack on the poor, to drive them away.
   5. Nothing is set in stone
      People always talk about federal programs as if they will never change. But Congress can always alter TANF in future years, if problems arise and it wishes to do so.

C. An economist's question: how will we discover the answers?
   In one sense, TANF is a social scientist's dream; lots of states will try many different welfare reform plans, and by comparing them, we may be able to learn something about what actually works. But TANF is also a social scientist's nightmare; the states are all trying their own plans, with no interconnecting system or logic, no central data bank for categorizing different provisions, and no common method of reporting results. To complicate matters even further, the release of information may well be shaped and guided by political considerations, rather than the concerns of analysts trying to study the system. Even if you favor welfare reform, this complicated array of policy changes will be hard to sort out. Even if we can learn the answer, doing so will probably take 5 to 10 years.

Essential Reading:
Blank, Rebecca, *It Takes a Nation*. Princeton, New Jersey; Princeton University Press, 1997. Blank is a fine economist whose special expertise is in welfare and anti-poverty programs. In this book, she meticulously lays out the issues and what is known about the issues, just as the major welfare reform bill of 1996 is beginning to take effect. Blank is a very clear and well-organized writer, so it is easy to look at her table of contents at the start of the book, see that each subsection of each chapter is written to focus on a particular issue, and then surf through the book looking for the pieces you want. This isn't an especially lively read, but if you are interested in getting up to speed on these issues, it's an excellent place to start.

Supplementary Reading:
U.S. House of Representatives, *1998 Green Book: Background Data on Programs within the Jurisdiction of the Committee on Ways and Means*. Washington, D.C.: U.S. Government Printing Office, May 19, 1998. Available various places on the web; one good connection is <http://www.gpo.ucop.edu/catalog/green105.html>. This report is published annually. It covers most of the big programs where the federal government hands out assistance to people: Social Security, welfare, Medicare, Medicaid, and so on. The main welfare programs are in Section 7, although food stamps is covered in the "other programs" in Section 15. The interested reader may also want to check appendix H for poverty statistics and appendix L for an overview of the many programs now underway that...
will seek to evaluate the effects of the welfare reform. This report is a little dry and long, but for those willing to scan through, look at tables, and skip sections that aren't of interest, it's got all sorts of good, up-to-date information.

Questions to Consider:
1. Did any of the basic facts about welfare, as presented early in the lecture, strike you as somewhat unexpected or surprising? Do you think that some of the facts might strike the majority of your fellow citizens as somewhat unexpected or surprising?
2. Do you think that the change from AFDC to TANF was on the whole a good idea, a bad one, or not much of a change?
3. What do you think might be some of the significant evolutions in welfare policy that could occur over the next few years, and what events in the world or in politics might bring them to pass?
Lecture Seventeen

Raising Wages for the Working Poor:
Minimum Wages, Wage Subsidies and Job Training

Scope: It is broadly agreed, both by society as a whole and by the poor themselves, that it is better for people to work than to be on government support. However, low-skilled workers in a market economy will tend to earn low wages. Indeed, their wages may be low enough that even if they are working full-time, they find their family near or even below the poverty line. This raises the question as to whether a complementary policy to the welfare-to-work programs discussed in the previous lecture might be policies to raise the wages of the working poor.

One possible policy along these lines is the minimum wage. There has been considerable controversy about the minimum wage in the 1990s. The consensus at the start of the decade was that the minimum wage wasn't an especially good primary policy tool for helping low-wage workers, because it raised the unemployment of low-skilled workers. However, economic studies in the 1990s have argued that any rise in unemployment as a result of a moderately set minimum wage is likely to be small—perhaps even so small as not to show up on statistical tests—and thus that moderate increases in the minimum wage may be in order.

A second set of policies for raising the wages of low-skilled workers are policies to subsidize their wages, perhaps directly through the tax code, or indirectly by giving subsidies to employers for hiring low-wage labor. Wage subsidies have the potential to be costly. However, if they can replace some of the costs of other welfare programs, and if they have some added social benefits like keeping workers in the labor force, and perhaps helping to avoid some social pathologies like the breakdown of the family and crime, the costs might be justifiable.

A final set of policies would be to train or retrain low-skilled workers for jobs. However, such programs have tended to be, at best, moderate successes, and have often been outright failures.

Outline

I. The problem of low-skilled, low-wage workers
   There is a broad social sentiment that we want people to work for a living, rather than relying on government support. The problem is that in a capitalist economy, low-skilled workers will earn low wages. As a result, a low-skilled worker who holds a full-time job may not earn enough to lift themselves out of poverty.

II. Minimum wage laws
   A. How high have minimum wages been?
      The minimum wage has risen in nominal terms over time. But in relation to the wages paid in the rest of the economy, it has been relatively low in the 1980s and 1990s. From the 1950s into the early 1970s, the minimum wage was typically about half of average earnings; in the mid-1990s, before it was increased, the minimum wage had fallen to only about a third of average wages. In historical terms, whether adjusted for inflation or compared to wages generally, the minimum wage has actually dropped and is fairly low.

   B. The debate over minimum wages, jobs and well-being
      1. The empirical argument for a small but real reduction in jobs
         A variety of economic studies done over time found that a rise in the minimum wage led to a small increase in unemployment. A typical estimate was that raising the minimum wage by 10% would decrease employment among low-skilled workers by perhaps 2-3 percent.

         2. Questioning the minimum wage as a tool for equity
            A further part of the case against a higher minimum wage is to ask whether a blanket policy of higher minimum wages for everyone really makes sense if the goal is to help poor households. For example, about three-fifths of minimum wage workers are part-time; perhaps one-third are teenagers, often living at home; only about one-tenth are sole breadwinners in a family with children.

         3. The empirical counterargument: weak evidence
The empirical counterattack on the minimum wage in the 1990s has started by pointing out that many of the studies found only a very low level of job loss; in some cases the variation was low enough (i.e., not statistically significant) that it might have been produced by chance. A new wave of studies, some comparing places where the minimum wage had risen with places where it hadn't, found little or no support for the argument that a moderately higher minimum wage raises unemployment. (One study looked at 410 fast-food joints across eastern Pennsylvania and New Jersey after the latter had raised the minimum wage in 1992.)

4. Why might higher minimum wages not be linked to employment?
A variety of reasons have been proposed for why studies have found such a small connection between minimum wages and unemployment. Perhaps higher minimum wages are only passed into law when the economy is strong, so that there is a political association between job growth and a higher minimum wage (a political economy reason). Perhaps a higher minimum wage results in higher prices for consumers, not less employment for workers. Maybe the labor market is not fully competitive, so a slightly higher minimum wage doesn't cause business to react by firing workers. Any of these is possible; the topic is still much in dispute.

5. Might higher wages for many outweigh unemployment for some?
Even if one accepts that a higher minimum wage raises unemployment for some, it might still be worth doing. For example, one might argue that higher wages for the overwhelming majority are a gain that is worth unemployment for a few. In other words, there's a tradeoff; we must think about it carefully.

C. A pragmatic minimum wage position: keep it, but keep it low
There is a long tradition of economists of pointing out that since an aggressively high minimum wage would cause unemployment, one shouldn't push this policy tool too hard. But on the other side, a minimum wage can serve as protection for low-skilled workers who may otherwise be ignorant or easily intimidated.

III. Wage subsidies
A. Payments to workers
1. The structure of the earned income tax credit (EITC)
   One way to subsidize poor workers is through the tax code, by giving them a tax break. The existing tax break that does this is called the earned income tax credit. It can provide up to about $3500 extra a year for a one-earner family working full time at or near the minimum wage.

2. Politics of the earned income tax credit
   The earned income tax credit has traditionally been supported by liberals, because it aids the poor, and by conservatives as a pro-work tax cut. However, as expenditures on the EITC rose in the early 1990s, concerns arose that the higher expenses might be driven to some extent by fraud, and so there has been a scaling back. Also, there are concerns about the disbursement of the EITC in one annual lump sum. The EITC amounts to relatively little in the huge U.S. economy and has no employment effect, because it's done through the tax code.

B. Subsidies to employers
   In theory, low-wage workers could also be subsidized through their employers, either with a bounty system for hiring such workers in the first place, or with an ongoing subsidy. There isn't much of this going on in the late 1990s (it's potentially trick in practice and doesn't have obvious political appeal), but some of the states experimenting with welfare-to-work programs may give this a try.

C. Costs and benefits?
   To raise the take-home pay of low-skilled workers significantly, wage subsidies might have to cost tens of billions of dollars. However, they would avoid giving firms a disincentive to hire workers. Moreover, if they can create an attachment to the workforce for low-skilled workers and help society avoid social costs like family breakup and crime, the investment might be worth it even in pure economic terms.

IV. Discouraging truths about job assistance initiatives
A. Job search vs. thorough training
   A variety of studies have found that basic job search assistance, which is fairly cheap to provide, can more than pay for itself. However, more thorough job training rarely raises wages by much at all for the average participant (e.g., U.S. JTPA).

B. Men vs. women
When training programs are successful, they seem to work for women with children, who perhaps have greater motivation to succeed. Such programs have had hardly any effect on men, especially young adult males.

C. Putting training in perspective

It's little wonder that someone who hasn't been well-prepared for work in their first 18 or 21 years by education, family, and friends can't be turned around by a quick six-month or 12-month program. The average person just isn't quite that malleable. Even when training is successful, the returns should be thought of as likely to be modest, and it's hard to make a strong case for dramatically higher spending in this area.

V. Taking the reformed welfare system and other programs as a whole

This lecture and the previous one have mentioned a number of programs to reduce poverty: welfare, food stamps, Medicaid, the earned income tax credit, and so on. It is important to consider these as a package, and not as separate programs. With some appropriate design, it should be possible by tweaking the current system to make these things work together in order to reach a point where a full-time worker with a family earns enough to support that family above the poverty line.

Essential Reading:
Blank, Rebecca, *It Takes a Nation*. Princeton, New Jersey; Princeton University Press, 1997. This book is recommended as the required reading for the previous chapter, but as a far-reaching discussion of welfare reform and anti-poverty policy, it also has comments on a number of the issues in this chapter. For example, see the section on "'Get a Job': How Far out of Poverty Will It Take You?" from pp. 79-82; the section on "Earnings Subsidy Programs" from pp. 110-121 covers the minimum wage, EITC, and other proposed wage subsidies; and the section "Do Job Programs Encourage Work?" from pp. 173-177 as a discussion of job search assistance and retraining initiatives.

U.S. Department of Labor, "Making Work Pay," March 1996. On the web at <http://www.dol.gov/dol/_sec/public/media/reports/pay.htm>. This 8-page report was put out by the Clinton administration in 1996 when it decided to support an increase in the minimum wage. It's politically biased, of course. But it offers good facts and evidence to support many of its arguments, and since the lecture is mildly discouraging about the usefulness of a higher minimum wage, some listeners may appreciate a stronger positive statement.

Two articles from the *Economist*. "Training and Jobs: What Works," April 6, 1996, pp. 19-21. "Training for Jobs: O brave new world," March 12, 1994, pp. 19-26. Government job training for welfare recipients and the unemployed is one of those public policy proposals that seems to have everything going for it; the major problem is that it hasn't worked very well. These two helpful articles offer a clear-eyed look at what seems to have gone wrong.

Supplementary Reading:
Phelps, Edward S., *Rewarding Work: How to Restore Participation and Self-Support to Free Enterprise*. Cambridge, Mass.; Harvard University Press, 1997. Bergmann, Barbara, *Saving our Children from Poverty*. New York; Russell Sage Foundation, 1996. Phelps and Bergman are both top-notch economists, although Phelps is a political conservative and Bergmann is a political liberal. In his book, Phelps focuses on the case for a wage subsidy scheme to increase the rewards to work for low-skilled individuals. Bergman focuses on a comparison between children's poverty rates in France and the United States, and how a mixture of government wage subsidies and programs to support health care and child care for the poor can reduce poverty among children. However, from their different political angles, the two writers are really attacking the same question: How can the United States assure a decent standard of living to low-skilled but full-time workers with families.

Questions to Consider:
1. Would you favor a higher minimum wage? Justify your position.
2. Would you favor a program of wage subsidies for the working poor? If so, of what kind? If not, why not? Justify your position.
3. Can you think of any other alternatives that are available for raising the standard of living for the working poor?
Lecture Eighteen

The Race for Global Economic Leadership

Scope: From the beginning of the 20th century to its close, the American economy has been tops in the world in the most basic measure of the average standard of living: per capita gross domestic product (GDP), which is the size of the economy divided by the number of people. However, in the period since World War II, industrialized economies like Japan and Germany have caught up to the United States to some extent. In the last couple of decades, even poorer economies like those of nations in East Asia and China have grown at phenomenal rates. Do these trends suggest that in the 21st century, the U.S. lead in standard of living will be surpassed by other countries?

There is an economic theory of why countries that are behind in standard of living might tend to catch up over time; in brief, precisely because they are behind, they have greater opportunities for relatively easy growth. These theories help to explain, for example, the relative progress of various European economies and Japan vs. the U.S. economy since World War II. But a number of countries continue to lag behind, and in fact seem to be getting relatively worse off, instead of catching up. Apparently, countries need not always converge, and perhaps there may be cases where there are advantages to being ahead.

The lecture concludes with a discussion of the fundamental roots of economic growth: investment in human capital, physical capital, and new technology. Various aspects of these topics will be taken up in more detail in the lectures that follow in this section.

Outline

I. Thinking about long-term national economic performance
   To some extent, we judge whether we are well off, whether as individuals or as countries, in comparison to those around us. But our absolute level of well-being matters as well.
   A. The U.S. economic lead
      The U.S. economy has been ahead throughout the 20th century in one of the simplest measures of standard of living: gross domestic product per person. Dividing by population adjusts for the number of people in a country, so that a large population economy doesn't necessarily outrank a small population one. Of course, size of economy isn't the only thing that matters to standard of living, but if you have choose one indicator, it's a pretty good one.
   B. The difference between a nation's absolute and relative standard of living
      Would you rather be the richest person in a poor group, or a relatively poor person in a richer group? In absolute terms, you may be better off being at the bottom of the richer group. In relative terms, being ahead is best. When it comes to national policy, most economists would argue for the absolute level as being most important, rather than the relative level. But in matters of foreign policy and national pride, the relative level also matters. Consider how the U.K.'s slide in per capita GDP vis-à-vis U.S. accompanied its declining power after 1945.
   C. International economics is a positive-sum game
      Part of the reason economists emphasize standard of living is because of their deep belief that the economy is a positive-sum game, in which everyone can be better off thanks to economic growth. If the economy were zero-sum, of course, then one nation could only grow at the expense of other nations, and the only way to be absolutely better off would be to be relatively better off, too.
   D. In the long run, growth is (just about) all that matters
      Examples that talk about annual growth rates, like the difference between 5% and 3% a year, often don't seem to make much difference. In the short run, that's correct. But over a few decades, differences of 1-2% per year accumulate, and can mean that an economy is either 50% larger—or not. Such differences—and the consequences for human welfare—are very large.

II. The pressures for economic convergence—and divergence
   A. The theory of economic convergence (i.e., poorer countries catch up with richer countries)
It's hard to be a leader, with everyone aiming at you. Economists have developed some arguments as to why it's hard for nations to maintain their economic lead.

1. Role of diminishing returns
   As investment increases, an economy becomes more productive. But as the level of investment goes up, the marginal gain in productivity gets smaller and smaller. Thus, richer nations, with high levels of investment, should tend to have a lower return on their investments than poorer nations, because the rich nations have a greater problem with diminishing returns. At least in theory, this problem of diminishing returns should exist for investment in education, in R&D, and in physical plant and equipment.

2. The ability to copy is a big edge
   The ability to use new technology makes a huge difference to economic productivity. But it may be easier for a poor country to copy technological insights from global leaders than it is for rich countries continually to invent new technologies. This gives poor countries a chance to catch up.

B. Some evidence for economic convergence
   Some evidence supporting these forces of economic convergence comes from the experience of European countries in catching up with the United States in the decades after World War II, and in the rapid growth experience of Japan in the 1960s and 1970s, of South Korea and other East Asian economies in the 1970s and 1980s, and in the growth of China in the 1980s and 1990s.

C. Some evidence against the theory of economic convergence
   In a number of situations, the theory of economic convergence doesn't seem to work especially well (e.g., Britain and the U.S.; India and the U.S.; China over the last 1,500 years).
   1. Lots of nonconvergence occurs, too
      A number of poorer countries don't seem to be growing faster, and catching up. It seems highly implausible, looking back in time, that the gap between the richest countries and the poorest ones was relatively smaller 100 or 150 years ago than it is today.
   2. Convergence is a theory about catching up, but not about moving ahead
      The theory of convergence explains why other countries would catch up to the leader. It doesn't explain why any country would overtake the leader. As the possibilities for taking advantage of less diminishing returns or for copying go down, catching up should become harder.
   3. Maybe the countries left behind have some reason for staying behind
      Perhaps the theory of convergence works better for countries in close proximity to others, where common technologies can be used and a flow of ideas across borders exists. But it may work less well in very different countries. Perhaps some countries are not well-suited by geography, climate, and history to economic growth.

D. New growth theory vs. old growth theory
   In the jargon of economists, the "old" growth theory is the theory that, among other predictions, predicts convergence. The "new" growth theory argues that countries may develop "virtuous circles of growth," allowing the leaders to stay ahead or even to extend their lead. Some underlying causes of such a virtuous productivity circle include economies of scale, learning by doing, and cycles of knowledge and invention. (Averaging all this together would probably give us a big picture of convergence, but with some countries left out.)

III. Underlying—and interrelated—sources of economic growth
   A. Growth comes from investment in human capital, physical capital, and technology
      Human capital includes education, skills, and experience. Physical capital includes plant and equipment. Technology should be understood broadly to include all new ways of doing things, including both specific inventions (like the laser) and ways of rearranging work (like the assembly line or quality circles for workers). The relative importance of these factors has been debated, but the bottom line is probably that they are complementary, and none should be neglected.
   B. Avoiding the misconceptions of "competitiveness"
      In the early 1990s, there was a surge of interest in national "competitiveness," leading to various competitiveness councils run by government, business and academics. However, economist Paul Krugman attacked the idea of "competitiveness" as a code word that seemed to cover a lot of dubious economic policy (e.g., protectionism, subsidies, "industrial policy"). Nations don't compete in the ways that firms do.
There is little in the "competitiveness" idea that isn't summed up more usefully in the idea of "higher productivity."

C. Will the U.S. continue growing and stay ahead?
   To continue growing involves the goal of raising absolute productivity. There was a worldwide slowdown in productivity growth in the early 1970s, in the U.S. economy and elsewhere. Taking steps to rekindle growth would be an enormous help to the economy. If the United States does that, it at least may potentially stay ahead—which is the relative productivity goal. But the best way to pursue a relative growth advantage is to pursue absolute growth—not the other way around. The service sector in the U.S. is key.

Essential Reading:
"Economic Growth: The poor and the rich," *Economist*, May 24, 1996, pp. 23-25. This useful article offers a helpful summary of how the thinking of economists about the causes of economic growth has evolved in the last few years from old growth theory to new growth theory, and what the implications are for convergence and divergence.

Maddison, Angus, *The World Economy in the 20th Century*. Paris, OECD, 1989. Maddison, Angus, *Monitoring the World Economy: 1820-1992*, Paris, OECD, 1995. Maddison is one of the top economists in the area of long-term economic growth; if you read economic studies in this area, you'll see that they often begin with Maddison's estimates of how economies have grown and changed over time. In these two short books Maddison runs through many of the facts of growth and convergence around the world that are discussed in the lecture. The books are short and well-written, and have lots of tables, so it's straightforward to go through them pretty quickly if you want to pick up a solid background on lots of these issues.

Supplementary Reading:

Pritchett, Lant, "Forget Convergence: Divergence Past, Present, and Future," *Finance and Development*, June 1996. This article offers the Pritchett argument that nations in the global economy have been diverging, rather than converging, in their standard of living. The magazine is worth checking out; subscriptions are free, and it's a place where many economists from the International Monetary Fund and the World Bank present accounts of their recent research written for the general public. On the web, the Finance and Development site is at <http://www.worldbank.org/fandd/index.htm>. The Pritchett article is at <http://www.worldbank.org/fandd/english/0696/articles/090696.htm>.

To find some basic international economic statistics on the web, the interested student might begin with the CIA website and its "Handbook of International Financial Statistics," at <http://www.odci.gov/cia/publications/pubs.html>. The main data source for most economic research looking at international comparisons in the last few decades is the Penn World Tables, available at the website of the National Bureau of Economic Research at <http://www.nber.org/pwt56.html>.

Questions to Consider:
1. Hypothetically, would you prefer to have the U.S. economy grow at 3% while the economy of close competitors like Japan and Germany grow at 5%? Or would you prefer to have the U.S. economy grow more slowly, at say 2%, while the economy of close competitors like Japan and Germany grow even more slowly, at just 1%?

2. Can you think of some examples where the economics of convergence seem to have occurred? What about some examples of the economics of divergence? Can you make an argument about which force seems more powerful?

3. Why do you think that so many politicians find arguments about "competitiveness" to be persuasive—but so many economists find that way of phrasing the issues to be unpersuasive?


Lecture Nineteen
Can We Increase U.S. Savings and Investment?

Scope: Savings and investment go hand in hand; one needs to save—that is, to put something aside from current consumption—in order to have something to invest in the future. America's rates of personal saving have been quite low by world standards. Further, U.S. rates of investment in physical capital as a share of GDP have tended to lag those of other industrialized countries. These difficulties need not be fatal: the U.S. also seems to make more efficient use of its physical capital, and to buy more of it because it is relatively cheaper in this country. Nor does a lower rate of investment in physical capital say anything about U.S. rates of investment in human capital and research and development, which are fairly high by world standards. Nonetheless, it is a worthwhile policy goal to think about how U.S. investment and savings rates might be boosted at least somewhat.

On the investment side, most of the available policy tools involve giving incentives to business to make investment more profitable; as an (politically ugly) alternative, one might make investment by consumers in housing and cars a little less attractive, as a way of freeing up capital for business investment.

On the savings side, savings can come from personal savings, business savings, government savings, or foreign savings. Attempts to encourage personal savings with tax breaks has been a subject of controversy; it seems clear that tax breaks for certain savings accounts get people to put money into those accounts, but it's not clear whether their overall rate of savings goes up as a result. There are various proposals for forced savings, perhaps as part of privatized Social Security Accounts. Encouraging business savings is somewhat the same as encouraging business investment; the idea is to encourage business to plow profits back into their business, rather than distributing them to investors. Government savings—that is, the issues of budget deficits and surpluses—and relying on foreign savings will be taken up in later lectures, so there is only a brief comment on them here.

Outline

I. U.S. saving and investment in an international context
   A. The lower U.S. personal savings rate
      The U.S. economy has long had a lower personal savings rate than many other industrialized nations (5% of disposable income in the U.S.; 11%-13% in other countries). Of course, personal savings is not the only source of savings: government savings (by running budget surpluses) and business savings (often reinvested in the business) count, too. An economy can also borrow from foreign savers, and the U.S. economy has done a lot of that, too. But overall rates of saving in the U.S. have traditionally been lower than in other countries.
   B. Lagging U.S. investment in physical capital
      The U.S. has tended to lag behind other industrialized nations in the share of GDP invested in physical capital. This doesn't show up in the numbers quite as much for 1996, because the U.S. investment levels in the midst of a strong period of economic growth are fairly high, and those of some other nations are a little lower than usual.
   C. A broader and more optimistic interpretation
      After all, our standard of living has been, and remains, the highest in the world for most of the twentieth century.
      1. A lower relative price of capital goods in the United States
         The price of physical capital goods relative to the price of other goods in the economy is lower in the United States. As a result, U.S. firms can buy a somewhat larger quantity of physical capital than might be suggested by the statistics on physical as a share of GDP.
      2. More efficient use of capital
         There is some evidence that U.S. firms get a higher return from their physical capital than firms in other countries; that is, U.S. firms use their capital more efficiently (19% real return, according to our studies). This factor could also help to offset a lower rate of investment in physical capital.
      3. Investment in human capital
Physical capital isn't the only kind of investment that matters. The U.S. economy tends to outspend most other industrialized countries on education, which is an important aspect of human capital.

4. Investment in research and development

Investments in research and development are also an important source of new technology and ideas. U.S. investment in this area also tends to be somewhat higher than in many other industrialized countries.

5. Other kinds of investment: consumer durables and military equipment

There are other kinds of investment in the future as well. Consumers invest for the longer term when they buy durable goods like cars and refrigerators. The U.S. government invests in military hardware that will last for some years. In both cases, the goal is clearly to put aside resources now to raise the standard of living (broadly understood) in the future. These kinds of investment don't show up in some of the statistics on physical capital investment. But they are yet two more areas where the U.S. economy tends to invest more than other industrialized countries.

II. How might the United States perk up its investment level?

A. A sketch of the U.S. investment picture

Total U.S. investment in the late 1990s is about $1.1 trillion a year. About $400 billion of that goes to housing, which leaves $700 billion for business investment. Perhaps 60% or so of business equipment goes into replacing older equipment that has worn out, so the new investment in a year is about $280 billion.

B. Make investment more attractive to business

There are a variety of policy tools that might be used to make investment more attractive to business: a tax credit for investment, accelerated depreciation, even allowing expensing. Low interest rates also encourage investment, by making it more attractive to borrow for the future. However, this will reduce government revenue from taxes, thus potentially reducing government savings.

C. Transfer investment between sectors

The U.S. economy invests a lot in housing, and a lot in consumer durables like cars. These certainly provide benefits to consumers, but they do less to encourage future productivity growth by business. Policies might be considered to make investment in housing and consumer durables less attractive, to free up capital for investment in business plant and equipment.

III. How might the U.S. perk up its savings rate?

A. The difficulties of raising America's personal savings

1. The dispute over the effectiveness of tax incentives for savings

Special savings accounts like IRAs and 401(k)'s offer a tax break in return for saving. It's clear that these accounts attract money. What's not clear is whether they raise the overall rate of savings. It could be, for example, that people transfer money from other accounts. In the 1980s, the savings rate went lower, even as IRA savings went up. Or it could be that they take on more debt—which offsets the extra savings in the special account. Such tax breaks cost the government money, which reduces government savings, too.

2. Proposals for mandatory or patterned savings

Rather than enticing people to save more with tax breaks, one might require them to save more—as is sometimes proposed for privatized Social Security accounts. Or one might simply encourage aggressively that everyone have a payroll deduction plan where money flows automatically to savings, even if people are then allowed to take it out if they wish.

B. Business incentives to save and invest

When businesses have a greater incentive to invest, rather than paying money out to their shareholders in dividends or stock repurchases, they are, in effect, doing saving on behalf of their shareholders. So incentives to encourage business investment will also encourage business saving.

C. Government saving with higher budget surpluses

When government runs a budget deficit, it borrows from the rest of the economy; as economists put it, it is a "dis-saver." When government runs a surplus, it is contributing savings to the rest of the economy. Thus, the movement of the federal budget from large deficits to moderate surpluses in the 1990s represented an increase in national savings.

D. Foreign capital
In a global economy, a nation's businesses, consumers and even its government can borrow savings from abroad. This can be helpful for some economies, as long as the money is invested sensibly. However, if the amount of borrowing gets out of hand, or an economy becomes overly dependent on foreign capital that might choose to flee, or the money isn't invested sensibly, then borrowing from abroad can lead to economic problems. This issue will be taken up in greater depth in the later lecture on trade deficits and international flows of capital.

**Essential Reading:**
Congressional Budget Office, *Assessing the Decline in the National Savings Rate*. Washington, D.C.; Government Printing Office, 1993. The national savings rate has rebounded since this was published—in particular, the government savings rate has switched over from budget deficits to budget surpluses. But this report still offers a useful perspective on the sources of national savings and where they have trended over time. The CBO is a nonpartisan research branch of Congress, so its reports are written for the serious reader, but not for those who are already specialists.

Lipsey, Robert E., and Irving B. Kravis, *Saving and Economic Growth: Is the U.S. Really Falling Behind?* Conference Board Research Report #901, 1987. See also Kirova, Milka S., and Robert E. Lipsey, "Measuring Real Investment: Trends in the United States and International Comparisons," *Review: Federal Reserve Bank of St. Louis*, January/February 1998, 80:1, pp. 3-18. This essay begins with a section on world growth patterns that raises some of the questions of convergence addressed in the previous lecture. Then the middle and end sections tackle the questions of savings, how it is measured and what it includes, and how it relates to growth. These authors are of the school that believes that when all other factors are taken into account, the U.S. economy isn't doing so badly on savings. In the second article listed, Lipsey with a different co-author makes a similar point. This article is a little tougher to read; on the other side, it's more recent, and it's available over the web at <http://stls.frb.org>; click on "Economic Research," and then on "Publications Online," and then on "Review," and go to the appropriate issue.

**Supplementary Reading:**
Three articles from the *Economist*. "America's power plants," June 8, 1996, p. 82. "Compelling reasons to save," April 11, 1998, p. 60. "Rattling the piggy bank," May 6, 1995, p. 78. Among popular magazines, no one covers issues like savings and growth nearly as well as the *Economist*. Here's a mix of articles. The first discusses the point that even though America has lower rates of investment in physical capital, American firms seem to use that capital more efficiently. The second discusses mandatory savings plans for retirement, and whether this sort of intervention in people's decisions can be justified. The third argues that many nations in the world need to think about saving more, not just the United States.

For statistics on saving and investment in industrialized countries, one useful place to look is the *OECD Economic Outlook*, publishes twice a year. In the back there are a variety of statistical tables comparing the macroeconomic performance of industrialized economies in many areas. For economies around the rest of the world, the most useful source is the annual "World Development Report" published by the World Bank. Again, there are always a range of statistical tables in the back. The number and presentation of the tables changes a bit from year to year, but find the table on "Structure of the economy: demand" and it has columns on gross domestic saving and gross domestic investment for many countries.

**Questions to Consider:**
1. In your mind which is a more important reason to be concerned about the U.S. rate of savings and physical capital investment: how the U.S. is doing relative to other industrialized countries; how the present actions of the U.S. will affect the future U.S. standard of living, regardless of what other countries do.
2. What steps, if any, would you favor for increasing investment in the United States?
3. What steps, if any, would you favor for increasing rates of savings in the United States? Be specific as to whether you would focus in on personal savings, business savings, government savings—or some combination of the three.
Lecture Twenty
Reform of K-12 Education

**Scope:** Education matters to an economy because it is one of the chief ways of building human capital and productivity growth. The production of K-12 education is also an interesting example of where an activity that has been traditionally planned by government has come under challenge as lacking the pressures for performance that are common in the private sector.

This lecture begins by reviewing the evidence linking education to economic growth. It then discussed why many economists have become suspicious as to whether increased money will result in increased performance. To some extent, this belief rests on the success of private and parochial schools in providing quality education at a fraction of the cost of public schools. In part, it rests on the fact that educational performance in the United States seemed to be flat or declining since the late 1960s, while over that same time spending per student has risen, pupil/teacher ratios have declined, and teachers have gained in experience. In part, it rests on the fact that spending levels per student across states have largely been equalized over the last 25 years or so, without a corresponding equalization in performance.

A number of mechanisms have been proposed to provide schools with better performance incentives. In broad terms, these can be divided into school choice mechanisms, where the incentives come from students choosing between schools, and financial incentives, where states try to offer rewards to districts that are performing especially well. Such proposals remain highly controversial. In the end, it may be that many of the problems of the schools are rooted in broader society, and it may be largely beyond the reach of purely educational reforms to solve these problems.

**Outline**

I. What does education do for economic growth?

A variety of evidence supports the widespread belief that a better education system will build a nation's economy.

A. An international and historical perspective

Some of the evidence on the link from education to economic growth comes from the fact that rich countries tend to have more education than poor ones. In fact, a number of countries carried out a push for more education and were rewarded with a higher growth rate.

B. Lower test scores and U.S. economic losses

By measures on a variety of tests, U.S. educational performance dropped off from about 1967 to 1980, and has been more or less flat since then. This implies that a generation or two of workers are now less skilled than they would have been if the educational system had performed better over that time. The economic losses from this experience have been estimated at hundreds of billions of dollars annually.

C. The personal connection

Those who complete more years of school tend to have higher wages. To an economist, this implies that their economic productivity is higher—and that if more people had more education, overall economic productivity would rise. This "educational edge" has been rising over time.

D. K-12 education isn't the whole productivity story

In a number of international comparisons, mainly those done by the International Assessment of Educational Progress, U.S. students don't do especially well in math and science. They're OK on the real basics, like adding and subtracting and knowing basic facts, but when it comes to doing two-step problems, analyzing experiments, understanding concepts and applying intermediate principles, they lag far behind. However, the U.S. economy has managed to overcome these shortcomings.

II. The disputable link from resources to school performance

A. The Coleman report

A famous report done in the mid-1960s by sociologist James Coleman found that private and parochial schools were educating students as well or better than public schools, but at a fraction of the cost. This
report raised a number of questions as to whether more money would necessarily raise student achievement.

**B. Rising education expenditures and falling or flat performance**

The performance of America's schools seems to have been falling or flat over the last three decades. However, this is a time when many areas of expenditures and resources have been rising, often rising dramatically.

1. **Rises in per-student spending**
   Per student spending has been increasing about 3% per year faster than inflation for several decades.

2. **Declining pupil/teacher ratios**
   Pupil-teacher ratios fell fairly steadily from 1960s through the 1990s, before stabilizing to some extent in the mid-1990s.

3. **Wages for teachers**
   Wages for teachers have by-and-large kept up with wages for other college-educated workers, which means they have risen a bit, but there have been no dramatic upward strides here. However, it does seem that retirement and health care benefits for teachers have risen substantially over the last few decades. Moreover, the average experience and educational level of teachers has increased, so the lack of a corresponding rise in wages is somewhat surprising.

4. **The administration “red herring”**
   It doesn't seem that administrative expenses in a direct sense are the cause of more spending on higher education, although there has been some rise in "non-instructional staff."

5. **The special education red herring**
   While demands for special education have risen considerably on a percentage basis, they remain fairly small in the overall picture, and are not a very plausible reason for the bulk of the overall increase in education costs, although there is an impact (maybe 10%).

**C. The spending equalization experience**

Since the early 1970s, there has been concern that schools were supported by local property taxes, so schools in poor areas with lower property values would have fewer financial resources than schools in richer districts with higher property values. However, many states have taken steps to equalize spending per students, and spending in the largest 25 urban school districts is now above the national average. But this step does not seem to have equalized performance, even in public schools. Moreover, the private and parochial schools still perform equally well or better with far lower spending levels.

**D. The ongoing controversy on spending and educational achievement**

More money *can* help education, as has been shown in a variety of individual cases, but it won't *necessarily* do so. Thus, the controversy over the need for greater resources for education seems poised to continue.

**III. Motivating a more efficient spending of the education dollar**

**A. The school choice option**

School choice mechanisms would give schools an incentive to perform better by allowing students greater choice between schools.

1. **The case for vouchers**
   In a voucher system, students would receive a voucher that they could use to attend any school that met basic educational standards.

2. **The case against vouchers**
   Some of the arguments against a voucher system include: extra cost, potential for greater segregation by race or class, fear that some students will be left behind, fear that competition between schools won't work well in terms of sorting out better schools, and questions about whether schools could charge more on top of the vouchers, or not.

3. **The public school choice option?**
   There are other kinds of programs besides a full-fledged voucher system that might allow or encourage some student choice. Examples include choosing between public schools, the ability to start charter schools, and simply having more smaller school districts.

**B. Measurement and incentives**
Another set of school reforms seeks to measure the performance of schools, and then to offer reward or punishments based on whether the schools are doing well or poorly. These proposals immediately run into the problem that students from high socioeconomic status backgrounds tend to perform better, so the question becomes how to avoid penalizing schools just because they have disadvantaged students. A number of difficult practical questions arise here.

C. A potential synthesis: more money in exchange for reforms?
There is a clear case for experimenting with certain types of school choice and incentive systems; we just don't know what works. There may be a political tradeoff where school systems receive more money in exchange for trying out some of these experiments.

D. The parental and family input
It is probably true that the biggest input in a child's education doesn't come from schools, but rather from parents and family. We may be asking too much of the schools if we expect them to fix the problems of children who do not have an adequate family support structure for learning.

Essential Reading:
Hanushek, Eric A., et al., Making Schools Work: Improving Performance and Controlling Costs. Brookings Institution; Washington, D.C., 1994. This book arose from a project in which a group of a dozen economists who had been studying educational issues for some time got together for a series of meetings. Anyone who knows academics knows that it's hard to get them to agree on much of anything. But this group managed to hammer out many of its differences and produce this readable and interesting book as a sort of consensus view of how economists in the 1990s view the issue of educational reform.

Woolridge, Adrian, "Education: Trying Harder," The Economist, November 21, 1992, special 18-page insert section in center of issue. This readable and informative survey does a nice job of offering a view from around the industrialized countries of the world—mainly the U.S., the nations of Europe, and Japan—on the subject of education reform. It discusses the importance of education in a high tech, knowledge-intensive economy, and then discusses the directions of reform in a number of countries.

Supplementary Reading:
Friedman, Milton, "The Role of Government in Education." Appears as Ch. 6 in Capitalism and Freedom, University of Chicago Press, Chicago, 1962, pp. 85-107. The most thoughtful and persuasive case in favor of a school voucher system was written more than three decades ago, in this brilliant essay by one of the great economists of the 20th century. Reading his essay is like stepping into a time warp; it could have been written yesterday. Many economists do not support a voucher system, or support one only with various limitations. But for a clear and useful statement of the issues and principles involved, you won't do better than this.

For a variety of U.S. educational statistics on the web, the place to go is the website of the National Center for Education Statistics at <http://nces.ed.gov>. This website has lots of reports and figures and tables and projections for the future on a wide, wide variety of educational issues and topics.

Questions to Consider:
1. Did you find yourself surprised by the discussion of trends over the past few decades in level of per student spending and pupil/teacher ratio? How would you characterize the beliefs of society as a whole concerning spending on education and classroom size?
2. Do you support substantially higher per student spending on public schools within essentially the present educational structure?
3. What sorts of reforms, if any, would you support to increase the incentives for schools to improve their performance?
Lecture Twenty-One
The Delicacies of Investing in Infrastructure

Scope: Politicians love infrastructure investment. It combines the immediate pleasure of pork-barrel spending and government contracts to local businesses with a lofty claim that it will assist long-term economic growth. Our focus here is on the second connection. To what extent does investment in infrastructure—roads, sewers, electricity, phone lines, and so on—promote economic growth?

There is certainly strong and plausible evidence that at least a basic level of infrastructure is helpful or even necessary for economic growth. But there are also hard questions about how much infrastructure spending is appropriate. Infrastructure projects can be economically misguided; they may be determined by the pork-barrel tendencies of the legislature rather than by real needs. Moreover, even the most necessary infrastructure is used fully only part of the day; for example, roads are congested during the peak commute, but virtually empty in the middle of the night. Adding to infrastructure to meet the peak-time need can mean an investment that often sits idle. An alternative is to create incentives to reduce the peak; in the case of roads, for example, this might mean charging tolls during peak times. There is a tension between the decision of building more infrastructure, and using the existing infrastructure more efficiently.

The United States has come to grips with these questions of infrastructure investment in two main ways: by regulations imposed on private companies, and by direct government building decisions. In the past, both sets of decisions have probably been biased toward overbuilding infrastructure, rather than seeking to use it more efficiently.

Outline

I. A seemingly obvious connection
   A. Intuitive links from infrastructure to growth
      Infrastructure includes such items as transportation, including roads, ports, airports; communications, including everything from telephones to the Internet; electrical power, from generating capacity to power lines; water purification and sewers; even buildings like schools and hospitals. At first glance, it certainly seems plausible that there is a link between infrastructure and productivity.
   B. The quantity of public infrastructure in perspective
      1. The public share of the overall U.S. capital stock
         The U.S. Department of Commerce puts together estimates of total accumulated U.S. stock of public and private capital. About one-quarter of all capital is owned by individuals, as homes or durable goods. Public capital is about 20% of the total, a respectable share, roughly comparable in size to the total stock of all private-sector business equipment. The rest (about 32%) is other private sector business structures, from factories to office buildings.
      2. Breaking down the public capital stock
         If one breaks down the public sector capital alone, 72% ($4.6 trillion) of it is in the state and local sector: highways, schools, hospitals, sewers, electrical, and water. Of the federal government share, much is in defense-related capital; the federal government controls relatively little nondefense infrastructure—although of course federal money may have helped investment in capital that is owned and run at the state and local level.
   C. Statistical links from infrastructure to productivity
      A variety of studies have found a link from infrastructure investment to productivity: studies looking at evidence over time, across states, and in various nations. This evidence, like all evidence, can be questioned, but it forms a fairly strong case that infrastructure investment has often helped productivity. It can still be a "chicken-and-egg" question to some extent.
   D. Political support
      Politicians certainly believe that infrastructure spending is a good idea. Whenever the federal government or a state has some money to spend, proposals for spending more on roads or other infrastructure immediately arise.
II. Questioning the link from more infrastructure to higher productivity

A. In a world of diminishing returns, how much is enough?
   It could be that infrastructure was important in the past, or that it is important to have an adequate infrastructure. But that doesn’t prove that additions to that infrastructure will have the same effect. Most investments have diminishing marginal returns; that is, as you do more and more of them, the marginal gain is less and less. Building another lane on a highway is a good example.

B. Good projects and bad ones
   Even if infrastructure spending is good on average, there can certainly be both wise and silly infrastructure projects. There should be a cost-benefit analysis to justify any decision.

C. The problem of peak-loads and pricing
   1. The peak-load problem in infrastructure
      Many infrastructure projects have the characteristic that they are not used at a steady pace, 24 hours a day, 365 days per year. Instead, they are used to the point of congestion or overload at certain times, and then barely used at all during some other times.
   2. The high costs of overwhelming the peak
      When an infrastructure system is overwhelmed by peak-load demand, the costs can be high, including time, inconvenience, environmental damage, even accidents and injury. The numbers are potentially very high in terms of lost productivity, etc.
   3. The difficulties of trying to outbuild the peak
      Trying to build infrastructure for the maximum possible use is highly costly. It benefits only those who use the product at the peak-load times—and means that there is even more unused capacity at off-peak times. It can also be frustratingly ineffective, for as more infrastructure gets built, the peak-load demand just keeps going up and up. For example, when extra roads are built, more people try to commute during the peak time—and the result is that the roads are still congested.
   4. Flattening the peak with price incentives
      Instead of trying to outbuild the peak load, an alternative is to encourage people to shift their demand away from the peak times. For economists, the obvious way to offer such encouragement is to charge higher prices at those times. The result will be less of a need to build a high level of peak-load infrastructure.

III. Balancing the choices between quantity and efficiency of infrastructure

A. When private companies build infrastructure: telephones and electricity
   1. Dictating infrastructure indirectly, with regulation
      The traditional approach for the electricity and communications industry has been to let private companies decide how much to build, but heavily influence their choices by regulation. The tendency in both cases has probably been to encourage overbuilding of capacity, by using forms of regulation where the firm’s profit was immediately tied to how much it invested.
   2. The potential for pricing the peak differently
      New forms of regulation have been devised to reduce the incentives for overbuilding capacity. Greater competition in electricity and telecommunications should also discourage such overbuilding.

B. When government is the direct builder and owner
   In many other infrastructure cases, like roads, government is the direct builder and owner. The traditional pattern here has been not to charge tolls, or to charge them only as a way of recouping construction costs. But new technologies for charging road tolls electronically are on the way. It would be useful to start collecting such tolls before expanding road-building dramatically.

C. The political unattractiveness of peak-load charges
   1. Ambivalence on peak-load charges
      Peak load charges often seem unreasonable to people when they are suggested for roads or for electricity, but in many other cases—phones, mass-transit, air travel—they have been widely accepted.
   2. How spending the money collected may ease the pain
      Using the toll money for a visible and popular purpose, like mass transit, or helping the poor afford the charges, may make charges more acceptable.
   3. The inadequacies of the other alternatives
We like to pretend that if we just build more roads or mass transit, or if we just encourage the electrical utilities to conserve, we can get around the peak-load problem. Such steps can help, but a general lesson from many such schemes is that either the regulation will be harshly intrusive and therefore controversial and circumvented—or it won't be enough. As congestion and infrastructure costs rise, pricing the peak-load may well look more attractive than the alternatives.

IV. A building boom or a pricing policy?
Many economists argue that although America certainly needs to spend some money fixing up decrepit roads and bridges, it doesn't really need a boom of new infrastructure. Instead, in many areas including electricity, roads, airports, phones, the Internet, and water, the deeper need is for sensible pricing policies to assure more efficient use of the existing level of infrastructure.

Essential Reading:
Congressional Budget Office, "How Federal Spending for Infrastructure and Other Public Investments Affects the Economy," July 1991. The last big public surge of concern over infrastructure investment came in the early 1990s. This report, like all CBO reports, offers a nonpartisan review of the evidence on levels of infrastructure investment, the evidence on links to productivity, and the arguments over whether it makes sense to focus on building more or on incentives and pricing to reduce the peak loads.
"Living with the Car: No Room, No Room," Economist, December 6, 1997, pp. 21-23. For many of us, the infrastructure issue that confronts our conscious minds the most on an average given day is that of traffic congestion. This article does a nice job of offering an international perspective on the that we are not likely to build ourselves out of traffic congestion. So the choices come down to how we limit use of the roads, and in many cities, a system of charges and tolls is being used to accomplish that.

Supplementary Reading:
Seely, Bruce, "A Republic Bound Together," and Gifford, Jonathan, "Toward the 21st Century." These two articles are part of a package on "The Saga of American Infrastructure," Wilson Quarterly, Winter 1993, pp. 19-49. Seely's article is a pocket history of battles over infrastructure in American history. It describes the interesting transition in how we have thought about infrastructure: from something that was necessary, patriotic, and all about building a common future, to something more ambiguous that reflects uncertainty over the motives of those proposing such project, whether the projects will have unpleasant side effects, and how well such projects will accomplish their intended goals. The article by Gifford is more economic in tone, looking toward the 21st century arguments over infrastructure. At the end, on pp. 48-49, there is a bibliography of books and articles with a range of views on infrastructure investment.
Rohatyn, Felix, "What the Government Should Do," New York Review of Books, June 25, 1992. Rohatyn is an investment banker in New York, not an economist. In this essay, he presents the case for a major wave of infrastructure investment. Since much of his case is based on the argument that our existing infrastructure is dramatically, even dangerously, depleted, he does not spend much time on the questions of peak-load pricing. But he offers a strong statement of the case for a surge of infrastructure building.

Questions to Consider:
1. In the area where you live, how would evaluate the need for further infrastructure investment in the following areas: roads, electricity capacity, water and sewerage, and air travel.
2. In the area where you live, would you favor an increase in road-building, or an increased use of peak-load tolls? Does your answer change, at least to some extent, on how the money raised by the tolls is spent?
Lecture Twenty-Two
Technology, Research and Development

Scope: New technology—which in its broad meaning just refers to any new way of producing something—is extraordinarily important to a nation's rising standard of living. Indeed, it's almost difficult to imagine what everyday life would be like with the technology that existed even 10 years before one's birth. In economic studies, technology is one of the key sources of economic growth. But although new technology is important in general, exactly which technology will prove important, and in what ways, is always an uncertain and difficult question. This is one of the reasons that private firms may hesitate to invest in certain kinds of research and development—they can't look into the future and see where it leads.

The U.S. economy does fairly well on support of R&D spending, although the level of support has not been rising in recent years. It is also of concern that government support of research and development seems to be shrinking in recent years, and there may be some cases—like basic research—where if the government doesn't fund it, no one else will.

A variety of policy tools are available to raise R&D spending: direct government support of research at universities and firms, tax credits, supporting cooperative technology centers, training more engineers, maintaining a stable macroeconomic climate, international joint ventures, and more. Given that America's total R&D spending is only about 2.6% of GDP, or roughly $200 billion, even policies that might increase that amount by $20 billion to $40 billion a year may have substantial payoffs.

Outline

I. The importance and unpredictability of new technology
   A. The evidence from growth accounting studies
      1. What does a growth accounting study do?
         A growth accounting study looks at the overall amount of economic growth, and seeks to explain that growth by looking at underlying factors like the growth in the number of workers or the amount of capital in the economy.
      2. The results of growth accounting studies: technology matters!
         The early growth accounting studies established a provocative result: one can explain only about half or less of the growth in the economy just by pointing to growth in capital and labor. Over time, the same amounts of capital and labor seem to produce considerably more output than before. Presumably, this occurs because of new technology.
      3. Shortcomings of this result: What is technology, exactly?
         This notion of "technology" is somewhat unsatisfactory; it takes what was left over, and calls it "technology," but doesn't measure technology directly. This concept of technology includes all different and better ways of doing things, not just the inventions that are sometimes emphasized.
   B. The unpredictability of technical change
      We know that technology is tremendously important by looking back in history. However, we have a very poor record of being able to predict which technologies will be important in the future, or how they will be important. In a variety of important innovations—like the laser, the radio, the computer, the steam engine—the original inventors and users had very little concept of how their insight would eventually be used. Why is this so? It is hard to conceptualize uses. Or, one invention might need another invention. Inventions often start out doing one thing, then switch to a whole new system.
   C. The economist's case for public support of R&D
      There is a strong economic case for fearing that markets may under-invest in new technology. An inventor receives only part of the social gains from a new technology, perhaps one-third or so, with the rest of the gains spinning off to other firms or to society as a whole. Since innovators receive only a portion of the rewards, their incentives to look for innovations is reduced. In the case of basic scientific research, the gain may be so uncertain as to discourage any private firm from pursuing such a project. Then, there is an argument for government support of R&D.
II. America's stagnant research and development effort
   A. Spending trends over time
      Levels of R&D spending relative to the size of the U.S. economy have been largely stagnant since the
      1980s—at about 2.6% of GDP—after being a little lower in the 1970s and a little higher in the 1960s.
   B. Government vs. private support of R&D
      The government share of R&D funding has been dropping in the 1990s, and by 1997 stood at about .8% of
      GDP. It has been offset in the 1990s by rising spending on R&D in the private sector. In 1997, total R&D
      spending for the nation was about $205 billion, with 30% coming from the federal government, 65% from
      industry, and the other 5% from a mix of universities and nonprofits.
   C. The line between basic and applied research
      Basic research aims at making fundamental discoveries that often have no immediate application. In the
      long run, they may turn out to affect everything, or to affect nothing. About 15% of American R&D goes
      into basic research. Because of the uncertainty about market potential, it is primarily funded by the federal
      government. However, federal funding of basic research has been flat during most of the 1990s in real
      dollars.
   D. International comparisons
      U.S. spending on R&D, taken as a share of the economy, stacks up fairly well against other industrialized
      nations. This makes some sense, because the huge U.S. economy is in a better position to capture more of
      the unexpected spillovers and spinoffs from supporting R&D than a smaller economy would be likely to
      do. However, a lot of U.S. government R&D is in military applications, which reduces the overall
      comparison.

III. What policies would encourage more innovation?
   A. Direct government support
      The federal government spends about $65 billion a year on R&D. In the context of a total budget of about
      $1.8 trillion and a GDP that exceeds $8 trillion, it should be possible do a little better. However, it typically
      works better if the government provides funds without trying to micromanage the precise direction of the
      research. For example, there were government studies on synthetic fuels, the Supersonic Transport, and
      others, which were "boondoggles."
   B. Tax credits for industry
      Industry can be offered tax credits based on the amount of R&D spending they undertake.
   C. Educating engineers
      Engineers are often the ones who operate where the ideas of technology are translated into products—and
      where the most productive and interesting questions are posed about new technology. The U.S. does fairly
      well by international standards in training engineers—but we could train more.
   D. The mixed issue of patents and copyrights
      Inventors, of course, tend to argue that stronger patent and copyright protection would give them more
      incentive to invest. This argument is true, as far as it goes, but it neglects the fact that strong patent and
      copyright laws may discourage diffusion of ideas across the economy—which is also an important policy
      goal. Thus, while patent and copyright law do have a role to play in encouraging innovation, one might
      wish to be hesitant before expanding their power too dramatically.
   E. Encouraging communication across industry
      Government can take a number of steps to encourage the flow of information across firms, in a way that
      may help spur new ideas and avoid duplication of effort. Some methods include allowing R&D consortia,
      as well as subsidizing the Internet, translating technical documents from abroad, and so on.
   F. International cooperative agreements
      The United States tends to pay more than other nations for research and development, because its huge
      economy is in a better position to take advantage of new technologies. But it might be helpful to encourage
      other countries to participate in paying for such projects—with the results freely available to all.
   G. A stable macroeconomic framework
      A company will be better able to focus on new technology if it isn't worrying about macroeconomic factors
      like a looming rise in inflation, or high interest rates, or needing to lay off workers due to recession, or the
exchange rate leaping about. To the extent that government can maintain a stable macroeconomic framework, this allows firms to focus on R&D.

H. An active competitive environment

The spur of competition is in large part what drives innovation: the hope of gaining high profits; the fear that if you don't move ahead, your competitors will leave you in the dust. Encouraging deregulation, avoiding monopoly, promoting free trade, and limiting regulation to what is strictly necessary will all make competition work more sharply.

Essential Reading:

National Science Foundation, *Science and Engineering Indicators*. Published annually. *National Patterns of R&D Resources*. Published biannually. These two reports from the NSF give all sorts of helpful facts and background about America's R&D effort. The first is a wide-ranging discussion that ranges from the state of K-12 education to the state of America's education in engineering to federal support of R&D to the possibilities for international cooperation in large R&D projects. There are lots of tables and figures. The second report is basically just data on R&D: who funds it, where is it spent, historical trends, and so on. Both reports are available from the website of the NSF. Go to <http://www.nsf.gov>, and click on "Science Statistics" or "Publications."

Supplementary Reading:

Landau, Ralph, Timothy Taylor, and Gavin Wright, eds., *The Mosaic of Economic Growth*. Stanford, CA; Stanford University Press, 1996. I recommend three chapters in this book of collected essays for getting a good sense of current R&D issues. "Privatizing Public Research: The New Competitiveness Strategy," by Linda R. Cohen and Roger Noll (pp. 305-333), gives a good sense of the economic justifications for public investment in R&D, the facts about how such investment has been happening, and many of the dangers that arise when government seeks to make research too "relevant." "Uncertainty and Technological Change," by Nathan Rosenberg (pp. 334-353), gives many interesting examples of how unpredictable and uncertain technological change can be, and offers some insights on why this may be so. In "Science and Technology Investment and Policy in the Global Economy," A. Michael Spence considers how the U.S. science and technology system has been internally focused, and how it may be useful to consider the global dimension of such investments.

Questions to Consider:

1. What advice would you give the president about how to direct the federal support of research and development?

2. Which are your most favorite and least favorite policies for encouraging research and development. Justify your choices.
Lecture Twenty-Three
Is the Stock Market Headed for a Crash?

Scope: U.S. stock prices have skyrocketed in the 1980s and 1990s, with the Dow Jones® industrial average tripling in each of the decades. By a number of standard indicators—dividend-price ratio, book value, and price-earnings ratio—they seem higher than has the underlying value of the firms would justify. This lecture explores the meanings of these indicators, and how much they should be trusted today in the evolving economy. It then introduces the "noise trader" approach to finance, which offers a useful vocabulary for discussing how stock prices can go so far above historical norms.

However, the prospect of a stock market crash is less dire than is often believed. There may be decline in stock prices, but only a temporary one. It may be that stocks will in the future rise more slowly than their long-term average—but will continue to rise more than alternative investments. Even if a stock prices to decline and stay low for a sustained period, it should be remembered that while this can certainly cause severe financial disruption, a fall in the stock price taken alone does not eliminate any factories or technology—and it is quite possible for the rest of the economy to continue to chug forward.

Outline
I. A quick review of the stock market since the 1980s and 1990s
   By any index you choose to look at, the stock market has boomed in value since the early 1980s—and has had some especially hot years in the mid-1990s.

II. What are the traditional measures to define an "overvalued" stock market?
   There are several financial rules-of-thumb that have been traditionally used to look at whether stock prices valued too high. All of them seem to be saying that stock prices are heading for a fall. But in the modern economy, there are also reasons to doubt whether these indicators carry the same meaning that they used to.
   A. Dividend-price ratio
      1. The historical levels
         Dividend payments have averaged 4 percent of the stock price since 1950. When dividend payments have been higher than that level, it has tended to mean that stock prices were headed for a rise. Anything less than 3 percent has commonly been interpreted as a sign that stock prices are overvalued. By November 1996, the ratio of dividends to stock prices fell below 2 percent for the first time in the available U.S. data, which stretched back to 1871.
      2. The changing economic role of dividends
         It used to be taken for granted that good companies paid dividends. Now, analysts are more likely to believe that paying dividends is financially foolish, because if a firm wished to distribute money to its shareholders, this can be done in ways like stock buybacks that involve less of a tax bite than payment of dividends. So, a low D/P ratio may reflect this changing attitude.
   B. Book value
      The book value of a company is determined by taking the value of all a company's assets minus the value of its liabilities—and then looking at this relative to the stock price of the company. Book value is reported each year in annual reports of companies.
      1. Historical levels
         The stock market value of companies was typically about 200% of book value from the 1950s to the 1970s, then sagged to about 120% of book value in the early 1980s, and has since risen to more than 500% of book value.
      2. The changing meaning of book value
         Companies increasingly rely on information and high technology for their economic value, but many book value calculations focus on more easily measured assets like buildings, equipment, and financial holdings. The rise in stock prices compared to book value could mean that book value as it is being commonly measured is less relevant to a company's stock price than it used to be.
   C. Price-earnings ratio
      1. Historical levels
The price-earnings ratio, or P/E ratio, is the total price of all the stock in the firm divided by the firm's annual earnings. The average P/E ratio over the last century or so has been about 14. Typically, a high P/E has been a danger sign that stock prices are headed for a fall. By mid-1998, however, the P/E ratio had risen as high as 27.

2. Conceptual questions
Using the P/E ratio as a benchmark for the stock market is harder to question than are the dividend and book value benchmarks. However, one related argument does apply. If firms are deliberately holding down their official earnings by taking on more debt and higher interest payments (which was part of the argument over lower dividends), then the higher interest payments will reduce their earning, and perhaps the high P/E represents this shift toward more debt.

III. How can the market stay so high or, conversely, how do crashes happen?
   A. Thinking about proximate and fundamental causes of a crash
      A crash means that there are many enthusiastic sellers of stock, and not many enthusiastic buyers, so the price falls. Think of this like an avalanche of snow: lots of small things can be the proximate cause that set it off; the interesting, and more important, question is how did the fundamental situation arise where a crash is possible.
   B. The "noise trader" hypothesis
      1. Two groups of stock traders and feedback loops
         It is useful to think of the stock market as composed of value traders and noise traders. The value traders cause movements of the stock price because of new information about firms; the noise traders cause these movements to be exaggerated; eventually, the value traders rein them in; but this causes another cycle of overreaction.
      2. What if you're wrong? Or if you're right—but not right away?
         Why do the value traders allow market overreactions to happen? They must face the risks that they may be wrong in their estimates of fundamental market value or that they may be right—but only eventually so. In either case, they will be hesitant to commit resources to buying or selling too quickly.

IV. How bad would a stock market crash actually be?
The scenarios for how bad a stock market crash would be range from barely noticing it to a new Great Depression. The milder scenarios are more plausible.
   A. Must what goes up always fall all the way back down?
      People sometimes talk as if the stock market might just collapse back to one-tenth of its present level. This seems highly unlikely; after all, the economy itself has grown substantially, and inflation has pushed up prices, and it seems unlikely that either of these facts will be reversed so thoroughly.
   B. A permanent crash or a temporary one?
      The economy has already shown a number of times that it can easily overcome a temporary downturn in the stock market. A vivid example is economy chugging ahead through the October 1987 stock market crash.
   C. Salve on the wounds
      Economists and policymakers have developed a better understanding of how to deal with stock market crashes in the short-term. In the midst of a crash, there can be huge problems that occur because the systems of trading are overloaded or crash. Large companies can become temporarily insolvent; but if they shut down, the dynamics of the crash only become worse. In the 1987 stock market crash, the Federal Reserve pumped loans into such firms. It didn't avoid the crash, but helped to prevent the crash from feeding on itself.
   D. The equity premium puzzle: cause for a soft landing?
      1. What is the equity premium puzzle?
         The equity premium is the extra amount that one receives for investing in stocks (also called "equities") as opposed to investing in bonds; a common estimate over recent decades would be that one receives a return of 9-10% per year (above inflation) for investing in stocks, but only 2-3% for investing in bonds. The puzzle is that this gap seems unexplainably large. Why haven't more people invested in stocks?
      2. Perhaps lower returns can still be a good deal

©1998 The Teaching Company Limited Partnership
It may be that the equity premium has diminished, because people have changed their attitudes toward the riskiness of stock ownership. In being more willing to buy stocks, they have driven up the current stock prices, but in the future, perhaps stocks will pay only 7% above inflation, rather than the historical 9-10 percent. Stocks would still be a good deal—but not quite as good as they used to be.

E. How bad would a hard landing be?
Contemplate the worst outcome: a stock market that falls sharply, and then stays low for a sustained time. In the popular imagination, this is a large part of what brought on the Great Depression. But economists emphasize that while a fall in stock prices would definitely affect the ability of companies to raise money, it would not cause a single factory or technology or worker to disappear. Paper losses sting, but they need not lead to economic collapse. The Great Depression had other, more important, causes.

Essential Reading:
Golub, John E., and David G. Bishop, "What Long-Run Returns can Investor Expect from the Stock Market?" Economic Review: Federal Reserve Bank of Kansas City, Third Quarter 1997, pp. 5-20. This short article offers a review of the evidence on stock prices in relation to measures like book value, the dividend-price ratio, and the price-earnings ratio. It also explores in greater detail the argument that the high price of stocks in the late 1990s may reflect a lower equity premium ratio—which could still leave stocks as a good deal, just not as good a deal as they used to be. This article is available at the website of the Kansas City Fed, <http://www.kc.frb.org>.

"Main Street's Biggest Fear," Economist, March 16, 1996, p. 80. This brief article discusses the links from the stock market to the broader economy—and why there may be less to fear from such connections than many people think.

Supplementary Reading:
"Stockmarkets: Welcome to Bull Country," Economist, July 18, 1998, pp. 21-23. This article focuses on the equity premium puzzle. It explains the equity premium puzzle, and explores the various possible explanations that have been proposed for it. Has it actually contracted? If so, why? A lower equity premium can explain why the stock market is doing so well. But if the equity premium and other indicators of stock market activity should bounce back to their more common historical levels, then the stock market is headed for a fall.

Malkiel, Burton, A Random Walk Down Wall Street: including a life-cycle guide to personal investing. New York, Norton, 1996. This book has come out in a number of editions over the years; try to get a recent one. It's the best single starting point for understanding how economists see the stock market. It also helps in understanding the logic behind the investment advice that economists commonly give for those considering long-term retirement savings: buy stocks at regular intervals, and hold them, and don't spend much or any time or energy trying to beat the professionals at timing the market's ups and downs or at buying and selling individual stocks.

Questions to Consider:
1. Do you think the stock market is headed for a major decline? Support your answer.
2. How is it possible for the stock market to be "overvalued" or "undervalued," at least according to the historical averages, for substantial periods of time?
3. How severely would a short-term fall in stock prices affect the rest of the economy? What about a medium-term fall in stock prices?
Lecture Twenty-Four
The Supply-Side Economics Movement

Scope: Since the late 1970s, a movement called "supply-side economics" has received substantial attention. The movement was composed more of journalists and policy activists than of academic economists; to be blunt about it, you would have a hard time finding more than a handful of academic economists who would identify themselves as "supply-siders." But the movement found a niche in the Republican Party, in the economic philosophies of Ronald Reagan, and thus in our recent economic history.

Essentially all mainstream economists would agree with the supply-side movement in stressing the importance of economic growth for raising a nation's standard of living over the long run. The goal is not the subject of dispute. But supply-side economists argued that tax cuts were the central and most important step to achieving this goal. Moreover, they argued that conventional economic thinking was not especially relevant. For example, they discounted the Keynesian belief that government might help nudge the economy out of recession by stimulating the amount of demand in the economy with spending or tax cuts. They also discounted the monetarist point of view that how the Federal Reserve managed the money supply mattered for the economy. Instead, it all came back to tax cuts.

There are a number of good reasons to reform the tax code, but the supply-side economists overpromised what reductions in tax rates could accomplish, and seem to have tunnel vision about the possible use of other tools of economic policy.

Outline

I. Supply side goals and means
   A. Who speaks for the supply-siders?
      Some of the chief spokesman for the supply-side perspective have been Robert Bartley, editor of WSJ editorial page; Jude Wanniski and George Gilder, authors of popular books; Arthur Laffer, a professor of economics at USC.; Paul Craig Roberts, professor of political economy at Georgetown University; and Robert Mundell, a prominent academic economist at Columbia University.
   B. The extraordinarily important goal of economic growth
      In the long run, what really matters for the standard of living is long-term economic growth, and not much else.
   C. Tools of the supply side
      1. Lower tax rates on wages and investment returns to improve incentives
         Top federal tax rates in the United States have sometimes been 70% or higher. At some point, taxing at ever-higher rates becomes unproductive, in the sense that it discourages so much economic activity that lower levels of tax are collected. Moreover, high tax rates discourage saving, investment, work, and entrepreneurship—and thus slow down economic growth.
      2. Money, exchange rates and the gold standard
         Supply-siders typically favor low inflation and attempts to keep exchange rates fixed, and they often seem to suggest that these goals might best be accomplished by some form of a new gold standard. However, monetary policy is probably a better approach.
      3. A generally free-market agenda
         Supply-siders typically support deregulation and free markets; they will be found on the free market side of just about every issue.
      4. Downplaying of many other policy tools
         Supply-siders tend to believe that fiscal policy is pretty much irrelevant to the economy. They would rather cut taxes to boost incentives than raise taxes to fight a budget deficit. They also tend to downplay or have little to say about issues like subsidizing research and development or job training, except to argue that the free market will do it.
   D. The canonical supply-side examples
      There are perhaps three canonical examples from 20th century U.S. history that supply-siders mention over and over again. These are the tax rate cuts that happened in the 1920s under Coolidge; the tax cut by the
Kennedy administration in the early 1960s; and the tax cut by the Reagan administration in the early 1980s. Not coincidentally, they would argue, the 1920s, 1960s, and 1980s all had lengthy periods of economic growth.

II. The challenges to supply-side economics
   A. Separating supply-side and other paradigms
      The supply-siders point out that tax cuts have often been followed by a period of robust economic growth. But there are other points of view which make this same prediction, so it is necessary to distinguish between them.
      1. Confusing Keynesian booms with supply-side booms
         At least since the writings of John Maynard Keynes in the 1930s, it has been argued that when the economy is stuck in recession, government can act to boost it out of recession with tax cuts or spending increases. Keynes argued that this would work by stimulating the amount of demand in the economy, which would cause businesses to produce more and hire more people. This is a different prediction about how tax cuts have their economic effect than the supply-side prediction.
      2. Confusing business cycle processes with supply-side booms
         When the economy rebounds out of a recession, it typically grows more quickly than average for a time; in a way, it's making up for time lost during the recession. If tax cuts are more likely in a recession, then the tax cuts may be taking credit for a speedier economy that would have happened anyway, as a result of the economy bouncing back.
      3. Confusing temporary with permanent
         It's an old game, played by all side, to pick a few selected years and then call them a seismic shift or a complete proof of a certain point of view. Every recession is the end of the economy as we know it; every upswing is a new dawning of a triumphant age. There is scant evidence that the changes wrought by tax cuts are permanent ones.
      4. Glancing back at the canonical examples
         With these alternate models in mind, it is harder to see the examples of the 1920s, 1960s, and 1980s as unadulterated evidence supporting a supply-side theory of how tax cuts worked. In all three cases, the economy was rebounding back out of a recession, and at least for the 1960s and 1980s, Keynesian explanations of how the tax cut worked are at least as plausible as supply-side ones. It does not appear that savings rates or hours worked responded by much to supply-side incentives in either case. Nor does it appear that any of these examples marked a lasting change in the economy.
   B. Testing the economic connections
      1. Questioning the link from tax rates to work
         Do people really work more hours as their tax rates are reduced, as the supply-side hypothesis requires? Some do, primarily second earners in households. But many full-time workers just continue working full-time.
      2. Questioning the link from tax rates to savings
         Do people really save a higher share of their income as their tax rates are reduced, as the supply-side hypothesis requires? Some do. But others, known as "target savers," actually save less, because the higher after-tax returns produced by the tax cut make it possible for them to put less money aside and still reach their target level of savings. U.S. personal savings rates dropped noticeably in the early to mid-1980s, after the Reagan tax cut.
      3. Tax rate cuts and the distribution of taxes paid
         Since the rich pay a larger share of tax cuts, the belief is sometimes expressed that supply-side tax cuts will disproportionately reduce the share of taxes they pay. This accusation doesn't seem to hold true, at least not to any substantial extent. This may be partly because the rich work harder as a result of the tax cuts (the supply-side argument), or because economic recovery tends to benefit the rich more and pushes up their share of taxes, or because lower tax rates mean that the rich have less incentive to find legal ways to minimize their tax burden.
      4. A capital gains tax cut
         Supply-siders argue that the capital gains tax—which is paid, for example, when one sells stock at a higher price than one bought it for—is a tax on incentives for entrepreneurism. Moreover, they argue that a capital gains tax cut will cause more people to sell stock, which will increase tax revenue. On the point about encouraging entrepreneurism, one can make a case for tax breaks for those who start
companies or work for them, but the same argument holds less well for those who buy and sell stock in General Motors. There is little doubt that a capital gains tax cut will raise more money in the short run, but it will probably lose that money and a little more in the long run.

5. Tax cuts, budget deficits and investment

Supply side economics was sometimes characterized by its opponents as a belief that tax cuts would stimulate so much economic growth that overall tax revenue would increase, and no budget deficit would result. This accusation seems unfair; it wasn't what was actually predicted by supply-siders at the time. To put it the other way about, supply-siders are willing to admit that at least in the short- and medium-run, tax cuts can increase the budget deficit. However, they typically believe that this is a price worth paying for better investment incentives.

6. Tax cuts and entrepreneurial spirit

Supply-siders argue that tax cuts are a spur to entrepreneurial behavior. The roots of entrepreneurial behavior are not well-studied, but it seems unlikely that most entrepreneurs are the sort of people who are influenced by a few percentage points on their tax rate.

III. The bottom line on supply-side economics and economic growth

A. Was supply-side economics ever really tried in the 1980s?

When in a good mood, supply-siders certainly argue "yes." But some supply-siders have pointed out that Reagan's early tax cuts were soon counterbalanced by tax increases. To the extent that this is true, it's harder for the supply-side forces to take credit for the economic recovery of the 1980s.

B. The limited role of tax breaks in encouraging productivity

The fundamental sources of productivity growth are well-understood; as discussed in previous lectures, they are new technology, growth in human capital, and growth in physical capital, operating in the context of a healthy market. Tax breaks have a role to play in encouraging some of these forces, like business investment in plant or R&D. But there is no reason to favor the role of tax cuts over other policy tools that encourage these goals, like public support for education or for keeping the budget deficit low.

Essential Reading:

Krugman, Paul, *Peddling Prosperity*. W.W. Norton and Co.; New York, 1993. Krugman is an equal-opportunity critic; you will remember that he criticized the idea of "competitiveness" in the Part III, Lecture 1. Chapter 3 of this book presents a nice pocket history of the supply-side movement, and how it really grew out of journalism rather than academic economics. Chapter 4 provides a skeptical evaluation of the extent to which supply-side policies can be counted as a success in terms of producing greater economic growth in the 1980s.

Supplementary Reading:

Bartley, Robert, *The Seven Fat Years*. The Free Press, New York, 1992. Bartley is the head of the editorial page of the Wall Street Journal, one of the main media launching pads for supply side economics. The title refers to the seven years of economic upswing from 1983 to 1990. Bartley's book was written during the recession of 1990-91, so it is a history and manifesto for how those seven fat years were brought about by Reagan's supply-side economics, and how we can return to good economic times. The book is a work of an engaged, active, and widely read person. The book is also rambling and heavy on polemics—for example, those who disagree with him are "wallowing neurotically in arcane and ill-understood statistics," and worse—and light on careful and reasoned analysis. In all of those ways, it's a fair representation of the tone and substance of supply-side arguments.

Fink, Richard H., *Supply-Side Economics: A Critical Appraisal*. University Publications of America, Frederick, Maryland, 1982. This collection of essays originally published in other places was put together in 1982, just after Ronald Reagan took office and the supply-side agenda had perhaps its greatest political power. It's a good source for background reading on a number of the main essays that gave momentum to the supply side movement, and to its credit, the book also contains a number of essays critical of the supply-side movement.
Questions to Consider:

1. Looking back at the early 1980s as we enter the 21st century, to what extent does it seem true to you that supply side economics altered either the political or the economic landscape?

2. Why do tax cuts and recessions often seem to happen at the same time, and how does this complicate the tax of figuring out the effects of supply-side economics?

3. Why does it seem that so few economists are willing to use the supply-side label—even though they typically are in agreement with the policy goal of sustained long-term economic growth?
Contemporary Economic Issues
Part III
Professor Timothy Taylor
Timothy Taylor
Managing Editor, Journal of Economic Perspectives
Macalester College

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.
# Table of Contents

## Contemporary Economic Issues

### Part III

<table>
<thead>
<tr>
<th>Lecture</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professor Biography</td>
<td>i</td>
<td></td>
</tr>
<tr>
<td>Foreword</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

### III. Growth and Productivity

| Lecture Twenty-Five | Sectoral Evolution: Farming, Manufacturing, Services, the Information Age (?) | 4    |

### IV. Budget and Monetary Policies

| Lecture Twenty-Six | Federal Budgets: Deficit, Balance, or Surplus | 7    |
| Lecture Twenty-Seven | The Shaky Foundations of Social Security | 11   |
| Lecture Twenty-Eight | Defense Spending and the Uncertainties of the "Peace Dividend" | 15   |
| Lecture Twenty-Nine | The Government in Health Care: Medicare and Medicaid | 18   |
| Lecture Thirty     | The American Tax Burden in Perspective | 21   |
| Lecture Thirty-One | Flat and Flatter Taxes | 24   |
| Lecture Thirty-Two | Inflation: Why the Measure Matters | 28   |
| Lecture Thirty-Three | The Federal Reserve and Inflation Fighting | 32   |
| Lecture Thirty-Four | Economic Interpretation of Federalism: What Should States Do? | 35   |

### V. Trade and Exchange Rates

| Lecture Thirty-Five | Foreign Trade: What’s Really at Issue? | 39   |
| Lecture Thirty-Six  | Free Trade vs. Labor and Environmental Standards | 43   |
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, nontechnical 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 Twenty-Five

Sectoral Evolution: Farming, Manufacturing, Services, the Information Age?

Scope: As an economy grows, all its parts don't grow at the same rate. Instead, some parts diminish in relative importance while others grow. There is an evolution of which sectors are most important. The United States in the 20th century has seen an evolution from farming to manufacturing to service industries. Now, at the dawn of the 21st century, there is some talk of yet another shift toward an information age.

This lecture begins by sorting out what happened in the transition from farming to manufacturing, and in the transition from manufacturing to services. Both transitions were painful for many of those involved; economic growth often involves a degree of dislocation. In both farming and manufacturing, the root cause of the transition away from the sector was, paradoxically, the strong productivity growth within that sector, which meant that those workers remaining in that sector could produce so much more. As a result, resources were freed up to flow to other sectors of the economy.

The movement from services to information is a more controversial business; indeed, it's not clear that it is a useful way of describing what has been happening in the U.S. economy in the last few decades. Productivity doesn't seem high in service industries, unlike the previous examples of farming and manufacturing. Moreover, despite the widespread use of computers and information technology, there is scant evidence that service productivity is rising. This raises the "productivity paradox"; how can it be that we see so much new technology around us at a time that measured productivity growth seems to be so slow? Ultimately, it may be that information technology helps provide a more personally tailored and faster level of services, but perhaps without quite transforming the economy in some of the ways predicted by more giddy forecasters of the future.

Outline

I. The economic shift from agriculture to manufacturing
   A. The historical peak of farming
      At the start of the 20th century, about one-third of U.S. workers worked on farms. The total number of people working on farms peaked around 1910, and then declined for the rest of the 20th century.
   B. Changes in the profile of rural America by the 1990s
      Farm employment has dropped steadily during the 20th century; by the 1990s, only about 2% of U.S. workers held jobs on farms. As the number of farms has shrunk, the size of the average farm has risen. Farming has become more of a big business. In many rural areas, and even in many farm households, non-farm income has become more important.
   C. The seismic shift in federal agriculture policy: the 1996 farm bill
      Federal support for farmers, which became firmly established during the 1930s, was at that time a way of supporting a group that was poorer than average. But by the mid-1990s, the average farmer had just as much income—and considerably more in accumulated assets—than a non-farming family. At that time, most federal farm assistance was going to very large farming operations. In 1996, Congress signed and President Clinton passed into law legislation that removed most of the rules and provisions that had served to keep a number of farm prices above market levels.
   D. A new economic agenda for rural America
      A new economic agenda for rural America has a number of components: continuing agricultural R&D, to keep productivity rising; free trade, since a large share (about 25%) of U.S. farm production is exported; disaster protection for this weather-dependent industry; and assuring a communication and transportation infrastructure, to help the rural economy keep close connections with the rest of the economy.
   E. The underlying economic shift: a productivity push
      The farming industry has been to a large extent a victim of its own success. American farmers have become so productive that a very small number of them can supply the entire United States, as well as producing
for export. This high farm productivity has pushed resources out of farming and into other uses, like manufacturing, and thus has helped to boost the growth of the overall economy.

II. The economic shift from manufacturing to services
   A. The number of U.S. manufacturing jobs in perspective
      The number of U.S. manufacturing jobs has been fairly flat since about 1950, ranging between 15 million and 20 million jobs over that time even as the economy and workforce have grown dramatically. Since 1950, jobs in the service sector have increased by a factor of almost four, and even jobs in government have increased by a factor of almost three.
   B. The output of U.S. manufacturing in perspective
      However, although the jobs in the economy have shifted toward the service sector, economic output has not shifted in that way. Goods production was 35% of the economy in 1960, and slightly higher than that at the end of the century (39%). Services production was 52% of the economy in 1960, and just about that same level at the end of the century. In other words, output of goods and of services has expanded at just about the same rate as the overall economy, even though employment in those areas has proceeded at a very different pace.
   C. A manufacturing version of a "productivity push" story
      As productivity has risen in manufacturing, roughly the same number of workers have been able to produce the manufactured goods that Americans want to buy. This has meant that as the economy expanded, the new jobs weren't available in manufacturing, but instead that those human resources could turn to the services sector.

III. Is there a meaningful shift from services to information?
   A. No clear shift from services to "information"
      There is no clear evidence that jobs in "services" are shrinking while those in "information" are rising; in fact, it's not very clear how one even divides "services" from "information." Measured productivity in services doesn't seem to be rising, so if such a transition is happening, it doesn't seem to be the same productivity push story as in farming or manufacturing, either.
   B. Explaining the productivity paradox of the information age
      The "productivity paradox" is that at a time when it certainly feels to many of us that we are seeing a huge number of high technology improvements and developments, measured productivity growth in the economy remains low.
      1. The capabilities of technology have been oversold
         Maybe computers are great in theory, but not so great in practice. Think of all the time that people now spend surfing the Internet rather than working, or learning new software. Maybe any gains from the new technology are counterbalanced by these sorts of losses, and by the disruptions of constantly updating technology.
      2. The amount of increase in computer technology has been overstated
         Although there has been a reasonable amount of investment in computers, it takes time for any new item to become a significant share of the overall capital stock of the country. Some estimates from the early 1990s are that the total information processing equipment in the economy was only about 10% of the total capital stock at that time; computers, a subset of "information processing equipment," were just 5% of the total capital stock at that time. These amounts just aren't large enough yet to move the entire U.S. economy to a higher growth path.
      3. The delayed boost
         Perhaps information technology will eventually bring enormous changes in the economy and booming productivity growth—but it takes time. The historical example here is the electrical dynamo; although it was a well-established technology at the start of the 20th century, it still took several decades before electricity radically changed how factories produced things and how people used gadgets like dishwashers and vacuum cleaners in their homes. Perhaps it will take a few more decades before someone figures out the really new uses for the computer and the Internet.
      4. Mismeasured output in service industries
Perhaps the answer to the paradox is that productivity is indeed rising—but in ways not captured by the productivity statistics. Convenience and the ability to get more of what one wants may not be directly measured in output levels.

C. Is the information age more than a slogan?

The information age is probably more than a slogan, but less than a revolution. It accurately captures a sense that in the modern service-oriented economy, the management of information has become ever more important: internally within businesses, between businesses, and between businesses and customers. But it may be that the effect of the information age is more to do better what we are already doing, rather than to alter fundamentally relationships of work and family in this society.

**Essential Reading:**

Carson, Iain, "Manufacturing: The world as a single machine," *Economist*, special survey in center of issue, pp. 1-18. This is yet another fine survey article in the *Economist*. It focuses on how manufacturing output has shifted away from developed economies, like the United States, to less-developed economies, and how the developed economies have shifted toward service sector jobs. It argues persuasively that these sorts of shifts should be viewed positively, as a useful part of a process of economic growth, rather than as something to be feared.

Three short articles from the *Economist* on the subject of the shift from manufacturing to services. "The final frontier," February 20, 1993, p. 63. "Schools brief: The manufacturing myth, March 19, 1994, pp. 91-92. "It's wise to deindustrialize," April 26, 1997, p. 78. The first article explores the importance of service industries in the "industrial" economies. The second gives a useful international perspective on the decline of manufacturing jobs, and criticizes the "myth" that this is a sign of economic weakness. The final article explains how deindustrialization should be seen as a natural consequence of economic progress.

Allen, Donald, S. "Where's the Productivity Growth (from the Information Technology Revolution)?" *Review: Federal Reserve Bank of St. Louis*, March/April 1997, pp. 15-26. This article isn't an especially easy read. But it does offer a clear discussion of some potential reasons that economists have advanced for the "productivity paradox."

**Supplementary Reading:**

David, Paul A., "The Dynamo and the Computer: An Historical Perspective on the Modern Productivity Paradox," *American Economic Review*, pp. 351-361. The example of how long it took the implications and offshoots of the electrical dynamo to spread through economy at the start of the 20th century is one of the most intriguing arguments as to why we may have only seen the beginning in the 20th century of the changes that new information technology will bring. If you're interested in a fuller statement of the dynamo argument, a good next step would be to obtain a copy of Paul David's working paper on the dynamo (available from the Center on Economic Policy Research at Stanford University) that is cited in references of this paper.

**Questions to Consider:**

1. Should the government have taken (or be taking) steps to prevent the flow of jobs away from the farm sector? Justify your answer.

2. Should the government have taken (or be taking) steps to encourage more jobs in the manufacturing sector?

3. Which of the potential explanations of the "productivity paradox" do you find most persuasive? Least persuasive?

4. Do you think the Internet will prove to have been a revolutionary change, or just an evolutionary change?
Lecture Twenty-Six
Federal Budgets: Deficit, Balance, or Surplus

Scope: Every budget involves many small and intermediate decisions about taxing and spending. Some of those particular questions are taken up in the lectures that follow this one. But a budget also involves one big overall question: will the budget as a whole be in deficit, balance, or surplus? The experience of the United States budgets has often been one of deficits: some huge, some moderate. However, in the late 1990s the budget swung into a position much closer to balance, with some surpluses forecast for the immediate future.

There are two policy issues with regard to the overall stance of the budget. One involved countercyclical policy: a budget deficit can be used to kick the economy forward when it seems mired in recession or depression; a budget surplus can be used to slow an economy down before an inflationary spiral begins. These actions can be taken on a discretionary basis, as the government perceives they are needed, or they can be built into tax and spending policy so that they happen more or less automatically. Indeed, the presence of automatic stabilizers helps to explain why deficits become so large in recessions, but are smaller or turn to surpluses in a recovery.

The second broad policy issue involves long-term savings and investment. A deficit is paid for with borrowed month; that is, it soaks up a certain amount of capital that might otherwise have been used for private investment. Unless this borrowed money is also used for additional public investment—which doesn't typically happen—a budget deficit thus reduces investment in an economy. The policy goal in this area would be to run budget surpluses (or at least smaller deficits) to free up capital for private investment.

Outline

I. A brief history of U.S. budgets, surpluses, and deficits in the 20th century
   A. Deficits have been common, even prevalent
      In the 100 years of the 20th century, the U.S. government will have run deficits in 71 of them.
   B. Size and causes of deficits
      Early in the century, large deficits occurred to finance fighting World War I and II, and to stimulate the economy in the Depression. While there were some deficits at other times, they were small. From 1958 to 1997, there were only two years when the budget was in surplus (1960 and 1969). The deficits also became larger over this time, relative to federal spending and the size of the economy (GDP). The deficits of the 1970s, 1980s, and early 1990s had no obvious explanation like a war or a Depression. It is important to track the debt-to-GDP ratio as a key indicator.
   C. Why large deficits in the mid-1980s? Why a surplus in the late 1990s?
      In the 1980s, the key factors contributing to the budget deficit were a defense buildup, a tax cut, higher spending on the elderly, and higher interest payments. In the late 1990s, the key factors creating the budget surplus were defense spending reductions, two deficit reduction packages, and the strong economic upswing in the 1990s.
   D. The size of deficits has been volatile
      The deficits move up and down swiftly, which implies that they aren't just influenced by what laws are passed, but also by the state of the economy. Recessionary cycles are a good way to track the rise and fall of deficits.
   E. The long term budget outlook and the greying of America
      After about 2010, budget deficits will begin to grow larger as the baby boom generation retires, and spending for Social Security and Medicare is scheduled to rise.

II. Countercyclical budget policy
   A. Intellectual roots of Keynesian economics
      John Maynard Keynes, one of the greatest economists of the 20th century, wrote his most professionally famous book in 1936, in the depth of the Depression, explaining how the economy could get stuck in a Depression and what to do about it. To simplify his thinking considerably, he argued that the economy
could get stuck in a vicious downward circle of no spending, no income, no investment, and no growth, and that the solution was government spending to push the economy forward and get some momentum rolling. The same theory implies that if the economy is booming, there is a role for the government in slowing it down; thus the idea of "countercyclical" policy—running counter to the cycles of the economy.

B. Discretionary vs. automatic countercyclical stabilizers
A discretionary policy requires Congress and the President to pass legislation to have tax cuts and spending increases when the economy is in recession, and tax increases or spending cuts when the economy is booming. This policy can be difficult to implement, given the lags in the political process and the fact that it requires going against the spirit of the times. Automatic countercyclical policy occurs because taxes are automatically reduced in bad times (since they are tied to income and profits), while social welfare spending increases; conversely, the total tax take automatically rises in good times, while social welfare spending falls.

C. The "standardized employment" or "full employment" deficit
A useful way to see how much of the deficit is due to these automatic stabilizers is to look at the "standardized employment" or "full employment" deficit, which figures what the deficit would have been if the economy was operating at a constant, standardized unemployment rate.

D. Legacy of the Keynesian approach
The legacy of the Keynesian approach has largely been to let the automatic stabilizers work without interference—although there are always political problems with allowing the stabilizers to tighten up in good economic times, instead of having a spending increase or tax cut.

E. Recovering from a recession isn't permanent growth
Helping stabilize the economy and end a recession is a good thing, but it's not the same as creating a permanently higher rate of growth. Long-term growth in an economy comes from rises in productivity. If budget deficits try to push the economy forward faster than it is actually growing in productivity terms, the results can be inflation, a rise in imports and the trade deficit, and a depressed level of investment.

III. Deficits, surpluses, and national savings
A. Deficits are borrowed money, which crowds out private investment
There's a certain quantity of capital being supplied out there in the economy for domestic firms to invest, made up of domestic savings and money borrowed from abroad. When the federal government runs deficits, it borrows that money, which means that less is available for other borrowers. The other borrowers who are crowded out of the market include businesses seeking investment capital, and people borrowing money to buy homes and cars.

B. Putting deficits and the level of investment in perspective
The amount of investment crowded out by federal deficits in the range of $150-$200 billion can be quite substantial. From the standpoint of the economy as a whole, it may amount to as much as half of the capital invested in new plant and equipment in a given year.

C. Long-run consequences of deficits
The consequences of sustained deficits over time include higher interest payments, greater national reliance on foreign sources of capital, and a slower rate of economic growth. Interest payments will be large for the next several years.

D. What about if government invests the money in long-term growth?
If the government were to borrow money and crowd out private investment, but spend the money on public investments, there might not be as much or any loss in terms of economic growth, at least in theory. In practice, as discussed in the earlier lectures on growth and investment, just spending more money isn't necessarily the right solution to the need for improving education and infrastructure. Also, there is little evidence that deficits have historically been linked to surges in productive public investment.

IV. What about a balanced budget?
A. A balanced budget amendment to the U.S. Constitution?
In economic terms, there's nothing special about a balanced budget. It's just a point on the continuum from surpluses to deficits. In political terms, the argument that had some plausibility from the 1970s into the early 1990s, as deficits increased, was that our political system was out of control and couldn't stand the
pain of getting to a balanced budget. But in the late 1990s, with budget surpluses in hand, that argument has less power. Maybe it took longer to get to balance than it should have, but reasonable people can differ on whether changing the Constitution is a reasonable response to a political system that can be slow to react.

B. From a balanced budget movement to a pro-surplus movement
The balanced budget movement always had roots in a certain homespun wisdom: don't spend more than you have. However, as we enter what seems to be a time of budget surpluses in the late 1990s and early 21st century, it may be time for a new bit of homespun wisdom: spend less than you have, and save and invest the rest for the future. This would counsel for the building of surpluses, not just the avoidance of deficits.

Essential Reading:
"The burdensome national debt," The Economist, February 10, 1996, pp. 68-69. This short article that government borrowing isn't always necessarily bad; it depends why it is done. But as the article points out, it isn't always necessarily good, either.
Schultze, Charles L., "The Balanced Budget Amendment: Needed? Effective? Efficient?" and Buchanan, James M., "Clarifying Confusion About the Balanced Budget Amendment," both in National Tax Journal, September 1995. The first article is pp. 317-328, the second is pp. 347-355. These two articles are by eminent economists: Buchanan is a Nobel laureate; Schultze was head of the Council of Economic Advisers during the Carter presidency. They form a sort of pro-and-con on the issue of the balanced budget amendment, which was defeated in Congress shortly before these articles are written. But more to our purpose here, they also offer contrasting perspectives on what the goals of budgetary policy should be, and what problems our political system faces in addressing these goals.
Congressional Budget Office, "Long-Term Budgetary Pressures and Policy Options," May 1998. This useful report explains how the pressures of Social Security and Medicare will affect the budget deficit in the first few decades of the 21st century. Like most CBO reports, it's clear, succinct and readable, with essentially no political posturing.

Supplementary Reading:
Office of Management and Budget," Historical Tables: Budget of the United States Government," published each fiscal year. Much of the budget is focused on what is proposed for the next few years, and while this is helpful for some purposes, I more often find myself turning to these tables. They typically go back to 1950, sometimes earlier, and offer a wide array of perspectives on spending and taxes, divided up in various ways. For reliable information on what has actually happened with the budget, it's all here.
Congressional Budget Office, "Reducing the Budget Deficit: Spending and Revenue Options," March 1997. This report, or something similar, comes out almost every year. It's a useful compilation of lots of different proposals for changing certain kinds of spending or taxes. For each proposal, the report briefly summarizes the rationale for and against the change, and then gives estimates of how much the change would affect the budget. It's a useful tool for thinking about what you might like to change in the federal budget—and a useful reality check for the fiscal effect of any proposed changes.
For up-to-date information on government budgets over the web, let me suggest two particular sources. One is the Congressional Budget Office, the nonpartisan arm of Congress that studies the budget, at <http://www.cbo.gov>. The budget is proposed by the Office of Management and Budget, which is part of the White House. The White House web address is <http://www.whitehouse.gov>, and from there you can find your way to the budget information. The budget itself has shifted around on the web, but at the time of this writing, it's at <http://www.access.gpo.gov/su_docs/budget/index.html>. It takes a bit of effort to download data files from some of the budget sites, so the CBO site may be a little easier to deal with. For any of these sites, remember that the historical data on what has happened in the past, or what is happening right now, is always of much, much higher quality than any predictions for the future.

Questions to Consider:
1. Given the present state of the economy, what sort of countercyclical policy seems reasonable to you? What might this involve for general levels of taxes and general levels of spending?
2. During the 1980s, it was sometimes said that the large budget deficits hadn't had a negative effect on the economy; after all, the economy grew throughout the 1980s. With the perspective of the 1990s, what are the responses to this argument?

3. Would you suggest or support the passage of some rule to help govern the conduct of budget policy, and to avoid a recurrence of enormous deficits? A balanced budget rule is probably too simple—and doesn't anyway make much sense in a time of surpluses. What might be some of the creative alternatives?
Lecture Twenty-Seven
The Shaky Foundations of Social Security

Scope: Social Security is one of America's most popular public programs, and deservedly so. For both elderly people and their concerned children, it has been a bulwark against an impoverished old age. However, Social Security was from the start built on a shaky foundation: the notion that the retirement of each generation would be paid for by the next generation of workers. If the next generation of workers is a numerous one—like the "baby boom" generation that was born between 1945 and 1960—then this system works fine. But when the large baby boom generation retires and is followed by a smaller cohort of workers, this system runs into grave difficulties. Social Security is presently projected not to have enough money to pay its bills in about 2030, and thereafter.

There are only two broad options here: tax more or pay less. There are, however, a variety of more-or-less palatable ways of carrying out these options. For example, higher taxes might be collected only from those who are better-off, or might be coupled with privatized retirement accounts for individuals. Paying less might happen by gradually raising the retirement age, or by slowing the growth in Social Security benefits by half a percent per year for some years. Social Security is both deserving of being saved and eminently savable—but it will be easier if it is done sooner rather than later.

Outline

I. The dangers of a pay-as-you-go retirement system
   A. Founded as pay-as-you-go
      Social Security has never been a system where your tax payments are put into a separate account with your name on it, that you receive back later with interest. Instead, it was set up as a system where, except for a small reserve, the money received flows right back out the door to the current elderly. Those who pay more into the system do get more back—but money is also redistributed to some extent from high contributors to low ones.
   B. When demographics conspire
      A pay-as-you-go system will run into difficulties whenever a large generation of workers retires, and is followed by a smaller generation. Not only will the U.S. experience this phenomenon in the first few decades of the 21st century, as the baby boom generation born between 1946 and 1960 retires, but life expectancies are growing and retirement ages are declining. The result is fewer workers paying taxes compared to those receiving Social Security benefits.
   C. Stopping a moment to admire the success story
      Before considering the problems of the future, it is worth pausing a moment to consider the good done by Social Security. Poverty rates among the elderly used to be very high; now they are lower than average. At the end of the century, the system is supplying benefits to 37 million retirees and their families.

II. The Social Security surplus: what they can do, what they can't
   A. The big shift to a partially funded system in 1983
      In 1983, seeing financial problems for Social Security in the not-too-distant future, a variety of reforms were adopted by the Greenspan Commission. An especially noticeable one was the decision to have the Social Security Trust Fund start running surpluses to build up reserves to pay for the future retirees. The current projections are that the trust fund will build up until about 2019, and then will deplete until 2031, at which point the incoming Social Security tax revenues at that time will cover only about two-thirds of the promised expenses.
   B. The Social Security surplus and the budget surpluses
      The federal budget has lots of parts, and it's hard to say that one part "caused" the budget surpluses of the late 1990s. But it is fair to say that the Social Security surpluses pretty much match the size of the overall budget surpluses projected for the next few years. If the Social Security surpluses were removed, and nothing else changed, the surpluses would be smaller, and might even become deficits in some years.
   C. Is the Social Security surplus really there?
Cynics sometimes point out that the surplus is all invested in Treasury bonds, which are just government promises to repay in the future. They say the surplus is "just paper," or it isn't "really" there. In some sense, this is correct. Essentially all financial savings—bank accounts, bonds, stocks—is in some sense "just paper." But it's paper that involves ownership and promises about the future.

III. Potential policy solutions

A. The 2% solution
   1. The shape of the solution
      Social Security is funded by payroll tax of 6.2% imposed on both employees and employer for a total of 12.4%, up to a total income level of $68,400 in 1998. The income ceiling adjusts upward for inflation over time. Raising this tax by about 2 percentage points would be enough to close the funding gap for Social Security over a 75-year planning horizon.
   2. The problems lurking behind the seeming simplicity
      Nobody likes higher taxes, even a couple of percent. Such a tax increase wouldn't solve the Social Security problem after 2070, and might not even solve it until then. But if we're going to take this step, it needs to happen right away, or the extra taxes necessary will rise over time.

B. Slower growth of retirement benefits
   Social Security benefits have been adjusted upward according to the inflation rate since 1975; before that, upward adjustments occurred on an ad hoc basis. There is some argument that the official inflation rate overstates the true rise in the cost of living by about 1%. If the future rise in Social Security benefits was limited to measured inflation minus 1%, this would save about one-third of the money necessary to balance the system until 2070 or so.

C. Taxation of Social Security benefits
   Social Security benefits have been taxed as income to a limited extent since the 1983 amendments. The amount of Social Security income to be taxed could be expanded.

D. Flavors of benefit cuts
   1. Later retirement ages
      The normal retirement age is scheduled for a gradual rise now, from 65 to 67 by about 2021. Of course, this is an indirect way of reducing benefits paid. The rise in retirement age could happen more quickly, or be scheduled to continue rising past age 67 in the third and fourth decades of the 21st century.
   2. Automatic adjustments for changes in life expectancy?
      Instead of increasing the retirement age, a similar step would be to reduce benefits paid as life expectancy rises. The logic would be that you have earned a certain amount of benefits by contributing to the system—so if you live longer than expected, this amount needs to be spread out over a longer time.
   3. Tinker with the benefits formula
      There are a variety of ways of tinkering with the benefits formula that would result in lower benefits; for example, instead of having benefits based on your 35 highest-earning years, it could be your top 38 or 40 years. This would reduce average annual earnings, and thus reduce benefits.
   4. A work incentive approach
      Instead of forcing a longer retirement age into law, we could redesign Social Security to offer incentives for working longer. For example, we could have larger reductions in benefits for those who choose to take early retirement at 62. Or we could allow those who work beyond normal retirement age or beyond age 70 to receive both income and at least some Social Security, to reward them for placing less of a burden on the system.

E. Investing the trust fund in equities
   Stocks pay more than bonds; as the earlier lecture on stock market crashes discussed, there is an "equity premium." So what about investing at least part of the Social Security Trust Fund money in stocks, rather than bonds, to get those higher returns? This would certainly make the trust fund balances look better, but it would have uncertain effects on overall retirement prospects.

F. Growing the economy out of the problem
   A larger economy in 2020 or 2030 would make it easier to pay off the amounts owed to the boomer retirees. Even raising the growth rate by .5% or 1% a year would be an enormous gain over the next
several decades. This suggests pursuing the agenda for growth laid out in the earlier lectures: savings, investment, education, R&D.

IV. Privatize Social Security?

A. The promise of privatization
The typical proposal is for partial privatization of Social Security; that is, the government would continue to guarantee everyone a minimum payment, which would be the same for all, but people could also put aside, say, 2% of salary in a retirement account, invested in assets of their own choice.

B. Qualms about privatization
1. Transactions costs
Privatization would involve the creation of tens of millions of accounts, rather than the one big account of the Social Security Trust Fund. Even small charges for running these accounts could be highly controversial—especially since small charges might wipe out a sizable share of the interest received by the young or the poor.

2. Regulation of risks
If people are allowed to take highly speculative chances with their private retirement fund, some will lose their money—and the door would be wide-open to all sorts of self-promoters. So there are often proposals that would restrict the sorts of investments that could be undertaken to broad-based mutual funds.

3. Regulation of withdrawals
Will people be allowed to withdraw their retirement savings all at once, or required to take it out over time, in the style of Social Security? What about when Congress wants to pass laws allowing people to tap into these accounts for certain purposes? How would the accounts be handled in case of divorce, or in wills after death? All of these issue will require further regulation.

4. The need for a transition tax
If people start putting some of their Social Security contribution in a personal account, this means less money for present or near-future retirees. Thus, privatization plans are sometimes accompanied by transition taxes, like a 1% national sales tax, to raise the money to keep the present system going while money is shifted over to the privatized system. In other cases, all the money going to the privatized accounts is new taxes; in this case, privatization becomes a tradeoff for the 2% solution of paying higher taxes.

5. Offsetting asset shifting
If people have more money in their privatized Social Security account, will they offset that by having less in savings, or in their IRA or 401(k) retirement account? If so, then the accounts won't really change how much people are putting aside for retirement.

C. What's are the best real reasons for privatization?
Many of the proposals, like putting retirement money in the stock market or raising the payroll tax by 2% or changing the retirement age, don't require privatization. The main arguments for privatization seem to be a matter of politics; for example, people will pay the 2% tax increase for Social Security if they get private accounts, but not otherwise. Or we don't trust the government to hold on to the surplus without trying to spend it, but if the money is held in private hands, it will really add to savings. Or people need a boost to getting involved in looking after their own money and taking responsibility for their own retirement.

Essential Reading:
Kotlikoff, Laurence J., and Jeffrey Sachs, "It's High Time to Privatize." Aaron, Henry, "A Bad Idea Whose Time Will Never Come." Both articles in the Brooking Review, Summer 1997, pp. 17-23. All of the authors here are top-notch economists. For a good, no-holds-barred dispute on whether or not to privatize Social Security, this is a good place to turn.

U.S. House of Representatives, 1998 Green Book: Background Data on Programs within the Jurisdiction of the Committee on Ways and Means. Washington, D.C.: U.S. Government Printing Office, May 19, 1998. Available various places on the web; one good connection is <http://www.gpo.ucop.edu/catalog/green105.html>. This report is published annually. It covers most of the big programs where the federal government hands out assistance to people: Social Security, welfare, Medicare, Medicaid, and so on. Section I is about Social Security; see also Appendix A: Data on the Elderly. Each year the report offers a superb nuts and bolts survey of the programs,
complete with a basic review of the legislation, statistics on how many people in what groups receive how much assistance, and even some more limited review of the academic research on how the programs affect people. It's a little dry, but it's readable and all in one place.

**Supplementary Reading:**
Beck, Barbara, "The Economics of Aging." *Economist*, January 27, 1996, special section in middle of issue, pp. 1-16. As noted a number of times in these suggested readings, the special sections in the middle of the *Economist* are almost always quite good. This article does a nice job of giving an international perspective on the issues of aging. The U.S. isn't the only country facing an aging population. Some countries, like Japan, may have an even worse imbalance of the ages. Many developing countries are having low birthrates, which means that they will have a huge population of retirees and a smaller group of workers, but the problem will hit them about 2050. Beck explores how keeping the elderly involved in the work world longer may be one way to address this issue.

Gramlich, Edward M., "Different Approaches for Dealing with Social Security." Diamond, Peter, "Proposals to Restructure Social Security." Both in *Journal of Economic Perspectives*, Summer 1996, 10:3, pp. 55-88. Gramlich was head of the most recent quadrennial commission on the reform of Social Security. As discussed in the lecture, this commission fragmented, and failed to reach a consensus on the single best approach to take. However, it sparked debate by offering three separate proposals, as Gramlich reviews here. Diamond discusses an alternative set of reforms for the Social Security system, including a later retirement age, and the much-ballyhooed Chilean approach to a funded Social Security system.

**Questions to Consider:**
1. Do you support the policy of building up surpluses in the Social Security trust fund, or does it seem a pointless exercise to you?
2. Which of the policies for increasing Social Security taxes or reducing benefits would you favor?
3. Do you believe that part or all of Social Security should be privatized? Whether your answer is "yes" or "no," would you categorize your reasons as more political or more economic?
Defense Spending and the Uncertainties of the "Peace Dividend"

Scope: A few decades ago, defense spending was a sufficiently large portion of the economy that President Eisenhower warned America about the power of the "military-industrial complex." However, defense spending has become a significantly lower portion of the economy over time, and has dropped substantially during the 1990s.

Defense spending obviously raises many questions about foreign affairs and America's place in the world power structure, but since most of those questions are not fundamentally economic in nature, they will be skipped over in this lecture. Instead, this lecture will focus on two sets of economic issues. One is how best to negotiate defense contracts and to ensure some competition even when the defense industry is shrinking; whatever level of defense we have, it would be good to get as much of it for our public dollars as possible. The second set of issues concerns the so-called "peace dividend," that is, the money that was freed up from the defense budget upon the collapse of the Soviet empire. Although a reduction in defense spending did occur, it sometimes doesn't seem as if the gains from that reduction can be identified very easily, while the job losses from reduced military spending and base closures are all too obvious. However, when considered carefully, it becomes apparent that the gains from the peace dividend are indeed fairly apparent, ranging from the government's budget surpluses in the late 1990s to the fact that engineers are working on civilian rather than defense-oriented projects.

Outline

I. Putting defense spending in perspective
   A. In real, inflation-adjusted dollars over time
      In real, inflation-adjusted dollars, defense spending at the height of World War II was more than three times as high as today's defense budget. Real defense spending stayed higher than at present though most of the 1950s and 1960s, before declining in the 1970s. Real defense spending increased somewhat in the 1980s during the Reagan presidency, before declining substantially during the Bush and Clinton years.
   B. A share of GDP over time
      It is useful to place defense spending in the perspective of the overall economy. Even though defense spending in real dollars was higher in the 1950s and 1960s, the overall economy was smaller than today. It turns out that looking at defense spending as a share of GDP shows a fairly steady decline since the 1950s—interrupted only by the Reagan defense buildup of the 1980s. As a share of GDP, defense spending is lower in the late 1990s than at any time since before World War II.
   C. As a slice of current government spending
      Defense spending used to be the uncontested big item in the federal budget. However, by the late 1990s, while defense was still one of the larger items, it was smaller than Social Security, or federal spending on health, or local spending on education, and soon may even be smaller than federal interest payments.
   D. The dissatisfactions of defense spending
      Even though defense spending has dropped considerably in the 1990s, it's never going to be a popular way to spend money. It's like buying insurance: even when you know it's a good idea, one often rather resents paying the money. Until you need to make a claim, of course! The issue of how much of a defense insurance policy our nation should take out, and how that money should be spent and structured, takes us into issues of foreign policy and America's place in the world that are not primarily economic in nature, and will be sidestepped here.

II. Beyond strategy, the search for efficient purchasing
   A. The fundamental problems of defense purchasing
      There seems a consensus that a lot of the money spent on defense procurement is wasted. For routine purchases, the system has long been overly bureaucratic. For high-tech purchases, there is an unavoidable element of uncertainty and negotiation when asking for technological wizardry. To make matters worse,
Congress wants to micromanage aspects of the process, and to start and cancel programs on an unpredictable basis, which can drive up costs as well.

B. Can competition be preserved in a shrinking defense industry?
   1. Defense mergers and industry shrinkage
      By the late 1990s, thanks to a wave of mergers, the U.S. defense industry had shrunk down to a few main players: for example, Lockheed and Martin Marietta merged to become Lockheed Martin; Boeing bought McDonnell-Douglas; Raytheon bought Hughes Aircraft and the defense portion of Texas Instruments. In general, the Department of Defense supported the mergers, because lower spending meant that there would be fewer defense assembly lines, and the mergers accomplished that goal.
   2. How to buy in a shrinking market
      Even in a shrinking market, the Department of Defense needs to buy in such a way that it can keep competition alive where possible. Perhaps the most important reason is not that competition holds down costs, but rather that it increases innovation, and superior technology, which is perhaps the chief advantage of America's armed forces.

III. In search of the "peace dividend"
   A. What is the peace dividend?
      1. The domestic defense spending that might have been
         With the disintegration of the Soviet Union, the U.S. was able to reduce defense spending dramatically in the 1990s. If defense spending as a share of GDP had stayed at the levels of the peak in the late 1980s, it would have been at roughly double its actual level: something like $540 billion, rather than the actual level of about $270 billion.
      2. The global peace dividend
         The reduction in U.S. defense spending was matched by a decline in defense spending in what used to be the Soviet Union. Defense spending as a share of global GDP declined by about half from the mid-1980s to the mid-1990s.
   B. Schizophrenia: defense savings mean job losses—or do they?
      1. Job losses from defense cuts
         As part of the cutback in defense spending, the government reduced both civilian and military jobs by about 750,000 in the first part of the 1990s. These job losses don't include reductions in private-sector hiring in the defense industry, which might double the total.
      2. Putting the job losses in the context of the overall economy
         The job losses in the defense industry were far more than counterbalanced in the 1990s by overall job gains in the U.S. economy.
      3. The failures of direct defense conversion
         Defense-related firms have had a very hard time moving successfully into civilian production, so very little of the transition away from defense-jobs has happened within the same firms.
      4. The surprisingly positive effects of base closures
         For a long time, it seemed like political death to argue for the closure of military bases; indeed, it took a special bipartisan commission to get the process started. But now that it is underway, it seems to have worked pretty well. In most cases, most of the civilian jobs at the military base were soon replaced by other jobs.
   C. The R&D issues
      Although defense-related job losses have been counterbalanced by gains elsewhere, the reductions in defense R&D during the 1990s have not been made up elsewhere in the government budget. Even if civilian spinoffs from military R&D aren't as large as they used to be, it makes sense to offset at least some of the reduction in defense R&D by spending more on civilian R&D.
   D. Where did the peace dividend go?
      1. The perception problem: is the lack of an increase a decrease?
         In non-inflation-adjusted dollars, the military budget was about $300 billion in 1989 and about $270 billion by 2000. In relation to the size of the economy, it had shrunk by half, but at first glance, the same number of dollars were being spent.
      2. Easing the government budget crunch
By the end of the 1990s, the U.S. government was running a budget surplus, while spending at very high levels on Social Security, Medicare, and some other social programs. The lower defense spending surely contributed to easing the budget crunch in the late 1990s.

3. "Opportunity benefits"

The greatest gain from the peace dividend is freeing up of the human and financial resources to work on civilian products that provide more immediate benefit to people, rather than putting those resources into a defense insurance policy.

E. How much does the strength of the economy depend on defense spending?

The economy used to be highly interrelated with defense, but by the end of the 1990s, it's not any more. This means that defense policy decisions can be made as they should be, on the basis of foreign policy goals and considerations, rather than as a back-door way of enacting economic policy.

Essential Reading:

Weidenbaum, Murray, Small Wars, Big Defense. New York, Oxford University Press, 1992. Weidenbaum is a distinguished economist (among other professional distinctions, he was the first head of the Council of Economic Advisers under President Reagan) who has maintained a career-long interest in defense issues. In this book he pulls together many of the fundamental problems that confront defense spending in the 1990s: shrinking dollars, inefficiency, lack of competition, a shifting sense of mission, and that hard-to-locate peace dividend. The book is just a little dated by the end of the 1990s, but as an overall statement of the key issues, it's hard to beat it. Weidenbaum is fairly pro-defense in his outlook—but that just means that his criticisms of the existing system carry some real weight.

Two articles in the Economist. "Divided Continent: A Survey of the Global Defence Industry," June 14, 1997, p. S11. "American monsters, European minnows," January 13, 1996, p. 63. These two articles describe the shifts in the U.S. defense industry during the 1990s, as lower defense spending has led to a large number of mergers as a way for companies to combine and shrink. Since the Economist is published in London, it takes a European perspective, which highlights that even if the U.S. defense mergers raise some concerns, they look pretty good compared to the excessively fragmented European defense market.

Supplementary Reading:

On the web, the main Department of Defense site is at <http://www.defenselink.mil>. At least when I looked at it, this site didn't seem especially well-organized for purposes of discussing public policy. However, if you look under the data links and surf the site, a fair number of interesting facts and figures are available. The best place for summary statistics on defense spending, manpower, and procurement is the most recent annual copy of the Statistical Abstract of the United States, although annual budget numbers are also readily available in the Historical Tables of the budget.

Questions to Consider:

1. What perspective do you think most people have on how the size of defense spending has shifted over time? What was your perspective before hearing this lecture?

2. What would be your agenda for making sure that the Department of Defense gets as much for its money as possible?

3. Make up an explanation to a skeptical listener of why, despite the loss of jobs caused by defense base closures and lower spending, that the U.S. economy really has experienced a peace dividend. Hint: Your argument might first focus on why the losses are perhaps not as bad as a pessimist might fear, and second on how to perceive the gains from the peace dividend.
Lecture Twenty-Nine
The Government in Health Care:
Medicare and Medicaid

Scope: Medicare and Medicaid came into existence at just about the same time, in the salad days of Lyndon Johnson's Great Society programs of the 1960s. They are often grouped together in casual conversation. But the programs are actually somewhat different.

Medicare is focused on the elderly. It is funded partly by payroll taxes and partly by contributions from the elderly themselves. The program has been quite successful in protecting the elderly from becoming impoverished by the costs of medical care. However, it faces severe financial difficulties, similar to those faced by Social Security, in the first two decades of the 21st century, as the baby boom generation ages. To remain solvent, it will either have to find ways of collecting more money or providing less care—or perhaps finding ways to provide care more efficiently.

Medicaid is focused on the poor. It is mainly funded out of general tax revenues at the federal level, but then is matched by tax revenues at the state level, where the rapidly rising costs of the program have put considerable pressure on state budgets. Most people think of Medicaid as focused on poor mothers and children, and in the 1990s, it has been expanded to cover poor children in particular. Also, an increasing share of Medicaid is also going to nursing home care for the elderly poor.

Outline

I. Medicare and the coming demographic crash
   A. Coverage
      Medicare is aimed primarily at the elderly. Part A of Medicare, for which everyone over 65 is automatically eligible, is focused on hospital services. Part B of Medicare, which is officially voluntary although almost all the elderly choose to participate, is focused on physician services. Both parts of the program have some deductibles and copayments built-in. As a result, a number of elderly have extra insurance, either privately purchased "Medigap" insurance or insurance through a past employer.
   B. Revenues: federal taxes and individual contributions
      The bulk of Medicare funding comes from a payroll tax of 2.9%, divided equally between employers and employees—although economists would argue that the employer's share ends up coming out of lower wages eventually. However, Part B of Medicare, the voluntary part that covers physician services, charges premiums to the elderly of about $45 a month. The premiums account for about 10% of total government Medicare spending (which is about 1/8 of all government spending).
   C. Geographic variation in Medicare spending
      Medicare has typically paid the traditional fee for whatever services are customary and reasonable in a given area. This has led to wide variations in what Medicare pays per patient in different states.
   D. A solid record of success
      Medicare has surely contributed to longer life expectancies. But its more important function has probably been to reduce greatly the financial risk of becoming impoverished as an elderly person through incurring large medical bills, or through having to pay extremely high premiums.
   E. How large a shortfall will Medicare have?
      Without changes in the present law, Medicare will not be collecting enough money from its taxes to support its projected level of payments by about 2010. The three factors pushing up costs are the number of retirees, the number of medical services provided to them, and the cost of those services. All three have been rising.
   F. Options for Medicare reform
      1. Raise age of eligibility from 65 to 70
         Raising the age of eligibility for Medicare would eventually cut costs by about 15%. These savings are relatively low, because many of the heaviest health care expenditures tend to happen in the last few years of life, and many of the elderly are still quite healthy between 65 and 70.
2. Raise the premiums paid by the elderly
   To keep the system solvent by taking this step alone, the elderly would need to pay about 50% of the
cost of Medicare in premiums, rather than the 10% that they presently pay.

3. Restrict doctors fees and what level of services they provide
   Medicare now sets its fees according to DRG, or Diagnostic Related Groups. There are 500 or so
preset fees that Medicare uses; the idea is that if the fee for a general diagnosis is preset, then the
health care provider has an incentive to hold down costs. But the DRGs are also somewhat adjustable
and flexible, so that there isn't too much incentive to deny care. With over $200 billion a year in
buying power, Medicare might be able to negotiate tougher deals with doctors on what is paid, and on
the quantity of services provided.

4. The managed care solution
   Medicare has just added a Part C, a managed care option. The notion is that Medicare would pay the
managed care premium, and regulate what is offered, and the elderly could choose which managed
care plan they prefer.

5. A voucher system
   The notion of a voucher system would be to give each elderly person a voucher to use for the type of
health insurance they prefer, whether it is managed care or a more traditional plan. This approach
would also require some government regulation to make sure that a basic package of services was
covered by plans and that plans had to take all the elderly who apply, not just healthy folks. It's not
clear how much this approach would hold down costs.

6. Privatized medical savings accounts
   The notion here is to save up throughout your life, and then have the money to draw on for medical
expenses after retirement. It's not quite clear how this approach works with the idea of insurance. If
you can only draw on your own money, you aren't insured against greater losses. Perhaps this
approach can be thought of as saving to buy future insurance? It's also not clear how we pay the
promised benefits to current retirees if present workers start diverting their Medicare payroll taxes into
private accounts.

II. Medicaid

A. Outlays and coverage
   In general, Medicaid is aimed at providing medical care for the poor and near-poor. But it is focused on
low income children and their parents, those who are poor and disabled, and those who are poor and
elderly. Medicaid was expanded somewhat in the late 1980s and early 1990s to make more children and
pregnant women eligible for care—even if they were a bit above the poverty line.

B. Revenues: federal and state taxes
   The total amount spent on Medicaid is about $170 billion; the program is smaller than Medicare. About
55% of that comes from federal spending; the rest is state matching funds.

C. A record of success
   For poor mothers and children, Medicaid has demonstrably increased their use of medical care; the
reduction in low birth-weight babies is an especially valuable gain. For the elderly and disabled, it provides
the ultimate safety net that care will be provided.

D. A system under financial stress
   Medicaid costs have been rising sharply, putting pressure on federal and state budgets. Medicaid won't
have a Medicare-style crash—it's not as heavily influenced by the retirement of the baby boom generation,
and it's funded out of general revenues instead of an earmarked tax—but the system is still on something of
an unsustainable trajectory.

E. Medicaid reforms
   1. The managed care option
      One approach is to encourage Medicaid patients into managed care organizations. Medicaid would pay
the premium, and assure that a package of services was covered, and people could choose between
managed care plans.
   2. How to pay doctors less
      Just cutting the Medicaid fees paid to doctors is likely to be counterproductive; the fees are already
low enough—in many cases, half of private fees—that doctors refuse to treat such patients. However,
there is extreme variation in Medicaid costs across states. For the sake of equity in this national program, it might be useful to think about what states are providing too little—and which states are providing too much.

F. The looming issue of nursing home care
The need for nursing home care may expand dramatically as the population ages, which in turn could put pressure on Medicaid. Some people believe that it is "unfair" that an elderly person should have to spend down their assets before receiving Medicaid support for nursing home care. But the availability of nursing home care through Medicaid does protect the next generation against needing to support their elderly relatives.

III. Thinking through the interaction between government and health care
The federal interventions in health care markets have arisen on a piecemeal basis, focusing on the poor, or the disabled, or what employers provide to workers, or the elderly, and so on. But of course, these systems all overlap. It might be productive to rethink the goals of these programs and how they interact with each other—and to take advantage of the government's huge buying power to push for market-oriented health care reforms.

Essential Reading:
Reichauer, Robert D., "Medicare Beyond 2002: Preparing for the Baby Boomers," Brookings Review, Summer 1997, pp. 24-27. Reichauer was head of the nonpartisan Congressional Budget Office for a number of years, and he brings that depth of background to this readable, focused article. He makes the case that the program needs fundamental restructuring; discusses the range of options from complete privatization to complete nationalization, and offers a pragmatic middle ground.

Council of Economic Advisers, "Health Status and Health Insurance." Appears as a segment of Chapter 3, "The Economic Well-Being of Children," in Economic Report of the President, February 1998, pp. 102-109. Available on the web in several places; one convenient spot is <http://www.gpo.ucop.edu/catalog/erp98.html>, and then click on Chapter 3. This discussion offers a good overview of how many children have health insurance, how Medicaid has been expanded in recent years to cover more poor children, and how health insurance coverage helps the health of children.

Supplementary Reading:
U.S. House of Representatives, 1998 Green Book: Background Data on Programs within the Jurisdiction of the Committee on Ways and Means. Washington, D.C.: U.S. Government Printing Office, May 19, 1998. Available various places on the web; one good connection is <http://www.gpo.ucop.edu/catalog/green105.html>. This report is published annually. It covers most of the big programs where the federal government hands out assistance to people: Social Security, welfare, Medicare, Medicaid, and so on. Medicare is Section 2; Medicaid is part of the "other programs" discussed in Section 15. Readers may also find helpful appendix B on the health of the elderly and appendices G and H on families and on poverty. Again, this report is a little dry a little dry, and there's more detail here about nuts and bolts than some readers will want. But it's got lots of juicy and up-to-date information, too. 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. The HCFA website at <http://www.hcfa.gov> has lot of material of interest. On the bar on the left of the page, click on stats and data for general information, or click on Medicare or Medicaid for particular information about these programs.

Questions to Consider:
1. Would you support raising the payroll tax rate for Medicare? What about the out-of-pocket expenses that is imposes on the elderly?
2. What methods of achieving cost savings, if any, would you support for the Medicaid program?
Lecture Thirty
The American Tax Burden in Perspective

Scope: Taxes are a subject that makes people tense. Here, we try to lay out a number of facts about the actual structure of taxes and how they have evolved over the last few decades, and then draw some tentative conclusions. The federal tax take, as a share of GDP, hasn't increased much over the last three decades. The income tax has stayed about the same in importance; payroll taxes have become more important; and corporate income taxes and excise taxes have become less important. The income tax seems to get most of the attention, perhaps because it is the tax we confront most directly on April 15. But for most of the households in the United States, the payroll taxes cost them more than does the income tax, because the income tax rests heavily on the wealthy.

State and local taxes vary a great deal from city to city, and from state to state, and different states draw on a wide variety of sources for revenue, so it's hard to draw much in the way of general conclusions. By global standards, the U.S. is a relatively low-tax economy, both in terms of the overall level of taxes it imposes and in terms of the top tax rate brackets imposed on the wealthy.

For economists, advice about whether taxes should be higher or lower turns on other questions: is spending up or down? is this a time for the government to be running a deficit or a surplus? These sorts of questions imply that the late 1990s, with the economy strong, are probably not the best time for an overall cut in taxes. But there are good economic arguments for raising some taxes and cutting others, and rebalancing the tax burden in that way.

Outline

I. The level of taxes
   There is a widespread sense that the federal government has been soaking up lots more of the economy in taxes during the last few decades. While there has been a mild upward trend in taxes over the last few decades, it is less than a lot of people tend to expect. Furthermore, much of the increase that has occurred has been in taxes at the state and local level, rather than at the federal level.

II. The components of the federal tax bill
   A. Income tax
      1. As a share of overall federal taxes
         When many of us think of federal taxes, the income tax is what springs to mind. However, the income tax has never collected as much as half of federal revenue; during the 1990s, it typically has collected about 45% of all federal revenue.
      2. Relatively flat income tax take over time
         There is also a widespread belief that the level of income taxes has been rising dramatically over time. Taken as a share of GDP, however, the percentage has not moved a lot over the last few decades.
      3. Progressivity
         The income tax is a progressive tax; that is, as income rises, it takes a larger share of income. This is done through a system where the first amount of income earned is not subject to the income tax—with the exact amount depending on family size. Above that level, then income in the next bracket is taxed at a certain rate, like 15%, income in the next bracket is taxed at a higher rate, like 28%, and so on. The average rate of tax, which is calculated by looking at all income and taxes paid, will be different than the marginal tax rate, which is the amount taken out of an extra dollar earned. The rich pay a much larger share of income taxes, and on average pay a much higher average tax rate.
      4. Deductions, exemptions and credits: legal tax evasion
         The tax code is full of legal ways to reduce one's tax bill. Deductions, like the ones for home mortgage interest or charitable contributions, reduce the amount of income on which one pays tax. Exemptions refer to income that is exempt from federal income tax, like the interest on state and local bonds or the income received in the form of employer-provided health insurance. Credits refer to when the tax code allows subtracting a certain amount directly from one's tax bill, in proportion to a certain expense that...
has been incurred; for example, there was a tax credit for research and development expenditures by business.

5. Time, annoyance, and uncertainty

Even if each of the specific provisions of the income tax is in some way defensible, taken as a whole it casts a shadow to time, annoyance and uncertainty. Many people don't resent the taxes they pay as much as they resent the demands on their time and attention. These issues will be taken up in the next lecture on the merits of a simplified flat tax.

B. Social Security and Medicare payroll taxes

The proportion of GDP collected by Social Security and Medicare payroll taxes rose sharply from the 1950s up into the 1980s—although the rise has leveled off in the 1990s. For more than half the population, the payroll taxes are the biggest tax they face—larger than the income tax.

C. The corporate income tax

Federal corporate income taxes are collecting less as a share of GDP than they used to a few decades ago. The amount collected by such taxes varies a lot from year to year, because corporate profits rise and fall dramatically—more so than personal income—when the economy is in a recession or a boom.

D. The excise taxes

1. Overall levels

The main federal excise taxes are on gasoline, cigarettes, and alcohol. As a share of the tax take, these taxes have declined substantially over time due to inflation.

2. A few incendiary words on cigarettes, gasoline and alcohol

In general, it seems that there is fairly strong public opposition to higher gasoline taxes, but at least some limited support for higher cigarette taxes. The economic case for higher gasoline taxes is fairly strong: it should be taxed as a source of carbon emissions and air pollution. The case for a higher cigarette tax is weaker: for the average smoker, it seems likely that existing taxes pretty much cover the health costs they impose on society. For government, smoking is probably a net revenue-gainer, because people who die younger collect less in Social Security. The issue of alcohol taxes is quite murky.

III. A few words on state and local taxes

A. State and local taxes vary widely

Some states have no income tax, or no general sales tax. Other states depend on such taxes. The variation of state and local taxes around the country is high: indeed, allowing such variation is part of our federalist system of government.

B. Main revenue sources for state and local governments

The main revenue sources for state and local government include general sales taxes (17%), property taxes (22%), and individual income taxes (14%)—as well as money passed along by the federal government. But states do so many things, and do them differently from other states, that their revenue sources are a hodgepodge.

IV. A global perspective on taxes

A. Comparing levels of taxes

In terms of total tax receipts, U.S. tax receipts as a share of GDP tend to be, along with Japan, among the lowest in the industrialized world. Tax receipts in most European countries are significantly higher. The highest tax bracket in the United States also tends to be a little lower than in most European economies.

B. Will cross-government competition shift the burden of taxation?

In an age of globalization and mobility, where many economic functions can be moved quickly to other places, governments may fear to tax rich people or corporations at a high level—because they may move someplace else. The result would then be higher taxes on the middle class and poor, who are less able to relocate. This fear has some minor plausibility, but by and large it seems overblown. Companies often are willing to locate in high tax jurisdictions—as long as the company and its workers also receive a high level of public services in exchange for those taxes.

V. Posing the big questions of tax policy

A. Should the overall level of taxes be lower or higher?
The potential reasons for a tax cut might include: 1) A decline in spending, so the government needs less revenue: 2) A recession, where the government needs to stimulate the economy with countercyclical policy; 3) A situation of national oversaving, where the government runs a deficit to prevent too much savings from accumulating. In the late 1990s, none of these situations seems to hold very well, so the economic case for an overall cut in the level of taxes is relatively weak.

B. Should the burden of taxes be distributed differently?
   1. Should the rich pay more and the poor pay less?
      The answer to this question probably comes down to one's gut level feelings, rather than to some principle of economic analysis. The tax distribution in the United States doesn't seem violently out of line with the distribution in a lot of other countries. Overall, taking all federal, state and local taxes together, the tax code is (very) roughly proportional.
   2. Should we rebalance which taxes we rely on?
      Personally, I'd favor relying more on excise taxes and pollution taxes, and using the money raised to reduce the tax burden on everyone to some extent—but particularly on the working poor.

Essential Reading:
Brownlee, W. Elliot, *Federal Taxation in America: A Short History*. Washington, D.C.; Woodrow Wilson Center Press, 1996. This readable book offers a broad historical account of federal taxation and how it shifted in form as a result of several major crises: the Civil War, World War I, the Great Depression, and World War II. You will notice that a disproportionate number of those "crises" happened within about 30 years, from about 1915 to 1945. If you want a deeper understanding of how the present tax code evolved over time, this book is a good place to start.

Data on state and local taxes isn't always easy to find. One good starting place is the *Statistical Abstract of the United States*. But there is also good detailed data available on-line from the Bureau of the Census at <http:/www.census.gov/pub/govs/www/index.html>.

Supplementary Reading:
"Disappearing taxes: The Tap Runs Dry," *Economist*, May 31, 1997, pp. 21-23. This article discusses the issues of it will be harder for governments to collect taxes in the future, as economic activity can more easily flee to other countries—or even into cyberspace.

Yablon, Jeffery, L., "As Certain as Death—Quotations about Taxes," *Tax Notes*, November 14, 1994, pp. 897-911. This article is nothing but a collection of pages and pages of quotations about taxes. Since it's written by a tax lawyer, a lot of the quotations are from judges and legal cases. But there is a good sprinkling as well from economists, politicians, social critics, comedians, and more. If you're looking for learned ammunition for an argument about taxes, this is a good place to start.

Questions to Consider:
1. Did any of the facts in this lecture about levels of different kinds of taxes, relative to each other and how they have changed over time come as a surprise to you? (If not, you're very well-informed!)
2. Do you feel the income tax should be more progressive? Less regressive? What about the entire body of taxes taken as a whole?
3. Do you feel this is a good time for a tax cut? A tax increase? Leaving taxes about the same? Justify your answer.
4. Do you believe there should be a shift in the distribution of taxes, with some taxes becoming more important and others less so? Explain.
Lecture Thirty-One
Flat and Flatter Taxes

Scope: There's a lot to dislike about the present tax code. It can be complex, especially for those who itemize deductions. By taxing income from work, we discourage work. By taxing income from savings, we discourage saving. The higher the tax rates, the more these discouragements occur. Congressmen have larded the tax laws through with special breaks that benefit various minorities of taxpayers, but then the majority of taxpayers must pay higher rates to make up for these breaks.

One solution that has been proposed to many of these problems involves a tradeoff. On one side, government would take away many or all of the tax breaks in the current tax code. Then, it would use the revenue saved to dramatically reduce the tax rates that people pay. In some plans, the tax rate on the marginal dollar earned would be the same flat rate for almost everyone, except perhaps the very poor, which has engendered the name of the flat tax. Such a plan could either be designed to bring in the same amount of revenue, albeit in a different way, or it could change the amount of revenue collected. It promises that people could fill out their taxes on a postcard.

In general, economists are supportive of the idea of fewer tax breaks and lower tax rates. But the more extreme versions of such proposals, which would move to a true flat, one-rate tax, have tended to fall apart politically. One problem is that getting rid of tax breaks sounds all right in the abstract, until constituents find that this also applies to their personal deductions for home mortgage interest, charitable contributions, and other items. Another problem is that flat tax plans often promise lower taxes for the poor and the rich—which lead the middle-class to suspect, with good reason, that they may end up paying more. Finally, a flat tax plan, when looked at closely, has a number of elements of complexity that are not fully avoidable by any tax code.

There are alternatives to a flat tax worthy of consideration, too. A national sales tax or value-added tax would mean that individuals pay higher taxes when they purchase goods, but could avoid filling out a 1040 form. However, such taxes also have their own problems of fairness and enforcement. Perhaps the most promising plans are to seek the goals of a flat tax without going all the way to true flatness; that is, reduce tax breaks, reduce tax rates, but don't try to push all the way to zero. This was the route chosen by the Tax Reform Act of 1986, which is generally regarded as having been a success.

Outline

I. The indictment of the 1040
   If the Internal Revenue Service and the 1040 form were on trial, it wouldn't be too tough for most of us to play the role of prosecuting attorney.
   A. Itemizing the complaints
      1. Overly complex
         Tax forms have grown a great deal in length over time. The costs of filling out the forms, including time spent by individuals, payments to tax preparers, and costs of corporate tax compliance may well be over $100 billion (i.e., 5% to 10% of the total value of taxes collected).
      2. Distributes tax burden unfairly
         Complexity means, by its nature, that some people are better positioned to take advantage of various positions than others. As a result, the tax burden may be distributed unfairly, and some people may be quite legally paying less than what might seem to be their fair share.
      3. Discourages work
         High tax rates discourage at least some people from working. There will be times when it would make sense for someone to take on a job if the tax burden was lower (or nonexistent), but it won't make sense with the tax burden at its present level.
      4. Discourages savings and investment
         High tax rates, which reduce the amount of after-tax return received, discourage at least some people from saving. There will be times when it would make sense for someone to save more if the tax burden
was lower (or nonexistent), but it won't make sense with the tax burden at its present level. The result will be less capital available for investment and long-term growth.

5. Arbitrary and obnoxious enforcement
There is a strong public sentiment that the Internal Revenue Service is an arbitrary, arrogant, and powerful enforcement regime, which operates outside of normal checks and balances.

B. The shape of the flat tax
The basic notion of the flat tax is to have a basic amount on which no one pays taxes, and then on all income above that amount, everyone would pay a fixed percentage amount (e.g., 17% to 20%).

C. The overall level of taxes and revenue neutrality
Most flat tax proposals suggest paying for the lower tax rates by reducing various tax breaks, including popular deductions and exemptions. Other plans sometimes promise to pay for the lower tax rates with lower government spending. But it is analytically helpful to stick to the "revenue-neutral" case where the flat tax is designed to raise the same revenue as the existing tax, since it separates the two different goals of cutting spending to keep taxes down, and structuring the level of taxes (whatever that level is) in a different way.

D. Promises of the flat taxers
The potential advantages of a flat tax are numerous. At least in the eyes of its proponents, it would be simple, understandable, and fair in sense that all pay the same marginal tax rate. There would be less need for rigid enforcement, and it would be harder to game the system. The lower rates would mean less discouragement of work and savings.

II. No exemption from criticism for the flat tax

A. Are we ready to give up our tax breaks?
Most tax breaks were passed for a reason, and even if that reason is pretty sketchy, we are attached to them. Some of the biggest tax breaks include: the fact that employer payments for pensions and health insurance aren't taxed as income, the deductibility of home mortgage interest, the deductibility of state and local taxes on income and property, accelerated depreciation, capital gains, deductibility of charitable contributions, and more. Not every flat tax plan wipes all of these out, but the lower the rate that is promised, the more of the tax breaks need to go.

B. Who will end up paying the tax burden?
A flat tax typically means lower income taxes for the poor, because of the basic levels of untaxed income that applies to everyone. It also typically means lower income taxes for the rich, who now pay on average about 30% of their income in taxes, well above the 20% rates bandied about for a flat tax. So if the tax is to be revenue neutral, the middle class will end up paying more, or there will need to be some sort of finesse.

C. The limitations of tax incentives for work
While tax incentives in theory should encourage at least some people to work more, the empirical evidence seems to be that many workers don't react dramatically to such changes. They work full-time, as their employer demands, and don't adjust their hours much. The change in hours worked as a result of flatter tax rates would be quite modest, and would probably be focused on secondary earners like spouses with another spouse already in the workforce, and teenagers.

D. The limitations of tax incentives for savings
It may seem obvious that higher interest rates should encourage saving, and that will be true for some people. But for other people—those trying to reach a particular savings target—the higher rate will mean that they can save less and still meet their target. Overall, savings seems to be influenced strongly by habits that go beyond the interest rate.

E. Untangling the complexity issue
1. The division between itemizers and non-itemizers
About 30% of taxpayers itemize deductions; if you don't itemize, the complexity level just isn't all that high.

2. Separating the number of tax rates from the complexity issue
The number of tax rates has nothing to do with the complexity of the tax code, because most people are just going to look up the taxes they owe on a table, which shows how much tax you pay for how

©1998 The Teaching Company Limited Partnership
much income, and that table can build in as many tax rates as one likes without changing the complexity the individual taxpayer faces.

3. The division between business and individuals
Business taxes have traditionally been much more complex than individual taxes, with any number of confusing tax breaks, extra surcharges, alternative taxes, and so on. Of course, we could wipe all this out as well in a flat tax, but that opens another set of difficult issues.

4. The capital gains issue
Capital gains refers to a gain where your investment is worth more, but you don't have access to that gain until you sell the investment; for example, the gains in the price of a house or a stock are capital gains. If capital gains aren't taxed as they occur, then there will be incentives for lawyers and accountants to convert income into capital gains. If they are taxed as the occur, then their value must be calculated on an ongoing basis, and people will have to, say, pay taxes on the increased value of their home even though they haven't sold it! There is no easy way through this issue.

5. The corporate form
Many people can receive benefits though corporations that they work for, or by setting themselves up as a corporation. This can easily become a way for people to avoid paying taxes on various kinds of benefits received, since corporations pay tax on their profits, not on their expenses.

6. Transition rules
Any severe change in the tax rules will create a time of difficulty for those caught in the transition, who made plans based on the earlier tax code. Problems may readily arise for homeowners, nonprofits, businesses, and others. There would probably need to be some kind of "grandfather" provisions.

F. Real problems, but not dispositive by any means
These problems are real, but they certainly don't destroy the case for a flat tax. More simplicity and less money spent on tax preparation would surely be a good thing. Even if the benefits to savings are not enormous, they may still be enough to raise the level of savings and investment, perhaps making the economy 5% larger over time. One could have a two-tier flat tax with a higher rate for the wealthy, so they don't end up paying less on average than now.

III. Cousins of the flat tax
A. A national sales tax
A national sales tax mean that people would pay at the cash register, but could avoid the record-keeping of an income tax. It would tax consumption, not savings. But it would also be a major tax cut for the rich, who consume a smaller share of their income. Also, if it were to replace the income tax, the rate would have to be quite high—even higher if some necessities were exempt from the tax—which raises the risk of evasion.

B. A value-added tax
In economic terms, a value-added tax looks a lot like a sales tax. The difference is that is collected from each business along the chain of production, and then passed along in the price to consumers. Otherwise, the effects and issues are much the same as for a sales tax.

C. A consumption tax though the income tax?
It would be quite possible to convert the income tax into a consumption tax. The main changes would be that everyone is taxed not on their income in a year, but on what they consume. There would be no tax on income from investments, but only on consumption when those investments are cashed in.

D. A flatter tax?
The 1986 Tax Reform Act involved clearing a wide swath of deductions and lowering tax rates. It is typically seen by economists as a success, if a mild one. It would be quite possible to follow up today with a flatter tax that would involve trimming deductions and exemptions and reducing tax rates, without necessarily going all the way to a completely flat tax.

E. A cynical political cycle?
Are we on a political treadmill? Politicians first add tax breaks to the tax code. Then, when the number of tax breaks becomes unwieldy, they convert to the flat tax idea and wipe the slate clean. This isn't a permanent conversion, however, since they can then immediately start adding tax breaks all over again.
Essential Reading:
Sease, Douglas R., and Tom Herman, *The Flat-Tax Primer*. New York, Viking, 1996. This short book was written by two reporters for the *Wall Street Journal*, so it's a compact, easy-to-follow and non-ideological discussion of what sorts of flat tax proposals are out there, how they would work, and the arguments over what effects they might have on the rest of the economy. Perhaps especially useful is Chapter 9, offering short arguments for and against the flat tax from politicians and economists.

Supplementary Reading:
Hall, Robert E., and Alvin Rabushka, *The Flat Tax*. Stanford, Hoover Institution Press, 1995. This is the grandfather of the current flat-tax proposals. Hall and Rabushka published the first edition of this book in the early 1980s: Hall is an eminent and thoughtful economist who has worked carefully through many of the difficult issues involved, while Rabushka brings more of a political science insight and populist touch. If you want to read the best in-depth case for a flat tax, this is the place to turn.

Congressional Budget Office, "The Economic Effects of Comprehensive Tax Reform," July 1997. This report focuses on various forms of consumption taxes, including proposals for national sales taxes, value-added taxes, and consumption taxes implemented through something like the present income tax. As is true of so many CBO reports, it presents a wide-ranging nonpartisan summary of the likely economic consequences of these steps.

The Brookings Institution, a mainstream Washington think-tank, has some "policy briefs" that are available on the web. These are on a variety of political and economic subjects, and while they sometimes have an overly academic tone, they are generally quite well done. Go to <http://www.brooking.edu>, click on the "policy briefs" series, and look in particular for "#31: Don't Buy the Sales Tax" and "#12: Tax Reform is Dead, Long Live Tax Reform," both by William Gale. On the subject of the proposed governance reforms for the IRS, a subject that isn't especially economic and thus isn't covered here, but is of interest to many people, see "#22: Taxing Reforms: Assessing the Plan to Transform the IRS," by Donald F. Kettl.

The IRS also has its own web-site at <http://www.irs.gov>. A lot of it is devoted to tax laws and filing your taxes, rather than to public policy issues. But if you look under "tax stats" there is a lot of data that can be accessed and downloaded. As of this writing, this isn't an especially easy site to use (big surprise, eh?), but there is good stuff here if you're willing to work at it.

Questions to Consider:
1. Which of the major tax breaks would you be willing to see cut back substantially or eliminated, if you knew the payoff would be lower tax rates?
2. Do you favor a single flat tax rate, or a progression of higher tax rates on those with higher incomes? Why?
3. Would you prefer a retail sales tax or value-added tax to a flat income tax proposal? Evaluate the pros and cons of each.
Lecture Thirty-Two
Inflation: Why the Measure Matters

Scope: The inflation rate that we have referred to so casually in so many of these lectures—whenever we say "adjusted for inflation," for example—is actually the result of a complex calculation by the Bureau of Labor Statistics in the U.S. Department of Labor. The calculation is based on the results of several major national surveys of buying patterns and shopping patterns, and involves

The underlying assumptions of this calculation have traditionally been to define a fixed set of goods that represent the purchases of a typical household, and then to see how the cost of buying that fixed set of goods evolves over time. But this approach runs into problems in a world where consumers are constantly substituting one good for another, and where goods are being improved and new goods introduced all the time. A prominent commission of economists recently argued that neglecting these issues of substitution means that the Consumer Price Index overstates the true rise in the cost of living by about 1% per year.

This judgment has been controversial, and it has raised a number of questions about what we are really measuring with the Consumer Price Index. But many of the judgments of the report are quietly being put into effect by the Bureau of Labor Statistics, so it appears likely that the measured inflation rate will drop slightly over the next few years. As a result, taxes will rise a bit, Social Security payments will rise less than they would have, the poverty rate will be lower, and the economy will look larger—all through the magic of a different way of calculating inflation statistics!

Outline

I. When measurement turns into policy
   A. How the measure of inflation is built into budgets and statistics
      1. Income and payroll taxes
         The measured level of inflation is built into the income tax, because the income tax brackets rise according to increases in the Consumer Price Index. Inflation is built into the Social Security payroll tax, because the ceiling for how much income you have to pay taxes on rises each year with inflation.
      2. Social Security payments
         The measured level of inflation is built into Social Security payments, which are adjusted upward automatically each year according to the rise in inflation.
      3. Broader social measures: poverty, standard of living, wages, economic growth
         The poverty line is adjusted upward each year according to the measured inflation rate. When we make statements about the path of family income over time, or average wages over time, or the growth in GDP over time, they are all calculated by looking at the dollar changes in nominal amounts, and then subtracting out the component for measured inflation.
   B. What if the measurement of inflation overstates the true rise in the cost of living?
      1. Consequences of an overstated inflation rate
         An overstated inflation rate would mean that taxes are lower and spending is higher that it would otherwise be. It would also mean that the number of people in poverty was higher, and people perceived themselves as having lower wages and living in an economy with slower growth.
      2. How small differences in inflation accumulate over time
         Even a small difference in inflation rates over time, like 1%, will accumulated up into being a substantial difference after a decade or two. It will make government a difference of tens of billions of dollars in the government budget surplus.

II. The Boskin report
   A. Institutional background
      The so-called "Boskin committee" was appointed by the Senate Finance Committee. It included four eminent academic economists, and one business economist, and was chaired by Michael Boskin of Stanford University.
   B. Using a fixed market basket to measure inflation
How is inflation measured? The approach is to take a group (or "basket") of goods that represents what the typical person buys, and then to see how the cost of buying that overall basket changes over time. This is a huge process, which involves looking at several surveys of what people buy and where they buy it, then recording prices on a sample of nearly 80,000 goods from 22,000 stores around the country every month.

C. The problems of a fixed basket of goods
   1. The substitution problem
      The substitution problem arises because when the pattern of prices shift, people will naturally buy fewer of the goods whose prices have risen and more of the goods whose prices have fallen. But the inflation calculation is based on the idea that the basket of goods doesn't shift; by denying consumers the ability to substitute for more expensive goods, it exaggerates slightly how much worse off they are as the result of higher prices.
   2. Quality and new goods bias
      When the government tries to look at the same basket of goods over time, it must be making the tacit assumption that goods are not changing in quality. Further, it will have a hard time dealing with goods that are altogether new. The current BLS procedures do try to make adjustments for quality in some cases, and new goods are gradually rotated into the sample, but these procedures fall short of capturing how much is happening in quality change and new goods (e.g., microwaves, VCRs, cellular phones).

D. Bottom line: an overestimate of 1.1%
The Boskin commission concluded that the Consumer Price Index overstated the true rise in the cost of living by about 1.1% per year.

III. Counterarguments to the Boskin report
   A. A political hit piece?
      Michael Boskin, as some folks may remember, was head of the Council of Economic Advisers during the Bush administration. So the Republican majority Senate Finance Committee was asking a Republican economist for estimates. While this raises suspicions, in our paranoid times, everything raises suspicions; it is worth saying that Boskin is an eminent economist, not a hack, and that the other members of the committee had no particular strong party identification. Moreover, the general set of issues they were raising have been discussed among academic economists of all political stripes for literally decades; they certainly weren't made up on the spur of the moment.
   B. The quality change and new goods arguments
      1. Don't new products influence prices of existing products?
         Perhaps new prices don't enter into the CPI as quickly as they might, but their existence often helps drive down the level of prices of earlier goods. Thus, new goods and new qualities show up indirectly in the CPI calculations.
      2. What about negative quality changes?
         The Boskin commission argument over quality change assumes quality is improving. But the quality of some items may be diminishing; possible examples cited include what sometimes seems to be the rising inconvenience of air travel and urban traffic congestion, or perhaps a lower quality of service being provided in managed care health organizations.
   C. What about separate price indexes for different groups?
      There are proposals that rather than adjusting the overall Consumer Price Index, it might be more profitable to create a number of different price indexes depending on the proposed use of the index. For example, there might an index based on the elderly for adjusting Social Security, an index based on what the poor buy for adjusting the poverty line, and an index based on what taxpayers buy for adjusting tax brackets.
   D. Is measuring the "cost of living" an achievable goal?
      If the overall goal is to measure the nebulous idea of the cost of living, then shouldn't all aspects of living be counted into the equation? What about factors like health, the environment, fear of crime, and so on? Measuring inflation really measures only changes in prices.

IV. What are the policy alternatives about measurement of inflation?
   A. Dealing with the issues
      1. Data problems
There are a number of proposals for upgrading and expanding the Survey of Consumer Expenditures, to get a better picture of what people buy and how it is shifting over time. This will allow a better sense of what substitutions actually take place, and what new goods are entering the market.

2. Substitution problems
To address the substitution problem, one needs to move away from the idea of a fixed basket of goods, and to allow some shifting between goods. The amount of shifting has to be limited; if one just looks at the cost of buying two completely different set of goods at two different times, you can't tell if the change in the overall cost is due to changes in prices or to changes in what was purchased. But allowing a limited amount of change, where goods whose prices rise by more would be presumed to diminish in quantity consumed, and goods whose prices fall would be presumed to rise in quantity consumed, makes for a more complicated but quite do-able formula.

3. Quality and new goods problems
When the qualities of goods change dramatically over a few years, it is possible to make estimates of how much the quality improvement is worth, and to build that into the price index. New goods, especially those which are being bought and used by a lot of people, might be rotated into the sample of goods more quickly.

B. Change without bright lights, behind the scenes
Many people expect that there will be a big vote in Congress at some point about whether to reform the Consumer Price Index. That might have happened a couple of years ago, but it seems unlikely now. Instead, this is a case where an agency of government, the Bureau of Labor Statistics, will just keep making gradual changes to its formulas and procedures, as it has been doing for decades. It seems likely that many of these changes will tend to bring down the rate of inflation. In that sense, by raising the issues and winning much of the intellectual argument, the Boskin commission has won the policy debate, too.

Essential Reading:
U.S. Senate, Committee on Finance, Final Report of the Advisory Commission to Study the Consumer Price Index. Print 104-72, Washington, D.C.: Government Printing Office, 1996. This is the official report of the "Boskin commission" referred to throughout the lecture. As a report to Congress, it's not a technical economist's report, but rather something that is readable and open for discussion. The report lays out in detail how the CPI is measured, what the biases are, how the commission thought about those biases, and responses to some of possible objections and concerns raised in response to the report. The report is available on the web at is available on the web at <http://www.senate.gov/~finance/cpi.pdf>. It's in a pdf file, so you'll need to use Adobe Acrobat (available free over the web from Adobe) to read it.

Supplementary Reading:
The Bureau of Labor Statistics, the government agency which calculates the Consumer Price Index, has a good website that offers a general introduction to many of these issues, specific inflation data, and particular studies of many of the issues that arise in calculating the CPI. It's at <http://stats.bls.gov/cpihome.htm>.

"Symposium on Measuring the CPI," Journal of Economic Perspectives, Winter 1998, pp. 3-78. This group of articles includes a lead article by the members of the Boskin Commission, giving a brief overview of their report and then discussing how it was received and their responses to some of the criticism. It is then followed by five shorter articles by economists who are experts in this subject. Each comment is aimed at illuminating the weak and strong points of a certain aspect of the argument, rather than being categorizable as "for" or "against" the Boskin commission—although some of those judgments slip in, too!

Questions to Consider:
1. If you were given the job of how to measure overall inflation in the economy, how would you go about it? You might begin by reviewing how the BLS tries to do the job.
2. Does it seem plausible to you that neglecting possibilities for substitution between goods will mean that the Consumer Price Index overstates the true rise in the cost of living?
3. Does it seem plausible to you that neglecting quality improvements and new goods means that the Consumer Price Index overstates the true rise in the cost of living?
4. Would you favor the use of many different price indexes for different purposes like indexing tax brackets, Social Security payments, and the poverty line—or do you think that on the whole we're better off with one rate?
Lecture Thirty-Three
The Federal Reserve and Inflation Fighting

Scope: The Federal Reserve is an odd organization, composed of 12 different regional federal reserve banks, which are officially private corporations owned by the banks in their region, and then run by a seven-member Board of Governors who are politically appointed by the president and confirmed by the Senate. The Fed has many regulatory duties that don't often make headlines, like distributing checks between banks, and one area of power that makes news all the time: the power to raise or lower interest rates. The Fed is required by law to pursue stable prices and full inflation. The problem it perennially faces is that higher interest rates are the usual tool to fight inflation, while lower interest rates are the tool for fighting unemployment.

When inflation is relatively high and unemployment relatively low, or vice versa, then the Fed has fairly easy choice. When both are relatively low—as in most of the second half the 1990s, the choice is a harder one. The arguments for trying to push even low inflation down to zero is that even low inflation has economic costs. Moreover, once unemployment has fallen to a certain level, it may not be possible to use low interest rates to move it lower still. Conversely, the argument for focusing on unemployment is that it is worse for people than a little inflation—and that inflation is greatly diminished in the late 1990s, anyway.

When the problems are already-low inflation and already-low unemployment, the Fed's problems are in some ways nice ones to have; after all, economic conditions are already in fairly good shape. The approach the Fed seems to have taken is to wait for a real target, but not to try to fine-tune an already pretty good economy.

Outline

I. The Federal Reserve: goals and structure
   A. A quasi-public corporation
      What is the Federal Reserve exactly? Officially, it is a group of 12 private corporations, each one owned by the banks in its region. The group of 12 regional Federal Reserve Banks is overseen by a seven-member board of directors who are appointed by the president and confirmed by the Senate.
   B. Duties and powers: lots of stuff, and the interest rate
      The Fed has many administrative duties: checks are cleared between banks by the Fed; the Fed is a supervisor of bank holding companies; and many other vital but boring responsibilities. But the reason that the Fed shows up in the newspaper headlines is typically none of these duties, but one particular power: by its actions in buying and selling bonds to the banking system, the Fed can raise or lower interest rates for the economy. The 12-member Open Market Committee makes this decision.
   C. Dual goals: inflation and unemployment
      Under existing law, the Federal Reserve is charged with attempting to reach two goals: stable prices and full employment. However, reducing inflation typically means raising interest rates, so that there is less demand in the economy, and fewer dollars chasing goods. Reducing unemployment means reducing interest rates, so that there is more demand in the economy and businesses are motivated to hire more people. So when there's both some inflation and some unemployment, which direction to go?
   D. Obvious calls and judgment calls
      Sometimes the Fed's judgments are fairly obvious. In the late 1980s, inflation was rising and unemployment was falling, so the Fed raised interest rates to fight inflation, and succeeded. In the early 1990s, unemployment was rising and inflation was falling, so the Fed cut interest rates to fight unemployment, and succeeded. In the second half of the 1990s, both inflation and unemployment have been fairly low, so the Fed left interest rates largely alone.

II. The arguments for focusing the judgment calls on inflation
   A. Even mild inflation is harmful to long-term planning
Even mild inflation has potential to disrupt long-term planning on issues like how much to save, how much to invest, and what kind of contracts to sign. Even if the gains from eliminating mild inflation are small in any given year, they will accumulate into significant amounts over time.

B. It's cheaper to fight low inflation than high inflation
When inflation becomes entrenched in the economy, as in the late 1970s and early 1980s, it may take very high interest rates and a deep recession to end it. When inflation is just getting started, as in the late 1980s and early 1990s, it can be ended with lower interest rates and a more shallow recession. If you're going to take the anti-inflation medicine of high interest rates, better to take it sooner. The experiences of the early 1980s with 16% interest rates point up this fact.

C. Interest rates have limited power to reduce unemployment rates below the "natural rate" of unemployment
The idea of how interest rates reduce unemployment is that by raising demand for goods and services, they encourage business to hire more. But what if the most businesses are already running at full throttle, and have no particular desire or need to hire more workers? The amount of unemployment when the economy is running full throttle goes under several names, none of which is fully satisfactory: "full employment," the "natural rate of unemployment," and the "non-accelerating rate of inflation" or "NAIRU" rate of unemployment. This rate is not a number carved in stone: will be determined by other economic factors. But trying to push unemployment with lower interest rates won't fix unemployment, and will only bring higher inflation.

D. The asset market wild cards
The stock market has climbed dramatically during the 1980s and 1990s, to a in the late 1990s where it is, by its historical standards, somewhat overvalued. The stock market doesn't count as part of the inflation rate; it's not part of the Consumer Price Index. But if it booms and then busts, it could affect the entire economy. So this is a wild-card argument for fighting inflation broadly defined to include asset prices. This is a big question for the late 1990s.

III. The case for leaning toward fighting unemployment in the judgment calls

A. Unemployment hurts more
A half percent change on the unemployment rate means something like 500,000 jobs for people. A half percent change on the inflation rate is something few people even notice. When it doubt, this argument goes, err on the side of jobs.

B. Since NAIRU is uncertain, wait until it is revealed
Since no one is quite certain of just what "full employment" or the "natural rate" of unemployment is at any given time, the Fed shouldn't make guesses. After all, if the Fed had started fighting inflation when the unemployment rate dipped below 6%—and many economists in the early 1990s would have guessed that the natural rate of unemployment was about 6%—then it would have made a terrible mistake in shutting off growth too soon. Wait until inflation is a clear danger before sacrificing any jobs.

C. The danger of inflation has diminished or even vanished!
Those who hold this view typically point to two major changes, new technology and new competition, and argue that in the new competitive environment, inflation is highly unlikely, because it's very difficult for firms to raise prices. This argument confuses competitive pressure, which is one thing, with higher inflation, which isn't the same thing. There is no doubt among economists that if the Federal Reserve cuts interest rates by enough, and pumps up demand, at some point inflation will start.

D. A little inflation greases the wheels of the economy
People resent having their wages cut. But if their wages rise, but not by as much as the inflation rate, often they don't mind as much. In this way, a little inflation can make it easier to adjust certain prices downward, when economic forces require, because it doesn't require an actual cut, just an increase that doesn't keep up with inflation. In the "sand" versus "grease" argument, most economists believe that inflation is "sand," slowing the economy.

IV. How should the Fed decide?

A. When democrats tie their own hands
One possible solution seems easy enough, in a democracy. Have Congress vote on what should happen, as they would on any law. But while the Fed has an element of democratic input (i.e., political appointees
acting under Congressional laws) there is a general feeling that it is better not to give Congress the temptation to goose the economy in the short-term and suffer inflation in the middle term.

B. A question of priorities: in the extreme, inflation first
If inflation and unemployment are both substantial problems, then the consensus of most economists would be for the central bank to go after inflation, so that a future of lower unemployment and economic growth can be built on a sound base.

C. Staying pragmatic
The Federal Reserve in the 1990s has stayed pragmatic. It hasn't given in to those who warn that unemployment can't fall further, nor to those who warn that inflation will no longer rise. In fact, it has done one of the hardest things for any group of policy-makers to do; it has largely refrained from interrupting a pretty good economic situation.

Essential Reading:
Blinder, Alan S., "Central Banking in a Democracy," Economic Quarterly: Federal Reserve Bank of Richmond, Fall 1996, pp. 1-14. Blinder is one of the fine academic macroeconomists of the present generation. In recent years, he has served both on President Clinton's Council of Economic Advisers and as one of the Board of Governors of the Federal Reserve. He is also one of the best writers in the economics profession. In this talk, he take on what can be an arduous task: defending the status quo. That is, he defends that the Fed should be somewhat independent of politics (as it is) and that it should focus on both lower inflation and lower unemployment, despite the fact that they are potentially conflicting goals. This talk is also available on the website of the Richmond Fed. Dial up <http://www.rich.frb.org/eq/index.html> and scroll down to the Fall 1996 issue. The article is in a portable display format (pdf) file, so you will need to use Adobe Acrobat, which can be downloaded free from Adobe, to read it from the web.

Four articles from the Economist. "The costs of inflation," May 13, 1995, p. 78. "Hubble, bubble, inflation trouble?" May 9, 1998, p. 78. "Inflation is dead," April 13, 1996, p. 16. "Grease or sand?" July 26, 1997, p. 68. As on so many other economics topics, no other publication covers these issues in the thoughtfulness and depth of the Economist. Here is a selection. The first article points out that the evidence that moderate inflation hurts an economy is fairly weak. The second article asks whether the Fed should worry about higher stock market prices. The third article mocks the views of those who would argue that inflation is now dead. Finally, the fourth article asks the "grease or sand" question: does a little inflation serve to speed up an economy or to slow it down.

Supplementary Reading:
The website of the Federal Reserve Board has lots of institutional detail about the Fed; how it works, what its goals are, recent speeches by Fed members and press releases, and so on. It's a well-organized and easy-to-use page, at <http://www.bog.frb.fed.us>. The Fed also has lots of publications intended for public education purposes. Single copies of most of them are free, and they can be ordered from the website.

Questions to Consider:
1. Do you think Congress should vote on raising or lowering interest rates, rather than leaving it to the Fed?
2. Given the present economic situation, would you recommend fighting inflation or fighting unemployment? Or neither?
3. What factors determine the "natural rate" of unemployment, and in what sense might this rate be referred to as "natural"?
Lecture Thirty-Four
Economic Interpretations of Federalism:
What Should States Do?

Scope: The United States has a federalist system of government, meaning that different responsibilities are assigned to different levels of government. In many cases, this makes intuitive sense; surely it makes more sense for the central government to run national defense than it does for states to have their own armed forces, and it makes more sense for states to worry about local road construction that it would to try to pass bills on the subject in Washington, D.C.

There has been a push in recent years for a greater degree of state power. The arguments typically given are that states are closer to the voters; that states can act as laboratories of democracy, allowing policy experiments in areas like education or health care; that in a large country, one-size-fits-all policy will often fit badly in many places. Economists have added the arguments that competition between states (or local jurisdictions) may pressure states to be more efficient. Further, people may simply have different preferences for the mix of taxes and social services that they desire, and a variety of policies across states will satisfy people's desires.

But questions and qualms remain. States may sometimes compete in a "race to the bottom" where they cut taxes and welfare benefits to attract the rich and chase away the poor. States may get locked into competing against each other in offering industrial subsidies; a race where taxpayers would be better off if no state offered such subsidies. If a state decides to offer a poor level of education to children, or does not enforce civil rights laws, then it will seem to many that the central government has a justification for stepping in. Drawing the line between responsibilities of central and local governments has been an issue for the United States since its beginning, and seems likely to remain so.

Outline

I. What does federalism mean?
   A. Federalism and the Constitutional division of authority
      "Federalism" and "federalist" as philosophical words date back to the 1780s and the birth of the United States (although word federal is older). Federalism is defined as "the distribution of power in an organization (as a government) between a central authority and the constituent units." In short, it refers to a government where different responsibilities are assigned to different levels. In the United States, these have evolved over time.
   B. The reality of many jurisdictions
      The United States has tens of thousands of smaller jurisdictions below the 50 states. In total, they spend more than $1 trillion a year, and they have primary responsibility for a number of key public issues like education, crime control, and infrastructure.
   C. The current federalist balance
      There's a widespread sense that the centralized federal behemoth has been taking over from states. That doesn't seem especially true. Central spending as a share of GDP has increased a little, but not a lot, over the last three decades, while state and local spending has increased more dramatically. A number of recent policy reforms, like the welfare reform of 1996, have also given more power to the states.

II. The economic angle into federalism: the Tiebout hypothesis
   It may seem like we're talking straight political science (balance of power considerations) and history here, but that's not quite entirely true; economists have a something to offer in thinking about division of responsibilities, and why it might have potential benefits and costs
   A. The Tiebout hypothesis: consumer-voters choosing between competing communities
      An economist named Charles Tiebout wrote in 1956 a paper that has become one of the most-cited in economics. It conceives of jurisdictions as offering packages of taxes and services, and people as choosing between these jurisdictions according to their own desires.
   B. Applying Tiebout to the world around us
1. Choices between jurisdictions
There are not only 50 states, but tens of thousands of local jurisdictions and government bodies within those states, which implies that people do have some choice about the government under which they wish to live. The number of jurisdictions has reduced since the 1950s, mostly through school district unification.

2. The extent of mobility
About 15-20 percent of Americans move every year, so it is reasonable to think that a lot of sorting goes on.

C. Potential advantages of a market-based Tiebout model
Some potential advantages of a federalist structure, include better political responsiveness, people getting more of the government they want, tailoring policies to local needs, policy experiments in different jurisdictions, and pressure for local government efficiency.

III. Potential problems
A. Oversimplifications in the Tiebout model
Tiebout recognized that he was presenting an "an extreme model" to clarify the issues. He also identified key assumptions behind the model. In many cases, the fact that the assumptions don't hold always hold true helps to bring out potential flaws and problems in a pure federalist approach. His seven key assumptions were:
1. Consumer-voters are fully mobile, and will move;
2. Consumer-voters have full knowledge of differences and areas;
3. There are a large number of communities to choose from;
4. Restrictions due to employment opportunities are not considered; it’s as if all persons are living on dividend income;
5. There are no spillovers, either positive or negative, in the way that communities provide services;
6. There is some public good provided which causes people to group together, because they can't all buy it for themselves individually;
7. Communities will move toward an optimum size, depending on the public good features that define the community.

B. From model simplifications to analytical issues
Some of these problems are more important than others; for example, even if not all people are fully mobile, with full knowledge of all differences and areas, that's true of many products where markets operate fairly well. But let me summarize a few of the potential problems that arise.
1. Segmentation
The rich may choose to live in jurisdictions with, say, zoning rules requiring large expensive houses. They will then be able to pay a relatively low tax rate on their relatively expensive homes and incomes, and enjoy a high level of public services like schools and law enforcement. Conversely, if the poor end up living together, then even if they vote to tax themselves at relatively high rates, the lower level of property taxes and income will mean a lower level of public services.

2. Races to the bottom
The problem here is one of spillovers between jurisdictions. If by spending money, one jurisdiction confers benefits on neighboring jurisdictions, then spending such money will be discouraged. If by imposing charges or taxes, a jurisdiction chases business or its tax base into neighboring jurisdictions, then such taxes will be discouraged. The result can be a race to the bottom, where no jurisdiction feels that it wishes to provide a level of services which others will benefit from, nor that it could impose taxes to pay for such services in any case.

3. People may want something that isn't viewed as broadly desirable
In this approach, everyone gets their own jurisdiction. But what if the people in a jurisdiction don't believe children should attend school? Or believe in compulsory religious attendance? Or believe in polygamy? Or think that ethnic minorities or women do not deserve equal civil rights?

III. Applying the economics of federalism
A. The clearly central responsibilities
A number of responsibilities are clearly centralized, and by and large, they are ones it makes sense to centralize: national defense and foreign policy; Social Security and Medicare; support of basic science; and macroeconomic policy.

B. Antipoverty policy is run by states, but why?
Welfare and Medicaid (medical assistance for the poor) are largely administered at the state level, with some federal oversight. The result is fairly extreme inequality. There is a federalist argument that programs of redistribution should not be split up among lower-level jurisdictions, because of a possible race to the bottom effect.

C. Harmonizing revenue sources across states
Each state must fear that if it taxes too much, or subsidizes too little, it will lose taxpayers and businesses to other states. It may be helpful to think about states harmonizing some of these practices, while still leaving themselves some room for idiosyncratic differences.

D. Infrastructure, education, and training
A number of commentators have argued that infrastructure, education, and training are best controlled at the state or local level. People in an area know better what they want and what is needed, and without local support and enthusiasm, such programs don't work very well.

E. Should health care financing be centralized?
There is controversy over whether health care financing and administration should be centralized. Centralized finance would make it easier to pool risks and to offer health insurance coverage to all. However, it seems important to retain some elements of competition, and it is not obvious how this happens in a centralized system.

F. Local jurisdictions sometimes need the power to exclude
Sometime, local jurisdictions need to be able to offer special benefits to their own local citizens. Charging those outside a jurisdiction for something provided free or at lower cost inside a jurisdiction is bound to be controversial. But if state and local jurisdictions can't do this, then they will lack an incentive to invest in public institutions, and we may all end up poorer as a result.

IV. How close does America want to be?
Ultimately, many questions of federalism boil down to a balancing act. Without experimentation and trial and error, we won't always know what course is best to take. In a free society, we want to give people considerable scope to make their own choices. On the other side, allowing choices and experimentation will sometimes lead to error, shortcomings and injustice. When that happens, there will be a cry to overrule the state and local authorities and to bring in the feds. But then, the federal government can also overreact and be heavy-handed, and rule out the possibility of further experimentation. This cycle has been running since the nation's start; it will keep running.

Essential Reading:
Council of Economic Advisers, "Devolution." Appearing as Chapter 4 of the Economic Report of the President, February 1996, pp. 107-130. This useful chapter examines the facts on federalism and trends over time, and explores both the reasons why a national government may sometimes have a role to play (when uniformity or spillovers are important) and when state and local governments might better take the lead. It also discusses in-between options, where the federal government collects the taxes, but passes them along to the state and local governments for spending.
"Devolution: The New Federalism," New England Economic Review, Federal Reserve Bank of Boston, May/June 1998. This issue is devoted to a discussion of issues of federalism. It includes two substantial papers on the current devolution movement and the capabilities of states to respond to it, along with a number of comments and responses from various perspectives. The discussion is quite accessible; the participants are top-notch. By reading these 80 pages, you can get a very good and up-to-date grip on these issues.

Supplementary Reading:
Donahue, John D., Disunited States. Basic Books, New York, New York, 1997. This nicely written book offers a discussion of federalist issues in the 1990s. Chapter 2 has a nice brief overview of arguments over federalism since
the U.S. revolution, and then successive chapters take up issues of unity vs. autonomy, benefits of federalism in some areas, possible races to the bottom in several areas of policy and so on.

Tiebout, Charles, "A Pure Theory of Local Expenditures," *Journal of Political Economy*, 1956, 64, pp. 416-24. Some listeners may be interested in looking up the original Tiebout article. Since it's now more than 40 years old, it was written at a time when many economics articles were still written in words, without heavy doses of mathematical symbols. The article isn't an especially interesting read, but it does repay effort.

**Questions to Consider:**

1. Questions of federalism aren't usually decided at a high level of abstraction, but rather in the consideration of particular cases. For each of the following cases, discuss whether you would favor more, less or about the same amount of state control as presently exists: national defense; foreign policy; trade policy; welfare; health care; infrastructure investment; and education and training.

2. Would you support having the federal government act as a tax collector for the states, perhaps collecting a national sales tax and distributing it to the states? From a federalist view, describe the benefits and problems of such an arrangement.
Lecture Thirty-Five
Foreign Trade: What's Really at Issue?

Scope: Foreign trade has been a controversial business for centuries, and those controversies continue today. Although foreign trade remains a small portion of the U.S. economy as opposed to, say, many European nations, its share of the economy has increased somewhat in recent decades.

Economists have been arguing for several centuries that foreign trade can be beneficial to the economies of both nations. This lecture offers a number of intuitive arguments to explain why economists take that position. However, economists also readily admit that foreign trade can also cause economic disruption and shifts in wage patterns, which implies that even if trade is beneficial overall to the economy, it can create winners as well as losers, and there is room for a social safety net to compensate the losers.

Many economists believe strongly enough in free trade that they would support a policy of unilateral free trade; that is, the United States should not seek to limit imports from abroad, regardless of what other nations do. In short, economists view protectionism as a self-inflicted wound; the fact that other nations inflict the wound on themselves does not mean that it is sensible policy to follow. However, unilateral free trade policies seem politically impossible, so the alternative has become international trade treaties, like those under the World Trade Organization.

Outline

I. A sketch of the facts on foreign trade in the U.S. economy
   A. Levels of U.S. imports and exports
      Imports and exports were each about 6% of the U.S. economy in the early 1970s; that figure has since doubled to about 12%.
   B. Putting U.S. trade in international perspective
      Compared to many industrialized economies, like those of Europe, trade is a relatively small proportion of the U.S. economy, often half or less as large as a share of GDP.
   C. The natural limits on U.S. trade in goods and services
      It's common to hear the fear expressed that everything in the U.S. economy is being challenged or overwhelmed by foreign trade. It's true that the forces of globalization are larger than they used to be, but there are some natural limits to U.S. foreign trade. Lots of services can't be easily produced abroad; the U.S. has a huge domestic market; and there are transportation costs imposed by the oceans on both side of the United States.

II. Some intuitive arguments for free trade
   A. Foreign trade is just a part of a competitive market
      All the arguments for why competitive markets are beneficial (as presented back in Lecture Two) apply equally well as to why foreign trade is beneficial. Both foreign trade and the broader market can cause a lot of disruption, but that's a price that the economy pays for a dynamic and growing economy.
   B. The technology-trade parable
      Consider an example where a domestic firm invents a new technology. It's very efficient, and many of the firm's competitors will start losing money and will need to lay people off or fire them. The firm with the great technology won't need or want to hire those workers; after all, it's got this great technology instead. How should society react? Most people would say that society shouldn't block the new technology—in the long run, that just won't work—but instead should have programs to help cushion the shock to the dislocated workers. Now imagine the same example, with a single change: the new "technology" of the firm is to import from abroad. Again, the competing firms will lose money, and workers will be laid off or lose jobs. But economists would argue that the same response is appropriate; don't block trade, but provide programs to cushion the shock to dislocated workers.
   C. Reductio ad absurdum: how far would you go in restricting trade?
      Say that you support limiting or reducing trade with other countries, on the grounds that such trade injures the U.S. economy. Would you also favor having your state reduce trade with other U.S. states, on the
grounds that interstate trade injures your state? What about having your county reduce trade with other counties in your state, on the grounds that inter-county trade injures your county? Or restricting inter-city, or even inter-neighborhood trade? Trade is beneficial at all levels, and there's no reason to start drawing a line at any one level of generality.

D. The anti-protectionism, anti-subsidy argument
   1. Protectionism is an indirect subsidy
      Protectionism, that is, restricting or shutting out imports, is done for the purpose of helping (or "protecting") certain domestic firms. By allowing those firms to be protected from foreign competition, it allows them to charge higher prices and make higher profits than they otherwise would. This effect isn't controversial: helping certain domestic firms is the whole reason for protectionism!
   2. When does an industrial subsidy make sense?
      General subsidies to money losing firms may make political sense, but they don't make economic sense. Why do some jobs deserve special assistance over others? The economic case for a subsidy would be that a certain key industry will have extraordinary spinoff benefits for other sectors of the economy.
   3. Targeting subsidies and making them accountable
      If government is subsidizing something, it only makes practical sense to spell out what will be received in exchange. But protectionism almost never spells out what the recipient industry is to do to deserve this subsidy.
   4. Who should pay for subsidies?
      If a subsidy makes broad public sense, then the broad public should pay for it. Protectionism imposes the higher prices only on consumers of that particular good, which imposes an unfair burden on them. Besides, if the point is to encourage this strategic industry, causing the price of its goods to be higher so that demand is discouraged doesn't make much sense!

E. Protectionism is always a second-best approach
   Whatever one's goal, subsidizing an industry, saving certain jobs, protecting the environment, whatever, protectionism is typically not the best way to accomplish that goal. There is almost always a more direct, less costly approach.

III. The issues and nonissues of foreign trade
   A. Economic disruption
      There's no question that the disruption from foreign trade can be large when a new foreign producer poses a tough challenge to American firms. As consumers, and as an entire economy, we benefit from that tough competition. But for the particular firms, and the workers employed by those firms, it can be very painful.
   B. Shifts in wage patterns
      Depending on what is imported from abroad, it may affect American wage patterns. One common argument is that since America is a relatively high-wage nation, we tend to specialize in goods produced with high-wage labor while other economies, especially in developing countries, tend to specialize in goods produced with low-wage labor. As a result, foreign trade tends to expand the market for high-wage goods, and help high wages get even higher, but provides extra competition for low-wage goods, and pushes low wages lower. In other words, trade contributes to increased wage inequality in the United States.
   C. The phantom of overall job losses from foreign trade
      One often hears that trade costs America jobs. This seems highly implausible. Trade certainly shifts the sort of jobs that exist in the U.S. economy; without trade, all those folks working in export industries would presumably have to be doing something else. But there is no evidence that unemployment gets systematically higher as trade goes up, either in the United States or abroad. In fact, our trade, as a share of the GDP, has doubled over the last couple of decades, and unemployment is near historic lows!

IV. Policies and proposals
   A. Arm control and trade talks: a lousy analogy
      An analogy is sometimes drawn between trade talks and arms control talks: we both have trade barriers (or missiles), and we can't reduce ours until you reduce yours. The flaw in the analogy is that while missiles at
least had an ostensible public purpose, trade barriers do not convey an economic gain to society as a whole. They are just a sloppy way of providing an indirect subsidy.

B. Unilateral, regional, and multilateral pursuit of free trade

Economists tend to favor unilateral pursuit of free trade; that is, drop our trade barriers to imports even if other countries don't drop their trade restrictions. Economists also favor multilateral pursuit of free trade, in which everyone's trade barriers are reduced, as in the World Trade Organization talks. However, economists are sometimes ambivalent about regional free trade agreements, out of fear that they will lead to more free trade within the region, but less free trade outside the region.

C. Acceptance for free trade (and free markets) means easing the pain of disruption

Government can be involved in a variety of ways to reduce the pain of someone who loses their job: unemployment insurance, medical insurance, encouraging savings before the job loss occurs, help with job search, retraining, relocating. But it's not clear why those who lose their jobs because of trade deserve this help more than those who lose their job for other reasons.

Essential Reading:
"World Trade: Fifty Years On," *Economist*, May 16, 1998, pp. 21-23. The first round of the General Agreement on Tariffs and Trade, the international talks to push for freer trade, happened in 1948, so 1998 was their 50th anniversary. This useful article summarizes what has been accomplished over that time, and what should be next on the free-trade agenda.

Blinder, Alan, "Who Will Protect Us from Protectionism?" In *Hard Heads, Soft Hearts: Tough-Minded Economics for a Just Society*. New York: Addison-Wesley Publishing, 1987, pp. 109-135. Blinder is a top-notch economist and a fine writer in a popular style; not always a very common combination! In this chapter, he explores the economics view in support of free trade, and debunks a number of common concerns and objections. The book was published more than a decade ago, and there are a few out-of-date references to events in the mid-1980s, but what's more surprising to me is how little the arguments over trade change with time.


Supplementary Reading:
Congressional Budget Office, A Budgetary and Economic Analysis of the North American Free Trade Agreement," Washington, D.C.: Government Printing Office, 1993. One of the most controversial trade issues of the 1990s has been whether to ratify the North American Free Trade Agreement to bring more free trade between Mexico and the United States. The CBO is the nonpartisan research arm of Congress, providing non-technical reports on important issues. This 100-page report offers a restrained and mainstream view of the likely effects of NAFTA, full of economic insights, and far removed from the overbearing rhetoric and overstated predictions that were so often heard from both supporters and opponents of the treaty.

Lustig, Nora Claudia, "NAFTA: Setting the Record Straight," Brookings Policy Brief #20, 1997. This brief is only available at the website of the Brookings Institution; go to <http://www.brookings.edu>, click on the "Policy Briefs," scan down to #20, and then click on this one. It offers a good update on the actual effects of NAFTA in the three years after it passed. The verdict has some ups and downs, but is mildly positive overall.


Questions to Consider:
1. Would you favor a unilateral policy of free trade by the United States: that is, we would not restrict any imports, regardless of how other nations acted toward our exports?
2. In the context of trade, and other issues too, discuss the difference between short-term shuffling of the labor market and long-term job losses. (Hint: It may be helpful to return to Lecture Ten on unemployment before addressing this question.)

3. Do you believe that there should be special assistance programs for those who lose jobs because of competition from foreign firms that go above and beyond the assistance available to those who lose their jobs for any other reason?
Lecture Thirty-Six  
Free Trade vs. Labor and Environmental Standards

Scope: The battleground on which arguments over free trade are fought out has shifted somewhat in the 1990s. The new criticisms of free trade focus on the possibility that trade may injure labor standards or the environment; the typical policy prescription is that provisions concerning the environment and/or labor standards should be included in trade agreements, and that if the standards are violated, the consequences should be to limit or shut out trade in certain items, or from certain countries. From an economic perspective, these arguments have some limited validity. But when pushed too far, as they often are, they are simply disguised arguments for protectionism.

There is little evidence supporting the belief that international companies systematically seek out countries with low environmental standards. Each nation has its own environmental priorities, and rightly so. If we wish to influence the environmental policies of another country, we should also be talking about bearing a share of the costs from doing so. There is considerable evidence supporting the belief that companies will relocate for lower labor costs. However, trading with low-wage economies doesn't hurt the U.S.; both sides benefit from this sort of trade. Arguing that poor countries should pay far higher wages is to ask the impossible; they pay low wages because their productivity is so low, and there is no quick fix for that problem.

A variety of policy tools are available to encourage higher environmental and labor standards around the world. Among those tools is free trade itself; since it makes nations wealthier, it makes them more able to pay high wages and to have a clean environment. When there is a true international consensus to punish a nation for out-of-bounds behavior—as with apartheid in South Africa—trade sanctions can work. But if each nation claims the right to judge the full range of environmental and labor policies in other nations, and to cut off imports when it finds those policies inadequate, the global trading system could not long survive.

Outline

I. The new challenge to free trade orthodoxy: questions of environmental and labor standards
   A. Free trade and freedom to choose methods of production
      In general, free trade rules hold that foreign products must be treated the same way as identical domestic products; and the way a product is produced is not part of that judgment.
   B. Are some methods of production unacceptable?
      1. Why free trade might harm the environment
         Industry may have an economic incentive to shift to poor nations with lax environmental standards, since by reducing their costs of environmental compliance they may gain a competitive advantage.
      2. Why free trade might hurt workers abroad
         Workers in other developing economies are often very ill-paid by U.S. standards; for example, their wage may be a few dollars a day. In addition, they may work long hours without overtime; they may hire children to work; they may receive few benefits. Doesn't this provide an economic incentive for production to shift to those countries, so that firms can take advantage of exploiting this low-cost labor?
   C. Sovereignty and intervention
      It is usually agreed that nations get to make up their own minds about their own domestic laws, except in the most egregious cases like apartheid in South Africa. In many cases, the arguments over environmental and labor standards have no such consensus: instead, the poor countries of the world are intensely opposed to them.

II. The environment and trade
   A. How much "eco-dumping" occurs?
      Strangely enough, there isn't much evidence that international firms make their location decisions to avoid environmental costs. Instead, plants in different locations are usually built pretty much to international specifications.
1. Not worth the costs of redesigning to be dirty
   Firms don't want to take the time and trouble to redesign a plant to be dirtier; they don't save enough in environmental costs to make it worthwhile.

2. Environmental costs are not high enough on the list of factors that influence location choices to matter much in the decision.
   Of the many factors that go into a location decision—availability of workforce, suppliers, raw materials, and infrastructure; level of taxes; and others—environmental costs just aren't that substantial.

3. Environmental laws, or their absence, may be a marker for the competence of local government
   Businesses like a stable local government, with clear requirement. If an area has few environmental laws or enforcement, it may sometimes be a sign that local government is not stable or in control, and therefore prone to change.

B. Differing priorities
   Other nations may have different environmental priorities, and legitimately so, than the United States. But nations typically recognize that not all their priorities can be pushed on each other.

C. Distinguishing local environmental harm vs. global harm
   Typically, nations get to manage what's inside their own borders. However, some environmental issues spill across national borders in the water or the air. In these cases, there is a case for global environmental treaties to be signed, and those treaties may have an economic component. Those treaties will specify an agreed-upon way of dividing up the costs of reducing the problem, not just imposing what one nation prefers.

III. Labor standards and trade

A. The fallacious demands for equalizing wages and benefits
   One sometimes hears arguments that the United States should only trade with other countries after they have raised their wages to U.S. levels, or adopted a U.S. level minimum wage. This argument, if taken seriously, would simply eliminate trade. After all, the productivity of low-skilled workers in poor countries simply will not justify paying U.S.-level wages.

1. First unreasonable assumption: trade only makes sense if wage levels are equal
   This argument seems to assume that foreign trade only makes sense if it is between identical economies. Of course, the opposite is true; trade can benefit both sides because of their differences—including different levels of wages.

2. Second unreasonable assumption: low wages in poor countries can be fixed by government fiat
   The argument seems to presume that governments of poor countries (or firms operating in those countries) could just give everyone higher wages if they wanted to. But wage levels are based on productivity, and productivity is terribly low in poor economies.

3. Third unreasonable assumption: blaming the world's poor for their poverty
   The poor workers of the world aren't poor as a sort of clever competitive trick. Saying that we'll help them by refusing to buy their products is self-contradictory, and a little ugly.

B. From easy to hard cases

1. Slave labor
   Slave labor seems to me an easy case. When there is physical compulsion and workers aren't allowed to quit, there is a strong case for refusing to import those products. Existing trade treaties allow trade boycotts in extreme cases where the international community is in broad agreement.

2. Prisoner labor
   Prisoners aren't quite slaves, but in some countries, like China, the distinction can be a close one. Again, a reasonable test is whether the international community unites to condemn the behavior, or whether it is something being pushed by only a few countries.

3. The difficult issue of child labor
   Children work in many countries, including the United States. But they work younger and longer for less pay in many poor economies. The U.S. and other developed economies should encourage that children receive at least a primary education, and that work conditions be safe. But pushing children out of the legal sector into the illegal sector, like prostitution, is not an obvious step for the better.

C. Working conditions: fringe benefits, overtime, hours and the right to unionize
1. Benefits are the same as pay
   Workers in poor countries often have longer hours, less overtime, and few benefits. But trying to impose the payment and hours of rich countries runs into the same problems of imposing higher wages: remember, from the employer's perspective, benefits and overtime are just another form of pay.

2. Rights to organize and unionize
   It is widely recognized that workers have some right to form organizations that can speak out on their behalf. This right is denied in some countries, as other rights of free speech and free assembly are sometimes denied. Except in a few extreme cases, the international community does not mobilize in response to such problems.

3. Is the United States ready to be judged by others?
   The U.S. has lower minimum wages than many European countries, and far lower rates of unionization. There are also sectors, like migrant agricultural workers in the U.S., where U.S. laws on minimum wages and minimal standards are often violated. Is the U.S. willing to have other nations refuse its exports on these grounds?

IV. Alternatives to trade policy for pursuing environmental and labor goals
   A. Private boycotts and labeling
      A combination of private boycotts and labeling of products can be an effective way to pressure firms to behave differently.
   B. Voluntary codes of conduct
      Organizations can draw up voluntary codes of conduct for their behavior overseas. In many cases these will represent an improvement over the present situation—but will be far less than environmentalists or labor advocates desire.
   C. International treaties
      1. Environmental treaties
         Going beyond existing environmental treaties, there could be a law that developed economy firms must follow their home pollution standards in their overseas operations.
      2. International Labor Organization
         There is an International Labor Organization to which many countries belong. The ILO passes a lot of high-sounding resolutions, but does less in terms of speaking up about how well those resolutions are being fulfilled.
   D. Countervailing actions on trade
      Under present trade law, if one nation decides to shut out a product because of concerns over how it was produced, and the GATT arbitration procedure rules against that nation's action, there are three possible responses. One is to withdraw the rule. But the other options are to keep the rule, and instead remove some other barrier to imports from that country, or to keep the rule, and accept some other barrier on exports to that country.
   E. Organic economic growth and political change
      Rich nations have higher wages, because they have higher productivity. Higher wages and incomes tend to bring tougher environmental standards, because richer nations can afford more environmental cleanliness.
      If the goal is to raise wages and get a cleaner environment, economic growth is a straightforward way to achieve that goal over time.

V. Necessary additions to free trade or a cover for protectionism?
   A. A not-so-veiled hostility to the market
      Many of the environmental and labor rights groups are at least somewhat hostile to the market, which they view as the source of environmental and labor problems. They seem to be claiming that if the U.S. refused to trade with these other countries, then their environmental standards and labor standards would be higher, and all side would benefit. This seems clearly wrong.
   B. Opening Pandora's box on free trade
      A cleaner environment and better working conditions for the world's poor are worthy goals, and worth agitating about. But free trade is a worthy institution, too, and in the long run it helps produce wealthier and more environmentally friendly societies. Better to keep trade relatively free, while using other available methods to advance environmental and workplace goals.
Essential Reading:
Golub, Steven S., "Are International Labor Standards Needed to Prevent Social Dumping," *Finance and Development*, December 1997, pp. 20-23. The author distinguishes between an economic and a moral argument for labor standards. The economic argument, that low wages abroad hurt U.S. workers, he dismisses on the grounds of economic logic. Rich countries can benefit from trading with poor ones. The moral argument is tougher, but Golub argues that the question is really a practical one of how to help workers in poor countries—and that shutting off trade with these countries is probably not the best way to proceed.

"Trade and the Environment: The greening of protectionism," *Economist*, February 27, 1993, pp. 25-28. This useful article points out how environmental issues have been combined with trade issues in recent rhetoric. It lays out the relevant portions of current international trade law, which helps to explain in a more detailed way why environmental activists find it frustrating. And it offers a gentle defense of the position that while environmental concerns do have a place in trade agreements, that place should be a limited one.

"Debate: Does Free Trade Harm the Environment," *Scientific American*, November 1993, pp. 42-57. Jagdish Bhagwati, one of the eminent trade economists of our time, makes "The Case for Free Trade" from pp. 42-49. Herman Daley, an economist with the World Bank, then writes on "The Perils of Free Trade" from pp. 50-57. As you would guess from the lecture, I think Bhagwati is the voice of reason and that Daly is badly misguided on this issue. But you can read for yourself and form your own judgments.

Supplementary Reading:
Bhagwati, Jagdish, "Trade Liberalization and 'Fair Trade' Demands: Addressing the Environmental and Labor Standards Issues," *World Economy*, November 1995. In this article, Bhagwati turns down the rhetoric and turns up the analysis. He carefully dissects and separates the various issues involved, and the various proposals for dealing with them, and explains why environmental and labor standards are of only limited use in trade agreements.

In August 1996, President Clinton appointed the White House Apparel Industry Partnership, a group with both industry, labor and human rights representatives, to come up with a code of conduct for multinational firms making apparel in other countries. Perhaps it's no surprise that the group splintered. It agreed on rules like countries must follow their own minimum wage rules; that firms shouldn't hire workers younger than 14; and that the work week shouldn't be more than 60 hours, with one day off per week. The proposed code of conduct is on the web at [http://dol.gov/dol/esa/public/nosweat/partnership/report.htm](http://dol.gov/dol/esa/public/nosweat/partnership/report.htm). The proposal was criticized harshly for not going far enough by various labor activist groups; for an example of such criticism on the web, see the Corporate Watch website at [http://www.corpwatch.org/trac/feature/sweatshops/swatch.html](http://www.corpwatch.org/trac/feature/sweatshops/swatch.html).

Questions to Consider:
1. Suggest a set of policy tools for advancing the goal of a cleaner environment in other countries. What role do trade laws play in your preferred set of policy tools, if any?
2. Suggest a set of policy tools for advancing the goal of a better work environment for workers in poor countries. What rule to trade laws play in your preferred set of policy tools, if any?
Timothy Taylor
Managing Editor, *Journal of Economic Perspectives*
Macalester College

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.
# Table of Contents

## Contemporary Economic Issues

### Part IV

<table>
<thead>
<tr>
<th>Professor Biography</th>
<th>............................................................................................. i</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreword</td>
<td>............................................................................................. i</td>
</tr>
</tbody>
</table>

### V. Trade and Exchange Rates

<table>
<thead>
<tr>
<th>Lecture Thirty-Seven</th>
<th>The Trade Deficit: What Are the Real Issues ............4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture Thirty-Eight</td>
<td>Can Anything Be Done about International</td>
</tr>
<tr>
<td></td>
<td>Financial Crashes?........................................................7</td>
</tr>
<tr>
<td>Lecture Thirty-Nine</td>
<td>A Single European Currency ......................................11</td>
</tr>
</tbody>
</table>

### VI. Tour of the Global Economy

<table>
<thead>
<tr>
<th>Lecture Forty</th>
<th>The Economics of European Union .........................15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture Forty-One</td>
<td>From Communism to a State of Transition in Russia and Eastern Europe ..................20</td>
</tr>
<tr>
<td>Lecture Forty-Two</td>
<td>Has Japan’s Economic Miracle Come and Gone? ...23</td>
</tr>
<tr>
<td>Lecture Forty-Three</td>
<td>Lessons from the East Asian (Rumpled) Tigers ......27</td>
</tr>
<tr>
<td>Lecture Forty-Four</td>
<td>China’s Economic Surge ........................................30</td>
</tr>
<tr>
<td>Lecture Forty-Five</td>
<td>India...........................................................................33</td>
</tr>
<tr>
<td>Lecture Forty-Six</td>
<td>Market Economics Comes to Latin America.................36</td>
</tr>
<tr>
<td>Lecture Forty-Seven</td>
<td>Africa’s Plight..........................................................40</td>
</tr>
</tbody>
</table>

### VII. Conclusion

| Lecture Forty-Eight | What Economists Know, and Don’t Know, about Economic Policy ........................................43 |
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. Discus 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, nontechnical 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.
Scope: The effects of foreign trade are often jumbled together with the trade deficit in everyday discussions, but the two issues are conceptually quite separate. It's quite possible to have a large amount of trade but (roughly) balanced trade, and thus no deficit, and it is also possible to have lower levels of trade and a relatively substantial trade deficit (or surplus).

The U.S. trade deficit grew very large in the mid-1980s, and after shrinking in the early 1990s, has again become quite large. From an economic perspective, a trade deficit should be understood as the counterpart of flows of investment between two countries; a trade deficit means that an economy is receiving net investment from abroad, and thus increasingly becoming a foreign debtor; a trade surplus means that an economy is investing abroad on net, and thus increasingly becoming a foreign creditor. These international flows of investment can be sensible or foolish, depending on whether an economy is using the money from abroad for sensible long-term investment or for current consumption.

Although protectionism is a mistake, as argued in the previous lecture, if your goal is to diminish foreign trade protectionism can help accomplish that goal. However, protectionism is unlikely to work well at diminishing a trade deficit. The only solutions to a trade deficit are to reduce the need for the inflow of foreign capital by reducing domestic investment (also not such a good choice), having government borrow less or run a surplus, or increasing domestic savings.

Outline

I. Why foreign trade and the trade deficit raise different issues

A. High trade levels without a trade deficit
   It's quite possible to have a lot of foreign trade, in the sense that exports and imports are a high share of GDP, but they are balanced. In this sense, the amount of foreign trade is not the same as the trade deficit. If trade is a large share of GDP, the real issues with foreign trade—disruption to workers, shifts in wages—will exist even if trade is in balance.

B. High trade deficits with a relatively low amount of trade
   Conversely, it's quite possible to have trade be a relatively low share of GDP, but to have a substantial deficit or surplus. The U.S. economy is an example; remember from the previous lecture that in comparison to other economies, the U.S. has relatively little trade, but it has a huge trade deficit. Thus, the impact of foreign trade on the U.S. economy in terms of disruption and wage shifts is relatively low, compared to many other economies—but the U.S. trade deficit can still be a substantial problem.

II. Trends in the U.S. trade deficit and what the trade deficit means

A. Levels of the U.S. trade deficit over time
   From the end of World War II to the 1970s, the overall U.S. trade deficit was typically in a small surplus, occasionally a small deficit, but always fairly close to balance. Within a few years from 1983 to 1986, however, the trade deficit shot up to the range of $160 billion. In the early 1990s the deficit almost reached balance again, before shooting back to a very large deficit, close to $200 billion annually, at the end of the 1990s.

B. The connection from trade deficits to capital flows
   1. Robinson and Friday on the island
      Imagine Robinson and Friday on a desert island. They can trade evenly, or they can trade in an imbalanced way, so one owes the other something in the future. Say that Friday sends Robinson more than Robinson sends Friday. Then Friday has a trade surplus (exports exceed imports) and Robinson a trade deficit (imports exceed exports). Moreover, the amount of Robinson's trade deficit measures just how much Robinson has borrowed from Friday, and the amount of Friday's trade surplus measures precisely how much Friday has loaned to Robinson.

   2. Drawing the connection from the island economy to the U.S. economy
When the U.S. economy runs a trade deficit, it is receiving more from abroad than it is sending abroad. This extra amount is paid for, from the perspective of the U.S. economy as a whole, by borrowing from abroad. The size of the trade deficit exactly measures the net inflow of foreign investment into U.S. bank accounts, stock, bonds, real estate, and so on. Conversely, a nation like Japan with a trade surplus is sending more abroad than it is receiving. The extra money received is invested abroad. The trade surplus exactly measures the net outflow of foreign investment leaving Japan.

3. Borrowing for consumption vs. borrowing for investment
   Does it make sense for a person like Robinson, or a nation like the United States, to borrow from abroad? If the borrower invests sensibly in the future, then the increase in future output can allow both paying back the loan and enjoying a higher standard of living in the future. But if the borrower just uses the loan to consume more in the present, then paying back the loan in the future will be more difficult and painful.

4. How wise are the U.S. trade deficits of the 1980s and 1990s?
   The main cause of the U.S. trade deficits of the 1980s seems to be the huge government budget deficits, which led to a great deal of borrowing from abroad, both directly and indirectly. U.S. investment levels were not especially high in the 1980s, so this looks like an unwise trade deficit. In the late 1990s, the federal budget is in balance, and the reason for the U.S. borrowing from abroad is to finance domestic investment. Economically speaking, this looks more sensible. However, a still better option might be for the U.S. to raise its own domestic savings rate, so that it need not depend as heavily on foreign capital.

5. The risks of dependency on inflows of foreign capital
   When an economy runs large trade deficits and received inflows of capital from abroad, it can become reliant on those inflows of capital. If the foreign capital stops arriving, for whatever reason, it can create a vicious circle for an economy. For example, this happened in East Asia and Russia in 1997-98.

C. A digression on the lack of connection from trade deficits to protectionism
   1. U.S. recent experience with the trade deficit
      There is no evidence at all that the U.S. trade deficits of the 1980s were caused by increased protectionism from abroad. If anything, trade barriers in nations like Japan have been falling through the 1980s and 1990s; there's no doubt that Japan's protectionism is far, far lower than it was in the 1960s.

   2. International patterns of trade deficit and surplus
      It is easy to look around the world and find cases where countries that aren't especially open to trade, like India or Korea, have trade deficits. Their protectionism doesn't save them from trade deficits! Similarly, it's easy to find examples where greater openness to trade has produced surpluses. Take Japan: Japan certainly has more barriers to trade than the United States, but the level of those barriers now is far lower than it was, in say, the 1960s and 1970s. However, Japan often ran trade deficits in the 1960s, and has run enormous trade surpluses in recent years. Becoming more open to trade hasn't hurt Japan's trade surpluses!

D. Explaining trade deficits with flows of foreign investment
   When thinking about explaining trade deficits, remember that they reflect flows of capital. Thus, the U.S. trade deficits of the 1980s reflect the huge budget deficits of that time, which increased demand for capital and brought a reliance on foreign capita. The U.S. trade deficits of the 1990s reflect a huge number of foreign investment dollars piling into the U.S. economy, some of them running from ailing economies in places like Japan and east Asia. Japan's huge trade surpluses are because Japan saves so much that it can't invest all the money domestically, and so it invests it abroad.

III. Possible policy responses to the trade deficit
   A. Undesirable, unworkable protectionism
      The undesirability of protectionism was argued in the previous lecture. But in addition, it seems unlikely that protectionism will do much to end a trade deficit. If we restrict imports, other nations are likely to respond by shutting out an equal amount of our exports, which will leave the trade deficit unchanged. Economically, forcing other nations to buy more U.S. products won't help the trade deficit either, not unless it is accompanied by changes in savings behavior.

   B. To address trade deficit, we need to address the imbalance of domestic investment and domestic savings
The U.S. economy could reduce its trade deficit, that is, its dependence on foreign capital, by investing less, but that's would reduce future economic growth. It could try to raise private savings, but as discussed in the earlier lecture on savings, we're not quite sure how to do that. It could reduce government borrowing, or build up higher budget surpluses, but that seems politically difficult.

**Essential Reading:**
Taylor, Timothy, "Untangling the Trade Deficit," *Public Interest*, Winter 1998. forthcoming. This article is my own effort to spell out in words the economic perspective on the trade deficit: how it differs from the trade balance, the connections with international flows of capital, how it is not especially connected with protectionism or jobs.
Council of Economic Advisors, "The U.S. Trade Balance." In *Economic Report of the President*, February 1998. Washington, D.C., Government Printing Office, February 1998, pp. 246-249. See also discussion on pp. 40-41. This excerpt from a longer chapter on foreign trade and the economy, along with the few pages referenced earlier, gives a good overview of how economists see issues of the trade balance. The back of the ERP also has statistical charts on the trade balance for the last few decades. This report is available on the web at a number of places; one good connection is at <http://www.gpo.ucop.edu/catalog/erp98.html>.

**Supplementary Reading:**
Golub, Stephen, "Is Trade Between the United States and Japan Off Balance? *Finance and Development*, September 1994, pp. 54-57. It is often asserted that the reason Japan runs a trade surplus, and the U.S. a trade deficit, is that Japan is an "unfair" trader. The implication is that a trade surplus is proof of unfairness. After the lecture, you should be starting to understand that trade deficits have a different cause: they relate to whether a nation like the United States is consuming more than it is producing, and thus importing capital from abroad to pay for its trade deficit; or conversely producing more than it is consuming like Japan, and investing its extra earnings abroad. Golub explains how these macroeconomic factors are what actually determine trade deficits and surpluses, not the existence of unfair trade rules.
On the web, for up-to-date facts about the trade balance, the government agency that compiles the trade statistics is the Bureau of Economic Analysis, which is part of the U.S. Department of Commerce. For up-to-date and historical data, go to <http://www.bea.doc.gov>, look under "International" and click on "data."

**Questions to Consider:**
1. It is generally felt that the U.S. trade deficit in the 19th century was not a great economic problem, but that the current U.S. trade deficits may be a problem. Is this just a contradiction? Or what is different about the two cases?
2. If reducing the trade deficit was your goal, what policy option would you favor for doing so? Which options wouldn't you favor?
Lecture Thirty-Eight
Can Anything Be Done about International Financial Crashes?

Scope: The 1990s have seen an explosion in the size of global currency markets, and not coincidentally, a number of financial crashes in Britain and Europe, Mexico, Thailand and the far East, and in Russia. In each case, foreign investors fled the economy, and the result was a sharp reduction in the exchange rate value of the currency. In turn, the currency depreciation weakened financial institutions, caused inflation, scared away foreign investors, and generally depressed the economy.

Why did foreign investors cut and run? In the most severe cases, there was some bad economic news which discouraged them. But it also seemed that the nearly panic-stricken flight of foreign investors in several cases was an overreaction; they fled because of fears about the fears that other investors might be about to have. The result was that the country suffering the depreciation suffered by more than seemed justified by the economic issues at stake.

There have been a number of proposals for trying to slow the overreactions of the market: having countries intervene directly in the foreign exchange markets; having countries move their interest rates to affect the exchange rate of their currency; a global tax on international capital flows; controls on foreign capital inflows; or by using institutions like the International Monetary Fund. It's fair to say that none of these methods has worked without tradeoffs, and some methods don't seem to have worked at all. Some economists have even expressed doubt that foreign capital flows are very beneficial to the global economy; that probably goes too far, but the prevalence of currency crashes in the 1990s is enough to make a person wonder.

Outline

I. Foreign capital market crashes
   A. Currency crashes of the 1990s
      There have been a number of currency crashes in the 1990s: that is, cases where foreign investors fled from a certain country, and as they sold off their investments all at once, the value of that nation's currency dropped sharply. Examples include Britain and many nations of Europe in 1992, Mexico in 1994 and 1995, Thailand and many nations of east Asia in 1997, and Russia in 1998.
   B. The transformation of global capital markets in the 1990s
      Up until the 1970s, it was quite difficult for an ordinary person or even a business to invest in stocks and bond in other countries. Capital flows were controlled. However, these controls have since been loosened, and the flows of foreign capital have risen dramatically in the 1990s.
   C. Consequences of a currency crash for a nation's economy
      1. Financial sector shock
         The decline in a nation's currency means that repaying foreign loans denominated in U.S. dollars becomes much more difficult; in fact, this effect will drive many banks into bankruptcy, which will stagger the domestic economy, causing high unemployment and recession.
      2. An inflationary push
         When the value of a country's currency falls on exchange rate markets, it makes all imported products more expensive, thus adding to inflation.
      3. Frightening foreign investors
         When an investor puts money in another country, there are two main sources of anxiety. One is how well the investment itself will do; the other is how the exchange rate will do. If an investment in Russia earns, say, a 20% return in Russian rubles, but the value of the ruble falls by 30% relative to the U.S. dollar, then the U.S. investor is worse off in dollar terms.
      4. A potential, partial counterbalance: exporting gets easier
         A currency depreciation helps exporters. Their costs, in the now-cheaper home currency, are reduced, compared to what they earn from their sales abroad. However, benefiting exporters in this way is not nearly enough to offset the costs of a currency collapse on the rest of the economy.
II. Why do foreign investors cut and run?
A. Fundamental economic factors
   1. Decline in commodity prices
      When an economy is dependent on a particular product, like exports of oil, and the price of that
      product falls on world markets, then the economy in general looks less attractive for investment.
   2. Overly expansionary government macroeconomic policy
      Expansionary policy refers to big budget deficits or supplying lots and lots of credit, which tend to
      expand an economy, but also push it toward inflation. An inflated currency is worth less, and can lead
      to economic instability, both of which discourage foreign investors.
   3. Excessive private sector borrowing from abroad
      Some economies are borrowing heavily from abroad; before Mexico's crisis in 1994, it had been
      running current account deficits of 6% of GDP for several years—a very high level of capital inflow
      from abroad. Thailand and Russia had also received surges of capital from abroad. If doubts arise that
      this money has been well-invested, then investors may head for the exits.
B. Speculative fear of fundamental factors and self-fulfilling prophecy
   If none of the fundamental things has actually happened for certain, but it looks as if they might, then
   foreign investors who fear a depreciation may decide to bail out now. As they sell, they create downward
   pressure on the exchange rate, and their expectation of a currency depreciation becomes a self-fulfilling
   prophecy.
C. Higher orders of speculation: fear of the fear of fundamental factors
   Perhaps none of the fundamental things has happened, and it isn't clear they will happen, but foreign
   investors fear that other foreign investors fear that it might happen, so they decide to bail out now. Again,
   as they sell they create downward pressure on the exchange rate, which falls, and the prophecy is self-
   fulfilling.
D. Exchange rate markets are highly volatile, perhaps too much so
   Some movements in exchange rates make economic sense. For example, if one country has an inflation rate
   that is 5% per year higher than another country, then (other things equal) one expects its exchange rate to
   be 5% less at the end of the year, too. But the jumps and reactions in the foreign exchange market seem to
   go far beyond these sorts of reasonable adjustments; in severe cases, a currency depreciates by 30%, 50%
   or more in a few weeks or months.

III. Methods of stabilizing a currency—and their drawbacks
A. Intervening directly in foreign exchange markets
   1. How it works
      When the foreign investors are selling the currency, a government (or a group of governments) buys
      the currency. As long as the government is willing to keep buying, it can keep the price up.
   2. The hope
      The hope is that you are buying the currency at a time when its value is unreasonably low. As the
      speculative frenzy dissipates, the currency will rise again and you'll make money on it. Moreover, you
      will have taught a lesson to all those speculators, who lost money, and may not be so quick to cut and
      run in the future.
   3. The fear
      The fear is that the currency really did need to be lower because of economic bad news, and so when
      you've bought it, you've bought a lot of currency that isn't worth as much as you paid, and you face
      large losses.
B. Using interest rates to control exchange rates
   1. How it works
      Countries can also affect their exchange rate by adjusting their interest rates: a higher interest rate
      makes a currency more attractive to foreign investors, and a lower interest rate makes it less attractive.
   2. The tradeoff with higher interest rates
      Higher interest rates can make a currency more attractive, but they also slow down borrowing for
      business investment and consumer purchases in the domestic economy. Trying to stop a speculative
      frenzy in exchange rates with high interest rates risks driving the domestic economy into stagnation.
C. Pre-announced agreement for multilateral intervention in exchange rate markets
   Sometimes governments get together and announce a band for the exchange rates of their currencies, as in
   the European Monetary System established in 1979. The idea is that if the exchange rate looks as if it's
   slipping out of the band, the governments as a group will intervene with direct purchases or interest rate
   movement to keep the exchange rate in the band. These systems can work for a time, but under stress they
   tend to fall apart, as the EMS system did in 1992.

D. Capital controls on short-term flows
   Some advocate controls on foreign capital inflows to discourage short-run capital. Chile is a prominent
   example, where all foreign capital investments are required by law to stay for a year before they can be
   withdrawn. On one hand, this surely discourages some inflows of capital; on the other, it protects Chile to
   some extent from sudden outflows.

E. Tobin taxes: sand in the gears
   Some years ago, an economist named James Tobin (who would later win Nobel prize in economics)
   proposed a small tax on international capital flows. The advantage of a small tax is that it wouldn't make
   much difference to someone investing for the long term. But if you were buying and selling every day, the
   impact of the tax would add up. The practicality and workability of such an international tax is open to
   dispute.

F. Domestic financial reform
   If countries like Thailand, Mexico, and Russia had better and more open systems of bank and financial
   regulation, there would be fewer nasty surprises for foreign investors, and less chance of a stampede for the
   exits.

G. Build international agencies
   The role of the International Monetary Fund is to help fight speculative excesses, by providing short-term
   loans in these cases. The IMF can also require that countries carry out certain economic reforms, and
   certify that these reforms are being carried out. This demand for reforms is always controversial, but it does
   help to rebuild the confidence of foreign investors in the economy.

IV. Are international capital markets helpful or hurtful?
   Even among the ranks of economists, some have begun to question whether free international flows of capital
   are a good thing for the world economy. The answer is probably yes—but the violence and pain caused by the
   international capital market crashes is enough to make one wonder.

Essential Reading:
A group of articles from the *Economist*. "Schools Brief: Capital goes global," pp. 87-88. "Capital controversies," May 23, 1998, p. 72. "Of take-offs and tempests," March 14, 1998, pp. 88. "Floating the Tobin tax," July 13, 1996, p. 84. As on so many topics in economics, the *Economist* provides far and away the best coverage of these international capital movement issues. The first and second articles make the case that despite the crashes that have occurred, international capital flows are still on balance a good thing for the global economy. The third article looks at the case for capital controls on foreign investment, and talks about the Chilean situation a bit. The final article discusses the Tobin tax proposals for taxes on international capital flows.

Bhagwati, Jagdish, "The Capital Myth: The Difference Between Trade in Widgets and Dollars," *Foreign Affairs*, May/June 1998, pp. 7-12. This article is interesting because Bhagwati is a very eminent international trade economists, and one of the most forthright and eloquent defenders of free trade around. But in this article, he makes the case that international trade in capital is apparently subject mania and panics and speculative excess, and so it doesn't appear to offer the same benefits to the global economic community as free trade. He argues that capital flows with some constraints (perhaps in the style of Chile, as explained in the lecture) can achieve almost all the benefits of international capital flows, while avoiding speculative excess.

Supplementary Reading:
Federal Reserve Bank of Kansas City, *Maintaining Financial Stability in the Global Economy*. 1997. This volume is the proceedings of a conference sponsored by the Kansas City Fed and held in August 1997, as the financial meltdown in east Asia got underway. Some of it will be tough going for the beginning reader, but it is mostly pitched at an accessible level. There are a variety of interesting contributors, including head of the Federal Reserve
Alan Greenspan, the leading economist at the International Monetary Fund Stanley Fischer, the leaders of the central banks of Argentina and Sweden, and some leading economists, too. Among the articles by economists, I especially recommend the articles by Frederic Mishkin (pp. 97-116) and by Robert Litan (pp. 257-298). This book is available on the web: go to <http://www.kc.frb.org>, click on "Publications" and then on "Symposium Proceedings" and then on the title. (However, it is in a portable display format or pdf file, so you will need to read it with Adobe Acrobat, which can be downloaded over the web for free from the Adobe site.) Single copies are also available free by mail from the Federal Reserve Bank of Kansas City.

Questions to Consider:

1. Explain how a relatively small economic issue can turn into a currency crash.
2. Which of the various proposals for dealing with international capital flows would you favor, if any? Explain your answer.
Lecture Thirty-Nine
A Single European Currency

Scope: One way of avoiding the perils of exchange rate volatility may seem simple: just have two countries merge their currencies. Presto! No more exchange rate movements! Since the 1992 Maastricht treaty, the nations of Europe are in fact pledged to moving toward a single currency, the euro, which is scheduled to come into effect in 1999, overlap with existing European currencies until 2002, and then completely replace those currencies.

How well is this policy likely to work? Economists tend to view this issue in terms of the theory of optimal currency areas; that is, what economic factors make it easier or harder for two regions or countries or economies to share a currency? Some key factors include how much alike the two economies are, how flexible their wages and prices are, how much mobility of labor there is across the countries, and whether there is a central government cushioning upward or downward movements in different regions. The optimal currency literature seems to argue that Europe is not as well-suited to a single currency as is the United States. Moreover, a shared currency means that individual countries must give up their domestic monetary policy—just as U.S. states have no separate monetary policy.

While the euro seems sure to bring a degree of economic tension to Europe's economies, the ultimate decision about whether it will remain will fall to politicians. In the cause of pushing for a more united Europe, Europe's politicians may be willing to put up with some economic discomfort. However, there is already a fair amount of popular discontent with the euro; if that discontent builds, the politicians may abandon the single currency.

Outline

I. Europe's euro
   According to a treaty signed at Maastricht in 1992, a single currency for the nations of Europe called the “euro” is scheduled to arrive in 1999. The euro will be administered by a new European Central Bank. It will circulate together with existing national currencies like the German mark and the French franc at a fixed exchange rate until 2002, when the existing currencies are scheduled to disappear. Not all countries are in, and there are provisions for exiting during the transition phase.

II. Potential advantages of a common currency
   A common currency has a number of potential advantages. Consider what the U.S. economy would be like if each of the 50 states operated its own currency!

   A. Reduce transactions costs
      Every time a currency is traded, some financial institution makes a small percentage. The economic resources being devoted to this task could be improving the standard of living in a more useful way.

   B. Reduce risk of cross-border ventures
      When producing in one country and selling in another, or more realistically, producing some parts in many countries and selling finished products in the same and other countries, a firm faces a risk that exchange rate movements will reduce or wipe out its profits. A common currency eliminates this particular risk.

   C. Reduce inflation and monetary policy mistakes
      The central banks of a number of European countries, with the notable exception of Germany, have often given in to pressures to try to stimulate their economy, and have ended up allowing inflation to get underway. Then, they ended up causing recession to fight that inflation. The new European Central Bank will have the single goal of keeping inflation low, and will be somewhat insulated from political pressure. For many countries, monetary policy may be improved over past experience.

   D. Reduce the risk of another major European war
      Europeans are willing to fight each other: see World War I and World War II. One hope of single currency advocates has been that if European nations are more tied together economically, they will be less likely to go to war against each other.

   E. The world's reserve currency?
The U.S. dollar is now the world's reserve (or default) currency. While the U.S. economy is only a little more than a quarter of world GDP, the U.S. dollar is used for as much as half of many purposes dealing with trade and foreign exchange. This has two advantages for the U.S. economy: it's relatively easy for U.S. firms and government to borrow and lend in dollars, rather than in other currencies, because everyone is willing to deal in U.S. dollars. Also, the U.S. economy benefits from seignorage; the fact that folks in other countries earn U.S. dollars by providing goods and services to U.S. consumers and firms, but then just hang on to those dollars for their own use in their own country. The result is that the U.S. economy receives goods and services, in effect, for the cost of printing the money. The new euro may challenge the U.S. dollar as the world's reserve currency.

III. What are the traits of an optimal currency area?
Some economies are well-suited to be combined into a single currency area; some are not. The economic research on this question goes under the terminology of what traits form a "optimal currency area." More accurately, this work identifies traits that may not make a single currency "optimal," but will make it work more or less well.

A. How similar are the economies?
If two economies are quite similar, then they will tend to move in the same way and face the same issues, and there will be less need for an exchange rate to shift between them. If two economies move differently, there is more chance that some economic event will occur to create pressures for some adjustment between them. It appears that the regions of the United States move together economically more closely than the nations of Europe, which implies that the U.S. economy is better-suited for a single currency than Europe. But the difference isn't a large one.

B. Flexibility of wages and prices
If wages and prices in an economy are flexible, then they can react and respond to economic events, and the exchange rate isn't as much needed. However, if domestic wages and prices aren't flexible, then the exchange rate is a way of shifting all of them at the same time, in relation to the rest of the prices in the world. Europe's wages and prices are typically less flexible than those in the United States, which again implies that the U.S. is better suited to a single currency than is Europe.

C. Mobility of inputs, especially labor
If labor (and other production inputs) are mobile, then the economy of an area can adjust to bad times by having workers move out, and to good times by having workers move in. If there isn't much mobility, then that method of adjustment is closed off, and there is more need to have something like the exchange rate as a way of adjusting. Labor is certainly more mobile across the United States than across Europe.

D. Fiscal transfers from central government
If a central government helps provide transfers between regions that are temporarily doing better than average and regions that are doing worse than average, there is less need for an exchange rate to adjust between those areas. The European central government remains very small, and makes smaller adjustments than the U.S. government between regions.

IV. Will the euro be sustainable?
A. The threat of destabilizing speculation
Each currency in Europe will be fixed relative to the euro in 1999, which means, by implication, that every currency in Europe will have a completely fixed exchange rate vs. every other currency. But these currencies are bought and sold on global foreign exchange markets, and that price can't be controlled directly. Instead, the European Central Bank must be prepared to buy and sell currencies in such a way as to defend the preset values from speculators—and perhaps even from countries themselves that may become unhappy with the exchange rate they have been assigned. If the European Central Bank falters, speculation will intensify.

B. A common currency means no domestic monetary policy
The same currency everywhere means the same interest rates everywhere. This means that the nations of Europe will have a single monetary policy. Unless they all agree all the time on what this policy should be, they will also have arguments over what that common monetary policy should be.

C. Limits on public borrowing
One of the conditions for joining the single currency is promises to limit government borrowing. The limits are that no nation's budget deficit can be more than 3% of GDP in any year, and no nation's accumulated debt can be more than 60% of GDP. The logic behind this rule is to prevent any country from going on a borrowing binge with its shiny new currency. But the rules are sure to lead to strife, especially when a recession arrives in one country and there is political pressure to run deficits to stimulate the economy.

D. Risk of even higher unemployment
Many European nations have had high rates of unemployment, even double-digit unemployment, since the 1970s. If a nation's economy suffers a setback, and it has inflexible wages, immobile labor, few transfers from a central European government, can't run large deficits because of the rules against doing so, and cannot adjust its exchange rate because there's a single currency, it seems likely that unemployment will rise. Even higher unemployment would be a very touchy issue almost everywhere in Europe.

V. Is the euro overreaching?
A. A fairly healthy Europe without the euro
In the second half of the 20th century Europe has done pretty well, economically and politically, without the euro.

B. The competing, conflicting, political agendas
The support for the euro in different countries comes from different sources, and it seems unlikely that the euro as it actually arrives will (or can) make all of them happy.

1. Who will really be running the new European Central Bank?
   Before the euro, the most powerful central bank in Europe was Germany's Bundesbank. Other nations had to stay in line with the Bundesbank, which led to a feeling (an accurate feeling) that Germany was largely setting monetary policy for all Europe. If all the nations of Europe have representatives at the new central bank, who will be setting policy then? The answer may be everyone, and no one.

2. Will the euro be tied to the European Union single market?
   Since 1992, Europe has also been working toward liberalizing flows of goods, people, and capital across the continent. If a nation doesn't participate in the euro, might it also be shut out of this single market?

3. Is the euro a first step to a broader economic agenda?
   Some see the euro as a first step toward a broader agenda of rules that would prevent wages, hours, or work conditions from being "unfairly" low in other countries. Others see the euro as a first step toward a broader agenda involving more competition and less government interference in the labor market. Still others see the euro as a separate stand-alone issue. They won't all turn out to be correct.

4. Will the European Central Bank become a policy scapegoat?
   The euro is already disliked in some countries. If a country's economy has a bad year or two, it will be easy for at least some politicians to blame the euro and the new European Central Bank.

C. An ultimately political decision
Europe may be less well-suited to being a single currency area than the United States. But it may be better suited than many other parts of the world. If there is a political commitment to bring the economies of Europe closer together, then there may also be commitment enough to support the euro even when it leads to tension.

Essential Reading:
Peet, John, "EMU: An Awfully Big Adventure," Economist, April 11, 1998, special 22-page insert in middle of issue. These inserts that appear semi-regularly in the middle of the Economist are typically very good—among the best popular writing on economics topics appearing anywhere. This one reviews the economic arguments concerning optimal currency areas, the political history of how the Maastricht agreement on the euro came about, issues on running the new European Central Bank, and more. Whatever happens with the euro in the next few years, this essay will remain useful background reading.

Supplementary Reading:
International Monetary Fund, "EMU and the World Economy," World Economic Outlook, October 1997, pp. 51-77. This regular publication of the IMF always reviews global trends, and then offers a chapter or two on a particular
issue. For this issue, it's Europe's economic and monetary union, or EMU. This chapter offers a nice summary of the economic evidence and arguments over the euro. It's little bit dry as reading goes, but there's a lot of good stuff here. Wyplosz, Charles, "EMU: Why and How it Might Happen," and Feldstein, Martin, "The Political Sources of the European Economic and Monetary Union: Political Sources of an Economic Liability," both in *Journal of Economic Perspectives*, Fall 1997, 11:4, pp. 3-42. I'm the managing editor of this journal. It's intended for professional economists, so I don't usually put articles from this source in the recommended readings. But these articles are both quite well-written, and I think should be accessible to the serious lay reader. Wyplosz argues from a European perspective that even if Europe isn't perfectly ready for monetary union, and even if some of the convergence criteria are ill-considered, it is probably still a good step for Europe. Feldstein takes a more skeptical view, arguing that that monetary union is being driven by diverse contradictory political agendas, and that the euro may well be bad for Europe's economy and unemployment problem.

**Questions to Consider:**

1. Do you think that the single European currency is more likely to raise or to reduce tensions between leading European countries?

2. Consider each of the following areas as to how well they work on the four criteria for an optimal currency area: the United States, Europe, Latin America, east Asia, and Africa.

3. If you were living in a European nation, and there was a referendum on whether your nation should join the euro, how would you vote? Why?
Lecture Forty
The Economics of European Union

Scope: Western Europe has a number of the world's richest economies; taken as a group, they are larger in size than the U.S. economy. But should they be taken as a group? In a long, intermittent and unsteady process that has been going on since the end of World War II, Europe has been binding its economies and its nations closer together.

This process raises a number of questions. What does a single market mean in practice, and how it is to be implemented? If Europe is to become a single unified market, does it also need a single unified set of laws on labor, competition, and other social issues to be enforced across that market? To what extent will different nations retain the right to tax or regulate in different ways? Free trade between nations is one thing, but it is literally necessary to have a single currency between the nations to accomplish it?

The single European market agenda appears likely to add modestly to Europe's economic growth. But the economic gains seem surprisingly small, compared to all the attention being paid to European unification. It appears likely that the political reasons for unification are at least as important—and perhaps much more important—than the economic reasons.

When it comes to a discussion of the economy of Europe, the 1990s have been dominated by one topic: To what extent will the nations of Europe form an economic and monetary union? In this lecture, want to discuss what is meant by that union, and what its economic importance is likely to be. But let's start by getting some basic facts about the economy of Europe in perspective.

Outline

I. The Economy of the European Union in perspective
   A. Members of the European Union by economic size
      The EU has 15 member nations in 1998. In order of size of GDP, they are Germany, France, United Kingdom, Italy, Spain, Netherlands, Belgium, Sweden, Austria, Denmark, Greece, Finland, Portugal, Ireland and Luxembourg. Germany is about one-fourth of Europe's economy; the top four nations are about 75% of Europe's economy; the top eight nations are about 90% of Europe's economy. Their combined economic size is just slightly more than the U.S. economy; their combined population is about 1/3 more than the U.S. population.

Europe's economies ranked in order of economic size

<table>
<thead>
<tr>
<th>Country</th>
<th>GDP in 1997 (in billions of U.S. $)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>$2115</td>
</tr>
<tr>
<td>France</td>
<td>$1394</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>$1278</td>
</tr>
<tr>
<td>Italy</td>
<td>$1146</td>
</tr>
<tr>
<td>Spain</td>
<td>$533</td>
</tr>
<tr>
<td>Netherlands</td>
<td>$363</td>
</tr>
<tr>
<td>Belgium</td>
<td>$242</td>
</tr>
<tr>
<td>Sweden</td>
<td>$229</td>
</tr>
<tr>
<td>Austria</td>
<td>$206</td>
</tr>
<tr>
<td>Denmark</td>
<td>$163</td>
</tr>
<tr>
<td>Greece</td>
<td>$119</td>
</tr>
<tr>
<td>Finland</td>
<td>$117</td>
</tr>
<tr>
<td>Portugal</td>
<td>$97</td>
</tr>
<tr>
<td>Ireland</td>
<td>$73</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>$15</td>
</tr>
</tbody>
</table>
Unemployment and inflation

The nations of the European Union have an unemployment problem: average unemployment for the 15 nations of the EU was over 10% in 1997. However, they seem to have inflation under control; average inflation for the EU was about 2%, essentially the same as the U.S. rate of inflation.

Unemployment and inflation in 1997

<table>
<thead>
<tr>
<th>Country</th>
<th>Unemployment rate</th>
<th>Inflation rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>9.0%</td>
<td>1.8%</td>
</tr>
<tr>
<td>France</td>
<td>12.3%</td>
<td>1.1%</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>8.2%</td>
<td>3.6%</td>
</tr>
<tr>
<td>Italy</td>
<td>12.0%</td>
<td>1.5%</td>
</tr>
<tr>
<td>Spain</td>
<td>21.9%</td>
<td>2.0%</td>
</tr>
<tr>
<td>Netherlands</td>
<td>6.5%</td>
<td>2.3%</td>
</tr>
<tr>
<td>Belgium</td>
<td>12.9%</td>
<td>1.1%</td>
</tr>
<tr>
<td>Sweden</td>
<td>8.1%</td>
<td>1.6%</td>
</tr>
</tbody>
</table>

Source: OECD

Rates of growth

Rates of economic growth have been moderate in Europe in recent years at about 2% per year, lagging just a bit behind the U.S. rate.

Average annual rate of growth of GDP in Europe

<table>
<thead>
<tr>
<th>Country</th>
<th>1986-1996</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>2.2%</td>
</tr>
<tr>
<td>France</td>
<td>1.9%</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>2.1%</td>
</tr>
<tr>
<td>Italy</td>
<td>1.8%</td>
</tr>
<tr>
<td>Spain</td>
<td>2.8%</td>
</tr>
<tr>
<td>Netherlands</td>
<td>2.7%</td>
</tr>
<tr>
<td>Belgium</td>
<td>2.1%</td>
</tr>
<tr>
<td>Sweden</td>
<td>1.3%</td>
</tr>
<tr>
<td>United States</td>
<td>2.4%</td>
</tr>
</tbody>
</table>

Source: OECD

II. The single market plan

A. A very condensed history of the drive for a single European market

The Treaty of Rome in 1957 created the European Economic Community. In 1979, the European Monetary System was set up to coordinate exchange rates. In the mid-1980s the single market project was started; it culminated in the Single Market Act of 1992. The Maastricht treaty, signed in 1992, committed the EU to a single currency by 1999.

B. What does the single market mean?

1. Four freedoms: people, goods, services, capital

A single market is taken to be defined by "four freedoms": free movement of people, goods, services, and capital. To a large extent, these freedoms have in fact been implemented in Europe. The more
obvious restrictions on movement of people, goods, and capital had been removed by the early 1990s. Some things, like communications and services, remain at the national level in the various countries.

2. The interlocking weave of regulation and competition
Market competition always operates within a framework of regulation, which at a minimum does things like blocking monopoly power, ensuring worker safety, assuring accurate labeling of goods, and so on. The EU, however, has reached beyond these minimal functions by also propagating a "Social Charter," which aims to make European-wide rules on issues like the rights of workers to participate in firms and the amount of parental leave that will be given. It is controversial whether these sorts of European-wide rules are necessary for the single market to work; the United Kingdom opted out of the Social Charter altogether.

3. How large will the gains be?
The single market has already brought modest gains to the economies of Europe. One study estimated that by the mid-1990s, the single market rules had raised the level of trade within Europe by 4-5%, made the overall economy of Europe about 1% larger, and raised the number of jobs and the level of wages by modest amounts.

C. The single currency
   Ultimately, to make all this work, the argument goes, need to reduce the risks of currency movements.
   1. The failure of the EMS system
      In 1979, the European Monetary System was set up to coordinate exchange rates across Europe. The idea was to keep the exchange rates in certain predetermined bands. The system worked fairly well for about a decade, but then came under speculative attack and fell apart in the early 1990s.
   2. The single currency option
      If the option of coordinating currencies didn't work so well, then a single currency is a possible solution—since it eliminated the possibility that speculators will tear two countries apart. A single European currency, the euro, is scheduled to be phased in over the next few years.
   3. Is a single currency too rigid?
      The new European Central Bank which will manage the euro has low inflation as its only goal. Will this prove too rigid? What happens when one country wants lower interest rates to reduce unemployment, and the new central bank says "no." What if one country has extraordinarily high wage settlements or budget deficits that might usually lead to inflation of its currency, except that now it no longer has its own currency? The single currency will be under considerable political stress.
   4. Is a single currency necessary for a single market?
      It may be that a single currency is not really necessary for the single market to work well. After all, lots of nations have expanded their trade over the last few decades, including Europe itself, without having a single currency.

D. Catalyst for reform or source of reform fatigue?
The overall impact of the single market and the single currency may well depend on whether it triggers a sequence of further reforms, or whether having struggled through to completing the euro, there is little appetite for any further economic reform.

III. A broader perspective on unification
   A. Fairly strong fundamentals: education, technology, saving, investment
      Europe has strong fundamentals for economic growth. Savings and investment levels are typically somewhat higher than in the United States; however, spending on education and technology is a little lower.
   B. Macroeconomic stabilization
      The rules for joining the euro have required lower budget deficits, low inflation rates, and low interest rates. Most European countries have made significant progress in those dimensions in the 1990s.
   C. The nagging problem of unemployment
      Europe has had high unemployment rates since the 1970s, in good economic times and in bad ones. Thus, it seems likely that this unemployment is built into the structures of Europe's economy; that is, into laws that limit the start-up of new businesses, that make it expensive to hire workers and difficult to fire them, and that give high and lengthy benefits to the unemployed.
   D. A context of market forces
European economies have many areas in which the level of market competition is lower, or the level of government intervention and subsidy is higher, than in the United States. Europe may be in need of its own "great deregulation experiment."

IV. Economic goals vs. political goals
   A. Economic effects of unification vs. effects of other economic factors
      By most direct economic measures, the effects of the single market and the single currency will be positive but modest—say, roughly equivalent to about one year's growth, but spread out over many years. Unification seems more likely to provide a one-time boost to Europe's economy rather than creating conditions where the rate of growth will be slightly higher each year in the future.
   B. Economic effects of unification vs. political effects
      Is the economic and monetary union of Europe a first step toward a United States of Europe? Many on the European continent say so. But it is perhaps more likely that Europe is headed for a new sort of hybrid, where the countries of Europe continue as separate entities and retain more power than, say, U.S. states, but they give up some power to the European central government and in that sense are less independent and sovereign nations than they used to be.

Essential Reading:
Peet, John, "European Union: Europe's mid-life crisis," Economist, May 31, 1997, special section in middle of issue, pp. 1-18. This article explores the problem that the EU may be getting ahead of its own popular support. The polls in Germany appear to oppose giving up the deutschmark for a single currency; many nations have some doubts about aspects of the Social Charter; there are concerns about how the EU may expand to as many as 25 nations if it takes in most of eastern Europe. The future political cohesiveness of the EU is by no means assured.
"Europe's Single Market: Thatcherites in Britain," Economist, March 15, 1997, pp. 25-27. This article focuses on the accomplishments of the EU in creating a single market; the amount of harmonization that has occurred, and the positive impacts on Europe's economic growth. As we wait to see what happens with the euro, it would be wrong to ignore what has already been accomplished.

Supplementary Reading:
Lots of information from the European Union is available on the web. You might start with <http://www.eurunion.org>, which is the web address for the European Union delegation to the United States. It offers lots of general discussion of the EU, especially in relation to the United States. Or you may wish to begin with <http://europa.eu.int>, which is the umbrella web page for all EU institutions and their components. One interesting place to look, at least in my opinion, is to click on "Information Resources" and then on "Alphabetical Index to EU Subjects," which offers a lengthy list of topics related to the European Union with reports about them. For the purposes of background on some elements of this lecture, for example, you might wish to click on the letter "S" and look up the reports under "single market."
Another good source for general statistics on the nations of Europe, and at placing them in the context of the other developed economies of the world including the United States and Japan, is the Organization for Economic Cooperation and Development, on the web at <http://www.oecd.org>.
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." This report investigates in depth 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 which have had the effect of strangling employment growth in their countries. If you really want to get into this issue in depth, this report is the place to start.
Questions to Consider:
1. Do you think that European economic union is fundamentally a good idea? What nuances would you add to your answer?
2. Do you think a United States of Europe is likely to come about? Do you think it's a good idea?
3. What do you think should be Europe's most important economic priorities in the next decade or so? Where does the drive for economic unification rank among the other issues?
Lecture Forty-One
From Communism to a State of Transition in Russia and Eastern Europe

Scope: For much of the 20th century, from the 1930s through the 1970s, many in the United States feared that the Soviet Union had found a superior method of economic organization, which would eventually allow the Soviet economy to overtake that of the United States. How peculiar such sentiments look today! The economies of the successor-states to the Soviet Union and its sphere of influence in Eastern Europe suffered an enormous decline in the early 1990s, as they left communism behind. While many nations of eastern Europe have rebounded from that decline by the late 1990s, Russia had not.

To be sure, there have been some notable accomplishments of economic reform in Russia, its former republics, and across eastern Europe. Governments have stepped away from trying to control all aspects of their economies; many state-owned enterprises have been privatized; hyperinflation has arrived and been driven off. However, it still remains for the people and firms of these nations to adapt to being part of a market economy, and for the government to reestablish a tax system and budget priorities suitable for a capitalist economy.

The U.S. and international organizations like the IMF can do a bit to help in all this. But ultimately, the root sources of growth will have to come from within these nations themselves. The nations of Eastern Europe have shown that there is a path from communism to robust economic growth; however, Russia is still struggling to find its own path.

Outline

I. How are the mighty fallen
   A. America's image of the Soviet economy: 1930 to the early 1980s
      It's almost hard to remember now how many of us here in the United States viewed the economy of the Soviet Union from about 1930 even into the 1980s with a combination of admiration and fear. It was common to hear the sentiment that, sure, there was less freedom in the Soviet Union, but they had zero unemployment, education and social benefits for all, and faster economic growth. It was common to see predictions that the Soviet economy would outstrip the U.S. economy in a few decades.
   B. Size of Russia and eastern Europe economies in perspective
      Looking at the size of the former Soviet economy today, or the size of the other formerly communist economies in eastern Europe, it's hard to believe our former fears. These economies look small and poor by world standards. The overall size of the economy of Russia, for example, is smaller than the overall economies of either the Netherlands or China and only slightly larger than that of India.
   C. An economic and socioeconomic collapse
      The economies of nations that were formerly a part of the Soviet Union have been in deep depression in the 1990s; the economies of eastern Europe suffered a depression of their own in the early 1990s, but have since rebounded out into robust economic growth. Russia has not shown this rebound. As the economy has shrunk, various socioeconomic indicators have also been flashing warning signs: perhaps most striking, life expectancy for Russian men has dropped substantially in the 1990s. Crime has doubled since 1991. Marriage and birth rates have both fallen.
   D. Can it really be as bad as it looks?
      All of this looks almost too horrible to be even true; is it as bad as it looks?
      1. Bad statistics?
         Who knows quite what is being measured in the economic statistics of some of these economies? It's clear that many of them used to overreport their output, because there were political pressures to announce that they had met their goals. Moreover, the output that did exist was probably exaggerated in value, because of poor quality. Now, conversely, there is substantial underreporting of economic activity from the many black markets, to avoid taxes.
      2. Adjusting a western perception gap
Perhaps Russia and the outlying republics were always somewhat poorer than we had thought. Many westerners suffered to some extent from a "Potemkin village" syndrome, where they judged the entire economy of the Soviet Union by the standard of some tourist venues in and around Moscow—but they never really saw a lot of the poor rural countryside.

II. What has been done?
A. An expansion of political and economic freedom
   There has been a dramatic expansion of political and economic freedoms in these countries. By the rough calculations of various analysts, they have gone from extremely un-free in the late 1980s to having perhaps 2/3 of the economic and political freedom of the developed, democratic nations of this world by the mid-1990s.

B. Privatization
   There are lots of ways to privatize firms, but the ultimate goal is the same: to put the firms in the hands of real owners, who will then have incentive to run them in a profit-seeking and efficient manner. An enormous amount of privatization has occurred. But doubts remain in many cases as to whether the new ownership is looking to the long-term, or just looking to make a quick buck off the existing wealth of the firm.

C. Killing hyperinflation—if not inflation
   Russia and many of these other economies took their first steps toward a freer market by suffering a bout of hyperinflation. In many countries, annual inflation rates went over 1000 percent, as a consequence of removing price controls in an economic environment where government budgets and central banks were dumping buying power into the economy. By the mid- to late 1990s, however, most of these nations seem to have their inflation rates under control to sufficient extent that economic growth can get started again.

III. What remains to be done
A. Building a cultural infrastructure for the economy
   A great deal of the way a market economy functions is built on a cultural understanding of what it means to own, to work for wages, to pay taxes, to shift jobs, to start a business, to save and invest. When people are raised in the context of capitalist economies, all this seems natural to them. But in Russia and eastern Europe, these habits all need to be learned.

B. Create and administer a workable tax code
   The old tax system in communist economies was built on high payroll taxes on workers—often reaching rates of 40-50%—and on a system of cross-subsidies where the government could set the price of some things low and other things high, and pocket the difference. The freeing of the economy brought this tax system crashing down; tax collections shrunk dramatically as a share of GDP. Installing a broad new tax code, and actually collecting the taxes, is a high priority.

C. Prioritize public spending
   Under the old Communist system, everyone got subsidies for everything; effectively, that's what low state-controlled prices meant. In a market economy, one can't subsidize all the people all of the time. This means withdrawing subsidies from the middle class and wealthy, and focusing them more on the poor and elderly.

IV. What should be the policy response of the United States?
   There are several potential routes for these economies to gain resources: aid from abroad, investment from abroad, and internal economic growth. Of these, aid seems to get the most attention, but foreign investment and internal growth are far, far more important. Indeed, over time, only internal growth really matters.

Essential Reading:
Grimond, John, "Russia: The endless winter of Russian reform," *Economist*, July 12, 1997, special survey section in middle of issue, pp. 1-18. This review of the grim policy situation in Russia gives a good sense of the extraordinary collapse of the communist system, and the hard times it has brought. However, it also argues that despite a groundwork has been laid where it is at least possible that Russia will be able to rise out of stagnation and become a growing economy again.

period of steady growth. This article analyzes the health of these economies, and points out a number of internal contradictions that remain between old-style Communism and the new wave of capitalist practice. The author argues that much of eastern Europe's success to this point has been based on cheap wages; but wages are rising, and it is becoming urgent to carry out other reforms if the pattern of growth is to continue.

**Supplementary Reading:**

World Bank, *World Development Report 1996: From Plan to Market*. Oxford; Oxford University Press, 1996. The *World Development Report* comes out each year, and the statistical tables in the back are always a useful source of information on economies around the world. However, the report also takes on a particular topic each year, and this year's report focuses on, as the title says, the transition from plan to market. It's all here: patterns of economies, privatization, enterprise reform, building better legal and financial institutions, investing in human capital, and much more. There is a good mix of general statistics and specific stories about countries and firms. This report is a good place to start if you're seeking to get up to speed on what happened in the first half of the 1990s, in these most crucial first years of economic reform.

**Questions to Consider:**

1. Can you remember back to your own impressions of the strength of the Soviet economy as you thought of it in the 1960s, 1970s, or even early 1980s? How does that contract with your impressions of it today?

2. Do you favor a substantial package of foreign aid for Russia? What about for the nations of Eastern Europe? Why or why not?

3. In your view, has the transition from communism to capitalism paid off for these nations? If you think so, explain your view in light of the enormous economic declines they suffered. If you think not, how long do you think it will be, if ever, before the transition pays off?
Lecture Forty-Two
Has Japan's Economic Miracle Come and Gone?

Scope: The economy of Japan had an amazing period of growth from the late 1950s into the early 1970s—and then maintained quite strong economic growth into the 1980s. For several decades, there was an impassioned set of disputes over how to explain Japan's pattern of growth. It became popular in many circles to argue that Japan provided an example of how smart industrial subsidies could help an economy to grow faster.

However, Japan is also a country with excellent fundamentals for growth: a very well-educated population, high savings and investment rates, and competitive firms. In a larger perspective, these seem to be the most important factors behind Japan's growth. It doesn't appear that industrial policy by Japan's government or restrictive trade barriers played an especially important role in helping Japan's overall growth—although such policies of course affected particular industries for better or worse. The one government intervention which does seem that it might have helped Japan's economy is control over its banking and financial institutions, which led to a situation in which bank loans were funneled at cheap rates to industry.

But in the 1990s, even this control over banking turned out to cause problems. After Japan's stock and land prices crashed in the late 1980s and early 1990s, the banking system and its corporate borrowers turned out to be plagued with bad loans. Japan now needs to clean up the mess, and point its economy toward a different kind of economic growth—not catching up with the U.S. and other developed economies, but rather generating its own growth from within. Japan's economy clearly has the resources to make this transition, but the process may well take some time.

Outline

I. Japan's extraordinary catch-up
   A. Japan's economic spurt
      Japan's economy had an extraordinary spurt of rapid growth in the 1960s, and then continued with quite rapid growth through the 1970 and into the 1980s.
   B. Japan's place in the economic policy rhetoric of the 1980s
      Given Japan's extraordinary economic success, it's not a surprise that many people looked for policy morals. Many commentators used Japan as their evidence that the U.S. version of free market, free trade capitalism was outmoded, and that Japan offered an alternative model where the "visible hand" of government outperformed the "invisible hand" of the free market.
   C. And then came the 1990s
      In the 1990s, Japan's economy has been lackluster. It has grown far more slowly than the U.S. economy. Japan's stockmarket and land prices collapsed and have not recovered. Many large banks and firms are hovering on the edge of bankruptcy. Economic prospects for the next few years appear grim.
   D. Japan's place in the economic policy rhetoric of the 1990s
      If Japan's success from the 1960s and on into the 1980s "proved" that Japan's model of development worked, then shouldn't Japan's economic weakness in the 1990s call that conclusion into doubt?

II. Getting fundamentals right
   A. Human capital and education
      Japan was an early strong investor in education. Universal compulsory primary education took place late in the 19th century, and by early in the 20th century, secondary education was widespread in Japan. Japan has traditionally spent a higher share of GDP on education than many other countries (only the U.S. spends more).
   B. Savings and investment
      Japan has had far higher rates of savings and investment than the United States in the last few decades; typically, the rate of savings and investment as a share of GDP has been about double that of the U.S. economy.
C. Technology
Japan has been well-known for many decades, going back to the 19th century, for doing everything possible to bring new technology to its firms. Government has financed tours of plants abroad; foreign engineers have been hired to work in Japan; firms have taken every opportunity to learn about foreign technology. Today, Japanese R&D spending as a share of GDP is similar to that of the United States.

D. A market-oriented context
Japanese firms are among some of the toughest competitors in the world, both within their own domestic market, and in global markets. In the manufacturing sector, they are responsible for a number of innovations in business practices that have been adopted worldwide, including just-in-time inventory, a philosophy of continuous improvement, and quality circles.

III. Has Japan taken unfair advantage?
A. Industrial policy
There is no question that Japan's bureaucrats often directed industrial subsidies to firms and industries. There is considerable doubt that this policy, taken as a whole, helped Japan's economy. It appears that Japan's bureaucrats more often directed subsidies to low-growth than to high-growth sectors.

B. Barriers to trade
1. Japan and trade in perspective
   Many people are surprised to know that foreign trade is a smaller share of Japan's economy than that of the United States and, for both nations, trade is a smaller share of the economy than for many European nations. However, it is surely true that Japan's share of world trade has risen as Japan's economy has expanded. U.S.-Japan exports and imports to Japan are each less than 2% of the U.S. economy. In the overall picture, the levels of U.S. trade with Japan are considerably lower than one might infer from media coverage.

2. Trade surpluses don't prove unfairness
   Japan does have huge trade surpluses. But the source of trade surpluses, as explained in earlier lectures, is whether a nation saves more than it invests, and exports the remainder abroad. Japan's high trade surpluses are a direct result of its high savings rate, not of possible trade barriers.

3. Getting beyond the anecdotes
   There are a thousand stories about the unfairness of trade in Japan and the constraints placed on foreign companies there. Many of the stories are true. But free trades can also tell a thousand stories with examples of trade barriers in Europe, and Latin America, and Africa, and the United States, too. Once one gets beyond the anecdotes, it is not at all clear that Japan's trade is more unfair than that of other developed economies.

C. Pro-savings, anti-consumer policies
   The Japanese government controlled the banking and financial institutions quite rigidly in the decades after World War II. Consumers were encouraged to put their money in banks, and indeed had few other options for investing, but the banks were very limited in how much interest they could pay, and consumer loans were discouraged with tax disincentives. Japan's high savings rate thus meant that banks had lots of capital, much of which they directed to Japanese corporations. The regulations had the overall effect of limiting the return to savers, but assuring a strong flow of capital to firms. But now, Japanese banks are in trouble.

IV. What next for Japan?
A. The bubble bursts
   In the late 1980s, Japan's stock prices and land values were riding extraordinarily high. But then interest rates went up somewhat, and these values plummeted by half and more. As a result, many loans are not likely to be repaid and many banks are effectively bankrupt, although they haven't admitted it yet.

B. Revenge of the controlled credit market
   The controlled banking and finance market, which did such a good job of funneling credit to Japan's corporations at low interest rates for several decades, also fostered a mentality where banks didn't much worry about whether borrowers would repay, and many borrowers didn't worry much, either. With slower economic growth and lower stock and land values, however, many loans are not going to be repaid, and banks and firms are staggering as a result.

C. The limited options for spurring further growth
Japan in the late 1990s already has very low interest rates and quite high budget deficits, so the obvious macroeconomic stimulations are not readily available. Trade surpluses are already huge, and firms are staggering, so an export push is unlikely. Almost by default, the focus has turned to deregulation of Japanese domestic firms, and trying to spur internal growth in that manner. Deregulation seems to be a likely path.

D. Avoiding another cycle of overreaction

In the 1980s, the air was full of predictions that Japan would rule the world economy. In the 1990s, the air is full of predictions that Japan can't cut it in the future of the world economy. The 1980s clearly were too optimistic about the future of Japan's economy; the 1990s are probably too pessimistic. Japan is not going to return to the torrid growth rates of the 1960s. The workforce is aging. Maybe the education system needs a review. On the other hand, in the long term, the economy of Japan will come through fine.

Essential Reading:

Three articles in the *Economist*. "Japanese Finance: A suitable case for treatment," June 28, 1997, special section in middle of issue, pp. 1-18. "The Japan puzzle," March 21, 1998, pp. 21-23. "Japan on the brink," April 11, 1998, pp. 15-17. For in-depth coverage of Japan's recent economic woes, no publication does it better than the *Economist*. The first of these articles discusses Japan's hidebound financial sector, how it badly needs reform, and how these reforms are likely to sting Japan's economy. The second article talks about how government by bureaucracy is strangling Japan's economy. The third article offers an update on the problem that many, many Japanese banks and firms are bankrupt in all but name, and dealing with their restructuring or collapse will be very difficult for Japan.

Argy, Victor, and Leslie Stein, *The Japanese Economy*. New York: New York University Press, 1997. It's hard to find books on Japan that don't have a huge ax to grind, and that accurately reflect the prevailing academic research on the economy. This book fills the bill. It does a very nice job of reviewing the macroeconomic fundamentals of saving and investment and the disputes over industrial policy, providing lots of helpful historical background and tables and graphs along the way. It does a little less than I'd like to see on subjects of human capital and technology transfer, but that's a small complaint about a fine book.

Supplementary Reading:

Lindsey, Bruce, and Aaron Lukas, "Revisiting the 'Revisionists': The Rise and Fall of the Japanese Economic Model," Cato Institute Trade Policy Analysis #3, July 31, 1998, available only on the web at <http://www.freetrade.org/pubs/pas/tpa-003.html>. There were a lot of things written in the 1980s and early 1990s about how Japan was now the leading industrial power in the world, because it had figured out how to use industrial policy and managed trade to become a "capitalist development state," and that it was sure to out-produce free market economies like the United States, unless we changed our economic philosophy too. In this slightly vicious and therefore fun-to-read article, the authors remind the Japan enthusiasts of exactly what they said, and how ludicrous it looks today.

As these lectures are given, the future course of the Japanese economy over the next few decades is much in doubt. Will it recover and reform? Will it sink further into stagnation? Will it come to be overshadowed by China? An interesting effort to think through how these various scenarios might come to pass, and the ingredients and implications of each one, appears on the web as "Scenarios for the Future of Japan," prepared by Nakamae International Economic Research and by the Global Business Network. It's at <http://www.gbn.org/scenarios/japan/>.

If you're just interested in reading more about Japan, its economy, and the nation as a whole, one place to start on the web is "The Japan of Today," a website run by something called the Japan Information Network, which seems to be a government-influenced private agency. It offers both background essays and up-to-date news releases on what's happening in Japan. Go to <http://jin.jcic.or.jp/today/>, and click on "Economy" for an index of topics in economics and economic policy.
Questions to Consider:

1. Has Japan's economic stagnation in the 1990s changed your opinion about the wisdom of the U.S. trying to emulate a "Japanese path" toward further economic growth?

2. Review the various arguments over why Japan's economy grew so rapidly, ranging from economic fundamentals to government intervention in the economy. Which arguments strike you as most important? As least important?

3. In your view, what steps should Japan be taking to spur its economy forward?
Scope: The focus of this lecture is on east Asia's "tiger" economies: Hong Kong, the Republic of Korea, Singapore, Taiwan, Indonesia, Malaysia and Thailand. These jurisdictions differ in many ways, but what they have in common is that as a group, they have experienced the most rapid sustained growth of any economies at any time. Thus, they have become the focus of intense study, looking for lessons that might be applied elsewhere.

The arguments over the policy lessons to be derived from the tigers typically divide up between those who believe that the main cause is fundamental factors like savings and investment, human, capital, technology transfer, and relatively free markets, and those who believe that it has more to do with government industrial policy. A prestigious study from the World Bank found that while the fundamental economic factors are of primary importance, there were certain situations in which government intervention made a difference, too.

The east Asian economies suffered a financial and economic meltdown in 1997, complete with plunging stockmarkets and economies in recession. This downturn has raised a number of tough questions about the east Asian model of economic development; apparently, it isn't quite as robust as many economists would have believed in the early 1990s. But there is reason to believe that if these economies seize upon this downturn as a political justification for making some long-needed reforms, they will be able to return to "tiger" status within a few years.

Outline

I. An incredible economic success story
   This lecture is really the story of seven countries in east Asia: part of a shifting group that go under the name of the "tigers" or sometimes the "newly industrializing economies."
   A. Naming the east Asian tigers
      The seven countries that this lecture will focus on are Hong Kong, the Republic of Korea, Singapore, Taiwan, Indonesia, Malaysia and Thailand.
   B. Basic characteristics
      This is an odd group in some ways. Hong Kong and Singapore are very small city-states; Indonesia is one of the most populous countries in the world. Hong Kong is now again part of China; Taiwan is claimed by China. Standards of living are quite high in the first four, and somewhat lower in the second three. Overall, the seven jurisdictions (Hong Kong is no longer a country; Taiwan is not officially recognized as a country) have a total of 532 million people and GDP of $1.4 trillion.
   C. What links them together?
      Each of the east Asian tigers has had a period of rapid growth at some point in the last few decades, meaning sustained growth of 6% or 8% or even 10% per year. Economic growth at these rates can transform a nation's standard of living, for poor, middle-class, and rich alike, in a few decades. This sustained rate of growth is nothing short of phenomenal.

II. Searching for the roots of success: market fundamentals or government intervention?
   A. Mainly fundamentals, a bit of government intervention
      A major study by the World Bank a few years ago looked over east Asia exhaustively, and found that while the primary cause for their rapid growth was stable fundamentals, but that government interventions in the market were occasionally helpful.
   B. The fundamentals
      1. Macroeconomic stability
         These nations have typically been quite successful (up until the events of 1997 discussed later in this lecture) at keeping budget deficits low and inflation low, and thus creating a stable climate for business.
      2. Building human capital through education
These economies have invested heavily in education, building up from universal primary education through various skills. In recent years, however, certain of these economies like Malaysia, Indonesia, and Thailand have seemed to lag behind in this area.

3. High national savings and investment rates
   National rates of savings and investment in these economies have typically been 30-35% of GDP, double the rates prevailing in much of the rest of the world.

4. Limiting interventions in the market
   These countries have had a substantial number of interventions in the market, more than many economists would recommend. But even so, compared with the economies of Latin America and Africa, they are relatively light offenders in this area. They have typically had extensive competition in many domestic markets and competition from international trade, too. They stayed with macroeconomic fundamentals for the most part.

5. Welcoming foreign technological skills
   These economies have been very open to technology from abroad. They have been willing to import machinery, to license technology, to bring in foreign firms, to support engineers, and so on.

C. Government interventions
   1. Promoting specific industries
      In many cases, these countries tried to designate specific industries as "strategic" and to use licenses, fees, and subsidies to support those industries. Of course, this benefited the industry receiving the subsidy. But these industries didn't seem on average to have higher productivity or to be more successful, and so in that sense, the subsidies didn't seem to accomplish much, except to divert economic activity into the black market to avoid the red tape.
   2. Repressing interest rates
      Until quite recently, the governments of east Asia's have typically regulated what interest rates banks can pay to borrowers, what rates they can charge lenders, and prevented easy entry of new banks. People have had few other places to invest their money. The result of these rules has been to make the banks flush with money, which they would then lend to corporations.
   3. Export push contests
      Many east Asian governments encouraged exports. Their tool for doing so was often a set of rules, or a contest. One rule, for example, was that firms with an export order of a certain amount received cheaper credit. Another was that firms which steadily expanded their exports over time received cheaper credit. The use of exports served to provide a useful nonpolitical way of judging success.

III. The economic implosion of the tigers in the late 1990s
   A. What happened?
      Foreign investors pulled their money out of these economies in the second half of 1997. As a result, the stock markets slumped; the currencies were worth much less; and the economic growth of the region would be a very un-tiger-like near-zero percent for at least a year or two.
   B. Underlying causes
      1. The explosion of capital flows to these economies in the 1990s
         Global financial investors discovered the east Asian tigers in the 1990s, and poured hundreds of billions of dollars into these economies. In recent years, much of this was in the form of short-term assets, which could be withdrawn at the click of a computer key, not in the form of fixed assets like factories, for example.
      2. Tensions for fixed exchange rates loosen
         Foreign investors were encouraged largely by east Asia's record of rapid growth, but also by the fact that many east Asian currencies were tied to the U.S. dollar, at least in a loose way, by their governments. This reduced the risk for foreign investors. However, when the U.S. dollar gained value between 1995 and 1997, then the east Asian currencies had to appreciate as well. As the currencies got stronger, their exports became more expensive and their economies began to stagger.
      3. Widespread complacency
         It turned out that there were a lot of risks in these economies that had been covered up by their strong economic growth. No one had worried much that the invested money might depart; or that the exchange rate might shift; or that many (maybe 20% to 30%) of the loans made in the regulated sector
were bad. These problems surfaced first in Thailand, but it then became apparent that economies across this region faced similar issues.

4. Economics shades into politics
The economic issues shade into politics in many ways. The economic turmoil of 1997 brought changes in leadership in many of these countries. Many of the necessary reforms to rebuild the confidence of international investors require regulation to make more clear about the risks involved in lending to these economies, like more openness in banking regulation. Countries that accept the necessary reforms have a reasonable shot at having their economies bounce back. Korea and Thailand are two examples. In Malaysia, however, the outlook might not be so optimistic.

C. Does the East Asian industrial policy have natural limits?
The financial crisis in east Asia has raised the question of whether this sort of approach to development has natural limits, and whether those limits have now been reached. No definitive answer is possible, of course. But the most likely answer seems to be that they can return to rapid growth if they carry out the appropriate reforms in banking, education, health and human capital, social security, private infrastructure, government intervention, etc.

Essential Reading:
World Bank, *The East Asian Miracle*. New York: Oxford University Press, 1993. This report from the World Bank is perhaps the definitive study of the underlying causes of economic growth in East Asia. It has a lot of graphs and tables, but it only occasionally lapses into economic jargon, and in general it should be quite accessible to any interested reader. The report emphasizes the importance of keeping the economic fundamentals right and letting the market work, but also points out that some interventions in the free market—particularly in having the government regulate the financial system and encourage exports actively—seem to have contributed to faster growth as well.

Woodall, Pam, "East Asian Economies: Tigers adrift," *Economist*, March 7, 1998, special section in middle of issue, pp. 1-18. Yet another of the splendid surveys from the middle of the *Economist*. This article reviews the financial collapse that struck the east Asian currencies and stock markets in mid-1997. It points out that the worst of the financial collapse may already be over, but the big question is whether these countries can resume their rapid pace of growth. The author argues that they can—but that their governments need to breaks some bad habits first.

Supplementary Reading:
Walton, Michael, "The Maturation of the East Asian Miracle," *Finance and Development*, September 1997, pp. 7-10. This short, thoughtful article is a reflection on what needs to happen next in the nations of east Asia if they are to recover from the financial meltdown they suffered in 1997. This publication is available at the website of the World Bank at <http://www.worldbank.org/fandd>. Look under the back issues. A paper subscription is also available free to individuals.

Stiglitz, Joseph, "Some Lessons from the East Asian Miracle," *World Bank Research Observer*, August 1996, pp. 151-177. Stiglitz is one of the preeminent economists of our time, who has offered insights on a wide range of theoretical and practical issues. In this paper, he offers his own perspective on how the east Asian "miracle" occurred, and on how he sees the balance of public actions and market forces that encouraged it.

Questions to Consider:
1. What objections can you see to treating the east Asian "tigers" as a cohesive group for the purposes of policy analysis?
2. What parts of the policy agenda for east Asia does it seem to you should be replicable in other developing economies around the world?
3. Do you think east Asia's economies—or at least some of them—will recover from the financial meltdown of 1997? Or have their growth prospects degenerated to those of ordinary nations?
Scope: China has an enormous population, and in the last few decades it has had extremely rapid economic
growth. For the people of China, this growth is good news, since it has raised an average standard of living
that used to be among the poorest in the world. The rapid growth has raised concerns about the size of
China's economy, but at least as of the late 1990s, any concern that China's economy will be dominant in
the world economy seems somewhat overstated. In the mid-1990s, China's economy is about the size of
Brazil's, and the per capita standard of living even after several decades of fast growth has only reached
about 10% of the U.S. level.

China's path to economic growth has largely been based on three interlocking policy changes: freeing up
agriculture from government control, allowing the spread of township and village enterprises, and allowing
a more free flow of trade and capital. These changes unleashed a torrent of economic activity. Yet as the
1990s draw to a close, there is reason to question whether China is now in need of a policy transition. Most
of the changes to this point were a matter of government getting out of the way. The next steps on the
policy agenda call for the government to carry out institutional reform in a number of areas, including
state-owned enterprises, the banking system, government budgets, and the environment.

Outline

I. China's growth explosion
   A. Rapid growth for a huge population
      China's population is about 1.2 billion, almost five times that of the United States. Moreover, China's
economy is growing very quickly. Real economic growth averaged 7.5% per year in the 1970s, 9.3% per
year in the 1980s, and about 10% during most of the 1990s.
   B. Relative growth and absolute levels
      Given these extraordinary rates of growth, it sometimes seems that China must be just about to catch up
      with the U.S. economy. But part of the reason the growth rates are so fast is that China is so poor to begin
      with, so that a given increase in its economy is quite large compared to the low levels that have prevailed.
      It will be hard over time to sustain this rapid rate of growth, although the Chinese economy will continue to
grow.
   C. How overwhelming is China's economy likely to become?
      China's economy is large, and growing rapidly. But it's important to keep its size in perspective. In the mid-
1990s, China's economy was roughly the size of Brazil's. It is smaller than the economies of Latin America
as a whole, or the east Asian tigers as a whole, smaller than nations like Italy and the United Kingdom, and
far, far smaller than the reigning economic heavyweights like Japan and the United States.
   D. Seeing the good economic news clearly
      From the standpoint of the standard of living of the world's poorest people, the single best news in the
      global economy in the last several decades is the events in China. In the last two decades, 200 million
      people have been lifted above the global poverty line of $1 a day in income.

II. China's path to economic reform
   A. Turning loose the farmers
      Until the late 1970s, China's farmers worked in collectives. They had little incentive to produce more, and
they didn't. But the system loosened, and in 1978, the central government allowed farmers to do what they
wished, as long as they produced their basic agricultural quota. The result was a boom in farm output;
markets in agricultural products; and farmers leaving the land to seek jobs in other sectors.
   B. Township and village enterprises
      The former workforce moved on in force to work in what became known as "township and village
enterprises," typically small or medium sized firms, often doing light manufacturing of consumer goods,
typically owned by collectives or local governments. These enterprises grew explosively, leading the way
away from state-owned production.
C. Openness to foreign trade and investment
In the old communist system, foreign trade and investment were typically discouraged. In recent years, however, thousands of companies have been allowed to import and to export, and foreign investors have been welcomed. In particular, ethnic Chinese living in Hong Kong, Taiwan, and the rest of east Asia have taken up the opportunity. The change has been dramatic.

D. Readiness for reform
China's economy had been so strangled by political control, and the people were so poor, that reform was ardently welcomed. China also faced few problems of incipient inflation, like those that had hindered economic progress in Russia and eastern Europe.

III. The next challenges
A. The problem of reforming state-owned enterprises
1. The continuing drag
   China still has about 300,000 state-owned enterprises; about 100,000 of which are industrial producers. In the mid-1990s, they were employing more than 100 million workers. Even according to government estimates, half are losing money and the proportion of money-losers is growing.
2. The unemployment risk
   The state-owned enterprises employ perhaps 100 million workers. If they are shut down quickly, there is fear of mass unemployment and political disruption.
3. Subsidies: the shift in form
   China's government has been cutting back on its subsidies to state-owned firms, by about half. But the subsidies are now being provided instead by the state banking system.
4. Fade away or kill off?
   One might hope that the state-owned industries would decline gradually in size, their losses would shrink, and they would just fade away. But this happy outcome seems unlikely, at least not within a few years or with limited losses. But the costs they are imposing on the government and banking system are too large to allow them to just rumble along. A more aggressive shut-down plan is needed, but the course of action isn't clear.

B. Banking reform and the allocation of savings
China saves at a very high rate, maybe even higher than Japan and the east Asian tigers. But as noted earlier, most of this savings has tended to flow into the state-owned banks, who then channeled it to money-losing state-owned firms. Breaking this cycle is important.

C. A functional federalist budget system
1. Collapse of the tax system
   The tax revenue of China's government has been heavily based on setting prices for inputs and outputs and then taking the "profits" from the state-owned firms. Thus, the decline of the state-owned firms has greatly reduced the revenue of the central government.
2. Education, health, poverty alleviation, infrastructure, environment
   The collapse of the central tax system has meant a reduction in government spending in areas like education, health, and infrastructure. For the long-term health of China's economy, this lack of investment is a bad sign.
3. A Chinese form of federalism
   China has rich coastal provinces and poor inland regions. Nations, and China is not exception, need to figure out how to balance responsibilities and taxes for different regions.
Essential Reading:
Ziegler, Dominic, "China: Ready to face the world?" *Economist*, March 8, 1997, special section in middle of issue, pp. 1-22. This article focuses not so much on what China's economic growth has accomplished, but on the sense China's next challenges and evolutions. It includes discussion of international affairs, as well as purely economic issues like China's reliance on foreign capital and its ongoing problems with its state-owned firms. To resolve some of these problems, China may need a sense of direction from the top of its political structure.

Pyle, David J., *China's Economy: From Revolution to Reform*. New York: St. Martin's Press, Inc., 1997. Pyle is not an established China expert, but he is in a way someone more useful: an economist who is interested in China, has visited and lived there for short periods, and who has an interest in getting a broad perspective on what has happened there and passing it along to others. This helpful book works its way though all the key issues, like agricultural reform, reform of state-owned enterprises, foreign trade and investment, reform of the financial sector, and so on. It's full of useful basic facts and perspectives.

Supplementary Reading:
World Bank, *China 2020: Development Challenges in the New Century*. Washington, D.C.: World Bank, 1997. This report spends a chapter talking about the sources of China's economic surge, but then focuses in on the challenges faced by China in the next few decades, in areas like reform of state-owned enterprises, the banking system, and the government capabilities to meet social needs. The fundamental question is whether China's economy will be healthy and growing in 2020.

Lardy, Nicholas, *China's Unfinished Economic Revolution*. Washington, D.C.: Brookings Institution Press, 1998. Lardy is a well-established expert on China who has been following the path of China's reforms for decades. In this recent book, he offers an insightful and readable analysis of the sort of reforms that China needs to make with regard to state enterprises, the banking system, government finances, and other issues.

State Statistical Bureau of the People's Republic of China, *China Statistical Yearbook*. Annual. This is the standard source for economic (and other) statistics regarding China. The economic statistics from China are not of the highest quality, and so they should be approached with some skepticism. However, the government does have some incentive not to overstate or understate matters too much in any one year, because it leads to embarrassing needs for revisions in future years, and because it wants to be trusted by foreign investors on basic statistical issues. So the numbers are typically of OK quality, not nearly as bad or as biased as one might fear. If you want a basic numerical sense of what is happening in China, with data over time, this is a good place to start.

Questions to Consider:
1. How much should U.S. attention be focused by the sheer size of China's economy?
2. Do some of the lessons of China's development experience seem applicable to you for other poor countries of the world? Which ones?
3. What do you think are the most important priorities for China's economy in the next decade or so?
Lecture Forty-Five

India

Scope: India is a democratic nation with one-sixth of the world's population and extraordinary potential for future economic growth, yet unless the country is exploding a nuclear device, it is largely off the radar screen of most Americans and policy makers. This lecture begins by discussing the economic philosophy followed by India after it gained independence from Britain in 1947. These policies included avoiding foreign trade for internal production, along with extensive government control over industry. For some decades, this set of policies was seen as a genuine success; today, it is largely seen as a failure, even in India.

Starting in 1991, India began to adopt significant economic reforms, including an openness to foreign trade and investment, and less government regulation. India's economy has responded by surging forward. Yet at the end of the 1990s, India's economic reforms remain only partial, and without further effort, it is not clear that faster economic growth will be sustainable.

Outline

I. The economic philosophy of India's independence
   The story begins with India's declaration of independence from Britain in 1947, a bit more than 50 years ago.
   A. Elements of India's economic philosophy
      1. Self-sufficiency, not trade
         After 150 years of feeling exploited by trade with Britain, India reacted with an inward-looking philosophy of self-sufficiency that discouraged foreign trade, including high tariff on imports and a strong currency to discourage exports. India largely withdrew from foreign markets.
      2. Government control over domestic industry
         The philosophy was sometimes called a "mixed economy," sometimes a "socialist" economy. The belief was that as a poor country, India needed to focus its resources on what was important. To accomplish this, the government regulated prices, quantities produced, wages, size of labor force, sources of supply, not allow new varieties of products to be produced. Many companies and industries were nationalized or owned directly by the government over time.
      3. Heavy regulation of labor markets
         India's distrust of market forces was evident in the passage of nearly 50 major laws concerning labor markets. These laws are so stringent in requiring extensive benefits and preventing firing for any reason that they have deeply inhibited the growth of industry in India.
      4. End rural feudalism
         Before independence, a common pattern in India had been that a small number of aristocracy got very rich and the poor starved. The perceived solution was to transfer ownership of land to the rural peasantry. This has been a success, by and large.
      5. Maintain democracy
         While this goal is not specifically economic, it needs to be remembered that India is a very diverse country, with a huge population and a number of linguistic and religious divisions. To some extent, the many interventions in the economy were aimed at avoiding feelings of grievance and knitting the country together.
   B. The optimistic view of India's economic philosophy
      Well into the 1970s and even the early 1980s, the view of India's economy in the west was that it was a poor but basically admirable economy, not slavishly devoted to the market, forging its own way. With the green revolution and various technology centers, the sense was that India's growth rate should be counted as a genuine success.

II. India's economic reforms of 1991-1993
   A. Background forces leading to the reforms
      1. Shift in international context
With the collapse of the Soviet Union, the rise of capitalist east Asian economies, and the economic success of China after market-oriented reforms in the 1980s, the socialist model of India began to look dated.

2. Slow relative growth
   Compared with the vivid economic success stories of Japan, China, and east Asia, India's 3.5% growth rates began to look tepid.

3. The persistence of poverty
   The fundamental justification for India's economic policies had long been that they were necessary to help the poor. But by 1990, although some progress had been made, India's poor continued to be in terrible condition.

4. The fiscal crunch
   India's government was facing a fiscal crunch early in the 1990s, and was in danger of defaulting on its loans. This helped to force a change of course.

B. The substance of the reforms
   The reforms involve reversing many elements of India's earlier economic philosophy, and heading toward free trade, exchange rate depreciation, less licensing, allowing foreign investment, and greater domestic competition in many industries.

C. The effects of the economic reforms
   After one year of recession, as the economy adjusted, India's economy shot forward to become one of the world's leading performers in the 1990s, growing at rates of up to 7 percent a year for the rest of the 1990s.

III. India's agenda for continued reform
   A. Privatize the public sector enterprises
      Even after reforms, the public sector enterprises are fueling the government's fiscal problems, tying up capital, and strangling competition in a number of areas.
   B. Encourage education
      India's government sometimes argues that almost all children are enrolled in school, but this appears to be far from the truth.
   C. Invest in infrastructure
      Seaports, roads, telephone lines, electrical power, and more all require an enormous surge of investment. The government does not have the resources or expertise to carry this out, and so will need to rely in many cases on private investment, perhaps from foreign sources.
   D. Rationalize the government's finances
      India is running chronic budget deficits, incurring debt and spurring inflation, while managing not to help the poor. On the spending side, it needs to stop trying to subsidize everything, and instead target spending to building long-term capital and assisting the poor. On the tax side, it needs to move away from reliance on taxing foreign trade and charging fees, and build a broad-based national tax like a value-added tax or a sales tax.
   E. Encourage investment from abroad
      One legacy of Britain's rule in India is that foreign investment is viewed with grave suspicion. But India needs foreign capital, and the management expertise that comes with it.
   F. Reform the restrictive labor laws
      While the need for some reform here may seem self-evident, the political consensus in India in the mid-1990s is that the other reforms that have been undertaken require tightening and strengthening the labor laws, not reducing their reach.

IV. Why not another Asian growth miracle?
   India may continue on its present path; it may slip back to the ways of the past; or it may surge ahead at a more rapid growth rate.
   A. The status quo path
      India has carried out some reforms, and surely the economy is on the upswing. The middle class is growing, and there are signs of technological innovation. But given the extent of continuing regulation, and
the growth record of other countries in east Asia, the Indian economy is probably still underperforming its growth potential.

B. The scenario with further reform
India's economy remains among the most regulated in the world. There is plenty of room for additional reforms which, at plausible rates of growth, might double the economy over and above the current moderate path in 20 years. With additional reforms, growth could be even faster and larger.

C. The danger of returning to slow growth
India's government may be too splintered and uncertain to forge ahead with further reform. It may even begin to roll back some of the reforms that have occurred. But a return to the 3.5% growth rates of the past would be a terrible loss for the hundreds of millions of the poorest in India.

Essential Reading:
Crook, Clive, "India's Economy: Work in Progress," The Economist, February 22, 1997, 26-page survey in center of issue. This survey, written in the 50th year of India's independence, does a nice job of summing up why India's economic progress was so disappointing up to 1991, what the reforms of the 1990s have accomplished, and the economic challenges ahead for India.

Supplementary Reading:
Bhagwati, Jagdish, India in Transition: Freeing the Economy. Oxford: Clarendon Press, 1993. Bhagwati is one of the preeminent economists of the late 20th century in the area of international trade. While he has been based at Columbia University for much of his career, he is from India and has a long-standing interest in India's economy. In this short book, he gives a good sense of how India was perceived around the world, the comparisons often made to China, the reasons for India's poor economic performance. The book came out just when India's economic reforms started, so the book is stronger on history than on what has happened in the 1990s.

World Bank, India: Five Years of Stabilization and Reform and the Challenges Ahead. Washington, D.C. 1996. World Bank, India: Sustaining Rapid Economic Growth, Washington, D.C. 1997. The World Bank publishes a number of country studies; that is, reports on the economies of particular nations. For India, they are published almost every year. They are typically dry as dust to read, but well-organized and up-to-date, giving a good sense of the current economic issues.

Questions to Consider:
1. Discuss the gap between the intentions of India's economic policies from 1947 through the 1980s and the effects of those policies.
2. Imagine that you are a relatively poor or lower-middle class person in India today. As a consumer and worker, would you favor or oppose further economic reforms of the sort detailed here? Does your answer differ according to whether you are younger or older (and thus have a longer or shorter time horizon)?
Lecture Forty-Six
Market Economics Comes to Latin America

Scope: The economies of Latin America, taken as a group, are substantial in size. For example, their combined GDP is larger than the seven east Asian "tigers." Brazil alone has an economy roughly the size of China's. When thinking about economic potential, Latin America deserves at least as much attention as places like east Asia or eastern Europe.

The reputation of the Latin American economies for economic growth was damaged by the terrible performance of these economies during the 1980s, which were ridden with inflation, protectionism, and crude forms of economic nationalism. However, the 1990s have seen a wave of economic reforms across the region: sensible economics policies, privatization, opening up to foreign trade and investment. The potential for growth in this region has noticeably increased in the 1990s.

Problems remain, as they always do. In the case of Latin America, perhaps the biggest problem is the extreme level of income inequality between poor and wealthy, higher than in any other region of the world. Moreover, while Latin American governments as a rule spend a plausible proportion of their budgets on education and health, a disproportionate share of this spending ends up being directed to the already wealthy. It will take time for economic reform to provide results, but the level of impatience and frustration in parts of Latin America is quite high.

Outline

I. A sketch of the economy of Latin America

Latin America will be taken to mean the group of 32 countries in South America, Central America and the Caribbean. For purposes of illustration, much of this lecture will focus on the seven largest economies: Brazil, Mexico, Argentina, Peru, Chile, Colombia, and Venezuela. The combined size of these seven exceeds the east Asian tigers of the earlier lecture. Brazil's economy alone is comparable in size to that of China. If the U.S. is looking for dynamic trading partners and economic opportunities, there is surely as much potential in Latin America as in other places that seem to be talked about more often, like eastern Europe.

II. Latin America's policy reforms of the 1990s

A. Attacking inflation

1. The howling storm of inflation in Latin America in the 1980s

Inflation rates in Latin America were so high in the 1980s that if it weren't so harmful to their economies, it would almost be comic. For example, inflation in the entire region averaged over 700% per year from 1986 to 1990. Brazil and Argentina, the largest economies, had inflation over 1100% per year in this period.

2. Sources of hyperinflation: fiscal and monetary policy run amok

Achieving inflation of this magnitude requires extreme macroeconomic policies, so that there will be far, far too many units of currency chasing too few goods. The policies in Latin America included very large budget deficits and very expansive monetary policies, where the central banks handed out loans at a reckless pace.

3. The poisonous effect of high inflation on productivity

When an economy is suffering from hyperinflation, a huge amount of the attention of business, consumers, and government, must be focused on the day-to-day task of managing money, to try to protect against losses from inflation. There is little time left, and not much incentive, to focus on long-term investments for the gradual improvement of productivity.

B. Discouraging savings and investment

Inflation makes one focus on the short-term. Thus, it's no surprise that rates of national saving and investment in Latin America were among the lowest in the world during the 1980s. In fact, it's somewhat surprising, and mildly encouraging, that savings and investment held up as well as it did!

5. Slaying the inflation dragon

In the mid-1990s, Brazil was the last large economy in Latin America to bring its inflation rate under control. For the region as a whole, sensible fiscal and monetary policies brought inflation down to
about 12% in 1997. This may seem a relatively high rate, but 1% inflation per month is a lot different than 1% (or more) per day. An economy can invest and function in a reasonable way with inflation down in the low double-digits.

B. Free trade and foreign investment

1. A legacy of looking inward and import substitution
   Latin America had a philosophy of inward-looking development. Don't rely on imports; instead, make everything at home. It also controlled foreign currency exchange and limited what could be bought with foreign currencies. These philosophies have a nationalist attraction, but a fear of being exploited by foreign trade partners is not a good reason for ignoring the benefits of foreign trade.

2. The movement away from protectionism
   In quite a short period of time, from the mid-1980s to the early 1990s, many major economies of Latin America took a long step back from protectionism. Both tariff barriers, that is, taxes on imports, and non-tariff barriers, that is, required licenses and regulations on imports, declined substantially. Also, a variety of free-trade agreements have been signed between various combinations of Latin American nations.

3. Opening to foreign investment
   Foreign investment used to be somewhat unwelcome in Latin America, because it was thought to imply dependence and external control, rather than the preferred strategy of growth from within. But capital flows into Latin America are substantial in late 1990s, often reaching $50 billion to $60 billion a year.

C. A turn toward privatization and markets

1. State-owned firms and family empires
   The prototypical Latin American firm of decades past embodied a corporatist philosophy, where powerful families, the armed forces, big unions, and various levels of government all came together to organize and run firms and to divide up the spoils.

2. The privatization push
   From the late 1980s to the late 1990s, more than half the privatizations in the world (by value) occurred in Latin America. Many state-owned firms had become huge money-losers, sucking up public subsidies, and under new management, their efficiency often improved dramatically. The privatizations continue. However, the three largest corporations in Latin America are still state-owned, the national oil companies in Venezuela, Brazil and Mexico.

3. Opening family empires to competitive forces
   Many of the larger Latin American firms that are not state-owned are family-run enterprises, where the patriarch of the family is chief executive officer, and children and cousins and relatives run the various parts of the organization. Understandably, these firms have often been run as cash cows for the family members. However, the other forces in the economic reforms are opening them up to competition.

D. Cleaning up the last of the debt crisis

1. What were the roots of the debt crisis?
   In the 1970s, the Middle Eastern nations of OPEC raised the price of oil dramatically. They earned lots of U.S. dollars, which they deposited in U.S. banks. U.S. banks, then faced the problem of where to lend that money. It seems that Latin America, which had been growing fairly well, was a good target. Moreover, many governments across Latin America agreed to guarantee repayment of the loans. The interest rates at that time looked very low, since inflation was rising rapidly, and it appeared that much of the money could be repaid at low or even negative real interest rates. Brazil, Mexico, Argentina and Venezuela were the biggest borrowers.

2. Events turn against the borrowers
   Higher interest rates in the late 1970s and early 1980s made these adjustable rate loans harder to repay. Hyperinflation and recession in the Latin American economies, along with lower oil prices, made it nearly impossible for some to repay.

3. The elements of debt relief
   Negotiations about repaying debt are highly charged. Borrowers claim they can repay almost nothing. Lenders offer to forgive a little bit, in exchange for economic reforms to assure they get repaid the rest. A variety of side-deals are cut. In the end, about one-sixth of the debt was forgiven, and the rest repaid by the early 1990s.
IV. What about the poor?

A. The economies of Latin America are among the most unequal in the world.

By standard measures of inequality, what share of income is received by the top fifth and the bottom fifth, Latin America is the most unequal of all the regions in the world.

B. Inequality in social spending on education and health

This inequality in income is also manifested in government spending on social programs like education and health. Most economies in Latin America spend an overall amount on education and health, as a share of GDP, that looks quite reasonable by world standards. However, a disproportionate share of this spending goes to subsidizing top-level services for the upper middle-class and wealthy, rather than to providing any services at all to the very poor.

C. What is the time horizon for success?

Economic reform is working in Latin America, raising the rate of economic growth by several percentage points a year. But in a situation of great inequality, when institutions are under the stress of reform, and old frustrations are bubbling about, it isn't easy to continue on a course of reform with the thought that it will pay off over a decade or two. There is sometimes a strong demand for short-term solutions; of course, most of those short-term solutions are actually a return to the previous problems.

Essential Reading:

Burki, Shahid Javed, and Guillermo E. Perry, The Long March: A Reform Agenda for Latin America and the Caribbean in the Next Decade. Washington, D.C.: The World Bank, 1997. In this report, two World Bank economists present their own mainstream view of the issues facing Latin America. This is a well-written and comprehensive report on the issues, covering everything from inflation and budget deficits to international trade to privatization to education to making sure the gains also reach the poor. If you're looking to get up to speed in a hurry on the economic issues facing Latin America, this report is a very good place to start.

Reid, Michael, "Business in Latin America: Back on the pitch," Economist, December 6, 1997, special section in middle of issue, pp. 1-26. This solid survey article looks at the competitive level of businesses in Latin America: the problems they face in their home countries, the potential advantages they may have in the future. It points out that economic reforms in the 1990s have accelerated the growth prospects of the Latin American economies. However, much of Latin America is still entrenched in various forms of crony capitalism, whether of the privately-owned or state-owned variety, so substantial changes are still needed.

Supplementary Reading:

Cline, William, "Managing International Debt: How One Big Battle Was Won," Economist, February 18, 1995, pp. 17-19. In the 1980s, the governments of Latin American countries were drowning in debts they had guaranteed would be repaid. By the mid-1990s, the debt problem was effectively over. In this article, a prominent economist describes how the Latin America's debt crisis was overcome—and what related issues are not ahead for Latin America's economies.

"The Backlash in Latin America: Gestures against reform," Economist, November 30, 1996, pp. 19-21. Latin America has definitely made progress on economic reform. But sometimes that progress has seemed long-delayed, or has caused dislocations, or hasn't worked for a time. There are a number of powerful and populist forces in Latin America that would prefer to avoid economic reform. This article discusses the countercurrents to economic reform—and offers some suggestions for a political and economic strategy to deal with them.

For up-to-date economic statistics on many of the countries of Latin America, I recommend the website of the Inter-American Development Bank, at <http://www.iadb.org>.
Questions to Consider:

1. Discuss how inflation can possible get so horribly out of control—and the effects that you would expect hyperinflation to have on everyday life.

2. Thinking back to the earlier lecture on privatization in Part I of these lectures, spell out the mechanisms by which you would expect privatization to lead to more efficient economic management.

3. What policies do you think Latin American governments might undertake that would be both supportive of economic reforms and growth, but also would help to defuse the social tensions brought on by extreme inequality?
Lecture Forty-Seven
Africa's Plight

Scope: Africa is terribly, terribly poor, whether one looks in economic terms or in measures of health and education. Moreover, the economies of Africa have mainly been going backwards or treading water for the last several decades, rather than moving forward.

This is a case where there are so many things to do that it is hard to figure out what should come first. Markets need to be freed up from government control. Government budget deficits need to be reduced, and spending directed toward primary nutrition, health and education—and away from subsidies to state-owned firms, which should be privatized. Foreign trade must be freed up. Agriculture, a primary sector in these economies, should no longer be neglected.

It isn't clear that foreign aid is much help for these sorts of reforms. Aid can trigger reform, but the necessary growth for Africa will need to come from within. Some of the deepest and most bitter arguments in the field of economic development concern whether it makes sense to just keeping giving aid for individual projects, or whether aid should be used as a carrot for countries that carry out an overall structural adjustment. Without some sort of adjustment, however, it's hard to see how Africa's economies can move forward.

Outline

I. A sense of Africa
   A. Poor economies
      The focus here will be on sub-Saharan Africa, which consists of 48 countries. The four largest in population are Nigeria, Ethiopia, Zaire, and South Africa. South Africa has by far the largest economy. In the rest of these countries, the standard of living is about 5% of U.S. levels, as measured by the buying power of per capita GDP.
   B. Grim socioeconomic statistics
      Life expectancy in sub-Saharan Africa is 52 years. Only 73 percent of children are enrolled in primary school, and just 25 percent in secondary school. Infant mortality rates are often about 10 times higher than in industrialized countries. Statistics on malnutrition, illiteracy, and other social indicators are equally grim.
   C. The economic trend has generally been downward in recent decades
      The economic trends in Africa, despite the desperate poverty of these economies, have typically been downwards in recent decades, although there has been a small resurgence, or at least the decline has flattened out, in the last few years.

II. What's to be done: getting fundamentals right
   A. Removing price controls on goods
      African countries have made substantial progress in reducing the number of price controls in their economies; however, many other ways of interfering in markets through licenses, fees, permits, and various ad hoc restrictions remain. Few government in Africa have come close to letting go of the market yet.
   B. Deficits, taxes and spending
      1. Substantial budget deficit
         Budget deficits in Africa are often enormous, averaging 5% of GDP for the 1990s, even with grants figured in, and 7% of GDP without grants.
      2. It's not the level of taxes, but their design
         The tax take in the average African country is about 16% of GDP, which is a reasonable amount for poor countries by world standards. However, the tax systems of many African countries are wildly complex. Collecting a similar amount with simpler and more straightforward methods would be a substantial gain.
      3. Government spending priorities
The spending priorities for governments of poor countries should be clear enough: basic nutrition, health and education services for their population, and some infrastructure investment, especially in roads. In all of these areas, African governments have fallen short, even given their limited resources.

C. The privatization agenda
About one-third of Africa's public enterprises were privatized in the first half of the 1990s, and several hundred more are privatized each year. This is progress. However, these have tended to be the smallest and least important of the private enterprises, and many of the privatizations have been concentrated in a few countries, so much remains to be done. More needs to be done to bring in foreign investors and managerial expertise.

D. Free trade
Opening up to free trade may be one of the most important steps that the economies of Africa can take. Trade brings rational prices into an economy, set by market forces. It brings supplies for business and goods for consumers. It brings in management expertise. It raises the pressure to remove subsidies from state-owned firms.

E. Nagging inflation
Inflation has not been a huge problem in Africa in the 1990s, but it has run at about a 16% annual rate.

F. The case for debt relief in Africa
Africa's economies have enormous foreign debt, roughly equal to the GDP of Africa. Government interest payments alone are often 20% of government spending or more, perhaps 6% of GDP. The interest payments work like a big tax on reform; if the reforms are successful, a big chunk of the money goes to foreign banks. This is bound to discourage economic reformers. On the other side, forgiving the debt in the present economic circumstances probably wouldn't accomplish much, either.

G. Savings and investment
Investment is one of the main sources of economic growth. Africa has low rates of savings, low rates of investment, and extremely low returns on the investments that are made.

H. Reform of agriculture
Agriculture is still the primary sector of output in most African economies, and where most people work. Raising productivity in this sector is essential. The important steps here include using the available technologies that are well-suited to Africa; road-building; and avoiding government policies that are biased against agriculture.

III. Evolution in thinking about the role of aid
A. The poverty trap
   1. An economic rationale for foreign aid
      Much of the thinking of economists about development economics used to revolve around the idea of a "poverty trap," in which people of poor countries would have a difficult or impossible time putting aside resources for investing the future, and thus needed a boost from foreign aid or government-centered development planning.
   2. The unfortunate political interaction with free money
      Reasonable as this all sounded in theory, it often seemed to end up involving policies with a high level of interference in markets, and a process of aid being funneled to nondemocratic leaders for their own political survival. Several iterations of development planning, looking after basic needs, ended up involving high level of government control.
   3. The limits of aid vs. growth
      There is also a developing awareness of the limitations of aid. It can help trigger growth, but it won't grow and sustain itself from year to year, the way true economic growth will.

B. The "structural adjustment" hot button
   "Structural adjustment" might sound like boring econo-jargon. But it's also a subject of red-hot controversy. Structural adjustment is the name given to the development strategy pushed by the World Bank since the later part of the 1980s: avoid big government budget deficits; remove subsidies and price controls; privatize and stop overregulation; and so on. While this may not sound too controversial from a U.S. perspective, it sounds imperialistic and aggressive to many in Africa.

C. Africa on its own
Africa is on its own. It's no longer the battleground against colonialism, or for superpower confrontations by proxy. If Africa's economies are going to step forward, it will be because of Africans themselves.

**Essential Reading:**

World Bank, *Sub-Saharan Africa: From Crisis to Sustainable Growth*. Washington, D.C., World Bank, 1989. The report has been one of the standard starting points for informed discussion of what to do in Africa during the 1990s. The focus here is on the long term, not on how to fix this month's or even this year's crisis. Thus, the emphasis is on fundamental steps like investing in people, reforming agriculture, and encouraging Africa's own entrepreneurs to step forward.

World Bank, *Adjustment in Africa: Reforms, Results, and the Road Ahead*. New York: Oxford University Press, 1994. This report is usefully read in tandem with the previous report. It focuses in particular on the "structural adjustment" agenda of free markets, free trade, privatization, smaller government, and so on. It both reviews how much of that agenda has actually happened (in a lot of places, not much) and then discusses how the agenda has changed economic growth where it has been put in place (again, in a lot of places, not much).

Some articles from the *Economist* are always helpful. "Africa: A flicker of light," March 4, 1994, pp. 21-24. "Investing in Africa: A new scramble," August 12, 1995, pp. 17-19. "Growth in Africa: It can be done (by Jeffrey Sachs)," June 29, 1996, pp. 19-21. In coverage of the economics of Africa, as on so many other subjects, the *Economist* stands alone in contemporary journalism. Here are three examples. The first article discusses the controversy over "structural reform," and the mixed evidence over whether it is working at all. The second article focuses on the push by South African firms to invest in the rest of Africa. What do these firms see as the potential? How do they plan to overcome the problems so many firms face? The final article by Jeffrey Sachs, a leading international economist, argues that a policy of free trade, free markets, and increased national savings can bear fruit in Africa, too.

**Supplementary Reading:**

Attiyeh, George B., *Africa in Chaos*. New York: St. Martin's Press, 1998. Attiyeh grew up in Ghana, and through pursuit of education and good luck, eventually completed a Ph.D. in economics at the University of Manitoba, in Canada. In this vivid, lively, compelling book, he takes everyone to task who needs it: so-called development experts who gave poor advice, national leaders who were more interested in power than the welfare of their people, western sycophants who kowtowed to African dictators, and much more. Along with handing out the criticism, Attiyeh offers lots of constructive advice about what should be done.

World Bank, *African Development Indicators*. Washington, D.C.; World Bank, 1997. This volume comes out annually. It is a great source for data; in fact, all it contains is data—table after table of data on many aspects of Africa's economies, public finances, socioeconomic indicators, and so on. It can be frustrating to work with this book, and with the subject of Africa's economies in general, because in so many cases the data you'd like to have simply isn't available. But this is a good place to start.

On the web, you may be interested in looking up the World Bank site on Africa at <http://www.worldbank.org/html/extdr/afr.htm>, which includes statistics, speeches, and policy papers about Africa. Much of the policy work may have too much detail to be interesting, but there's a lot of more general information, too. As another site for a quick overview of information on specific countries, I recommend checking the CIA website at <http://www.odci.gov/cia/publications/pubs.htm>, and then clicking on "World Factbook," which has maps and brief descriptions of most of the countries in the world.

**Questions to Consider:**

1. Put your empathy to work. Can you imagine how difficult it must be to live in a poor area of Africa?
2. On which of the many reforms discussed in the lecture would you put the most emphasis? The least emphasis?
3. Would you favor giving more foreign aid to the countries with the poorest people, even if their governments are carrying out the most counterproductive economic policies, or would you favor channeling aid to countries where the government is undertaking some substantive economic reform?
Lecture Forty-Eight
What Economists Know, and Don't Know, About Economic Policy

Scope: These lectures have focused on a variety of policy questions, rather than on trying to draw out individual economic themes. Nonetheless, some themes and connections have been implicit throughout. In this closing lecture, the focus is on pulling together some of the things that economists know. In fact, I will argue that economists know some things that are true and useful; that this knowledge has seeped over into broader society.

A first area in which the knowledge of economists has evolved is in thinking about the merits of market competition. Remember when Russia and Japan were economic models certain to outstrip the United States, and when the U.S. itself, under Richard Nixon in the 1970s, imposed wage and price controls on the entire economy. Quite a change from that setting to the present, with waves of deregulation and privatization. A second area of learning is in macroeconomic affairs, where we have learned the importance of not allowing government fiscal and monetary tools to destabilize the economy or to cause inflation. The third lesson is the benefits of free trade.

However, one broad area of economic policy remains difficult to pronounce upon: how to increase America's savings and investment. We aren't quite sure what tools to use to increase personal savings. At least in the area of encouraging physical capital investment and R&D investment, we have policy tools that seem likely to work. But in the area of human capital investment, we have large numbers of Americans who do not seem to fulfill their potential, and little sense of how to rescue them.

Outline

I. The merits of market competition
   A. A shift in the defining historical context
      1. For many people who were old enough to be in positions of power in the 1950s, 1960s, and even into the 1970s, the most salient events that they remembered from growing up were World Wars and the Great Depression. The lesson many people took from those events was that the Depression proved a free market tended to be unstable and subject to collapse, and that the market needed heavy regulation, while government management of the economy during the World Wars showed the government control could get the economy to move forward quickly.
      2. More recently, for those who are growing into political judgment in the 1980s and 1990s, the Depression and World Wars are the stuff of history books, not their personal experience.
   B. The shift in international role models
      Through much of this century, many in the U.S. looked to other countries with less of an emphasis on free markets for its economic model. Some of the models in years past included the Soviet Union, Sweden, and Japan. None of those models looks especially promising today. Instead, it is the market-oriented reforms in east Asia and China that attract attention.
   C. Deregulation, privatization and antitrust
      1. Up until the mid-1970s, the government had enormous control over the pricing and output of a number of industries: for example, airlines, trucking, railroads, banks, telecommunications, oil and natural gas, and monetary exchange rates. Especially at the local level, government also took on and carried out a lot of tasks itself, with municipal employees.
      2. Antitrust law up until the 1960s tended to block almost all proposed mergers, and even into the 1980s government regulators were seeking to break up large firms like IBM and AT&T. The 1980s and 1990s have seen waves of deregulation and privatization that have saved consumers enormous amounts of money, and shown that efficiencies were waiting to be unlocked by a competitive market. They have also allowed mergers and spin-offs, largely unfettered by antitrust authorities, as a useful way of restructuring entire industries.
   D. Using prices, not blocking them
Some of the leading examples of price controls have been diminished in the 1990s: the federal government took a long step back from farm price subsidies; many cities reduced the reach of rent control laws or eliminated them altogether. Conversely, we found new ways to use the price mechanism, in both environmental contexts, in auctioning off the radio spectrum, and in other ways.

II. Macroeconomic management
A. Fiscal policy: balancing cyclical and long-term concerns
1. Automatic stabilizers for the cyclical concerns
   Ever since the Depression, when times get bad, the federal deficit goes up automatically—and Congress and the President let it rise. The deficit rises in bad times because taxes drop and income support payments rise, and a larger deficit is what one wants in this case to stimulate the economy. Conversely, the deficit falls (or the budget surplus rises) in good times, because taxes rise and income support payments drop. This is what one wants to happen in good times, to slow a potentially overheating economy.

2. Balanced budgets or surpluses for the long-term savings
   It wasn't that long ago that the U.S. was running substantial budget deficits even in good years, and huge deficits in bad ones. But at the end of the 1990s, it appears that the government will have budget surpluses for the next few years. This is typically thought of as a good thing, because the government surpluses add to national savings and, by retiring federal debt, make funds available for private investment.

B. Central bank monetary policy
   Central banks around the world have recognized that it is necessary to keep inflation under control. However, if inflation is fairly low and the economy dips into recession with higher unemployment, monetary policy can then be used to help the economy out of the recession.

III. Free trade
   Free trade has been highly controversial in the 1990s: think of the political battles over the North American Free Trade Agreement or the ratification of the new World Trade Organization. Free traders haven't won all the battles, but they have won the big ones.

IV. The remaining challenge: Encouraging savings and investment
A. The savings problem: searching for a reliable policy tool
   We aren't sure how to encourage private savings; tax-favored accounts like IRA's get more money into those accounts, but it's not clear that they raise overall savings. Having the government run larger budget surpluses is one way to raise national savings.

B. Encouraging business investment and R&D
   The U.S. economy has relatively low investment levels by the standards of developed economies, typically in the range of 15-19% of GDP. Its R&D investment, however, is a bit higher than most industrialized economies. Both could be increased further with a judicious application of direct government spending and tax breaks.

C. The difficulties of investing in human capital
   From a narrow economic perspective, the difficulty with human capital investment is that there is no market for it: how does a three year-old borrow today to invest in human capital for future wages? Yet many very, very young people are already falling behind in their personal and intellectual maturation, and we don't know much about how to help them catch up.

V. Competing flavors of capitalism
   Capitalism comes in many flavors. The U.S. goal for the future should be to seek out pragmatic balances and accommodations between using the power of markets and investing for the future, and meeting our other social goals.

Essential Reading:
economists who are serving a stint in the administration, but will later return to their home university or think-tank. The report is always a little partisan, but not overly so; instead, it's more a source of the conventional wisdom. As a result, it's a good place to see the sorts of conventional wisdom described in this lecture play itself out from year to year. The 1998 version is available on the web at <http://www.gpo.ucop.edu/catalog/erp98.html>. I'd expect that the 1999 issue will be able to be accessed, when it becomes available, by changing the last component of this address to erp99.html. But when 2000 comes, all bets about web addresses are off!

**Supplementary Reading:**

If you have been tracking these readings throughout the lectures, you'll be fully aware at this point that I recommend the *Economist* magazine as by far the best source for seeing how economists really think. If you haven't tried the magazine before, don't be frightened off by the title. It's just a news magazine for the general public; not a magazine specifically for economists. But on economic matters, it's by far the best newsmagazine there is.

For a good starting point on the web for economics information and news of all sorts, I recommend the "Economics" section of The Mining Company, at <http://economics.miningco.com>. This website has about 600 different areas, each one hosted by a particular person who seeks out resources on the web in that area, ranging from government data resources to academic working papers to articles in popular magazines, and offers quick web hookups to them. This is the address of the economics site.

**Questions to Consider:**

1. Do economists know anything? If so, what? Have your opinions on this point shifted at all during the course of the lectures?

2. Can you contrast your gut-level reactions to the power and desirability of market forces to how you felt about them two or three decades ago?

3. What policies would you support for raising the long-term rate of economic growth in the United States in the decades to come?