I am pleased to be here this evening to present the Third Annual Rutman Lecture. I have long been interested in why some countries enjoy more rapid economic growth than others, and I want to concentrate on a part of the growth process that seems to me to be under-appreciated and perhaps even neglected: the role of the labor market.

I still remember the emphasis in my high school social studies and history classes on natural resources as the source of growth. My teachers took it as self-evident that the United States was a rich country because of its bountiful minerals, superb farmland, and plentiful hydropower. Asia, with its tremendous population pressure and a scarcity of natural resources, seemed condemned to Malthusian misery. Latin America was a great growth opportunity because of its relatively small population and extensive resources. Yet, today, we talk of the Asian tigers and look without success for comparable success stories in Latin America.

Japan’s rapid advance starting in the 1950s changed our understanding of economic growth. Japan had a high saving rate and accumulated capital rapidly. So, our thinking about growth began to focus on capital formation—both physical capital accumulation and human capital. Economists came to realize that natural resources play at best a minor role in economic growth. More recently, economists have also emphasized the importance of political stability and security of person and property.

As we look around today, Japan has fallen flat. Its saving rate is still high and its people still well educated. Yet, its growth rate is minimal. Japan seems to be in perpetual recession. Much of Western Europe also seems stuck in a slow growth mode. Why? There is no simple answer, but I’ll review with you tonight the importance of a flexible labor market, which we enjoy in spades in the United States. In brief, an efficient labor market is critical because getting the right workers into the right jobs, and wrong workers out of wrong jobs, is central to realizing the full productive potential of an educated populace working with modern capital.

Before proceeding, I want to emphasize that the views I express here are mine and do not necessarily reflect official positions of the Federal Reserve System. I thank my colleagues at the Federal Reserve Bank of St. Louis—especially David Wheelock—for their assistance and comments, but I retain full responsibility for errors.

SOME BASIC CONCEPTS

Some basic concepts will help us talk about the process of economic growth. Over time, improvement in a nation’s standard of living, which is usually measured by the growth of income per person, depends on the rate at which the per capita output of goods and services rises. In turn, the growth of per capita output is determined largely by the growth of labor productivity—that is, the growth of output per unit of labor input, which often is measured in terms of hours worked. The role of education as an important source of productivity growth is certainly understood here at an educational institution. At the same time, most people understand the importance of capital to the growth of labor productiv-
ity. Improvements in the sophistication of the machines, tools, and other physical inputs used in producing goods and services, or simply an increase in the quantity of such capital in the hands of skilled workers, are key components of productivity growth.

As important as education and capital are, their potential contributions will not be fully realized without a well-functioning labor market. That is the topic I’ll address this evening.

**LABOR PRODUCTIVITY AND ECONOMIC GROWTH**

In a recent annual report of the Federal Reserve Bank of St. Louis, we examined the determinants of rising living standards and what governments can do to foster a high pace of economic growth. That report showed that the high pace of growth enjoyed by the U.S. economy in the second half of the 1990s reflected rapid growth of labor productivity. After having been low for about two decades, around 1995, labor productivity suddenly began to grow at a high rate—about the same pace that it had grown from the end of World War II to 1973, when our nation last enjoyed an era of high economic growth.

What has caused the return to rapid growth in labor productivity since 1995? Economists attribute the rise mainly to the microchip—specifically to the application of new information technology to the production of goods and services, everything from cars to cataract surgery. The new technology enables firms to produce more output, and often higher quality output, using fewer resources. The application of new technology made labor more productive, which led to rising real incomes and higher living standards.

Our annual report focused on the history of technological breakthroughs and the productivity booms that followed from them. We argued that governments can help by fostering an environment that encourages inventive activity and the efficient allocation of economic resources. Monetary policy, for example, can help in this effort by ensuring that market signals of the price system are not distorted by uncertainty about the general level of prices. Legal enforcement of private contracts is another example of how governments can help promote economic growth.

**LABOR MOBILITY**

Many economists have argued that labor market policies can have a substantial impact on economic growth. A well-functioning labor market is crucial to ensuring that people are able to take advantage of their individual talents by finding employment that best suits them. Many people starting out change jobs several times before finding a good match of interests and skills. Similarly, when technological breakthroughs or other forces create new opportunities, or indeed cause specific job losses, a well functioning labor market will ensure that labor is reallocated to where it can be employed most productively.

Fundamental to a well functioning labor market is labor mobility. But we should be honest about what “reallocation of labor” means. Some people jump readily from stagnant or declining industries to expanding ones, but many must be pushed through business failures and layoffs. A spell of unemployment is often a part of the successful reallocation of labor. Paradoxically, though, public policies that try too hard to protect workers from unemployment may instead increase it.

In comparison with other economically developed countries, the United States has an unusually mobile labor force. People move relatively freely between jobs, spells of unemployment are relatively short and, unlike their counterparts in other countries, Americans tend to give little pause to moving across the country in search of better opportunities. This mobility has been an important source of America’s long-term economic success.

Let me illustrate the mobility of America’s labor force with some data. Over the past two decades, the United States typically has had one of the lower unemployment rates among the developed countries. In 2001, the last year for which
comparable data are available, the U.S. unemployment rate averaged 4.8 percent. By comparison, in both Japan and the United Kingdom the unemployment rate averaged 5 percent, while in Canada and Germany the unemployment rate averaged 7.2 and 7.8 percent, respectively.

The United States did not have the lowest unemployment rate among developed countries in 2001, however. Austria, Denmark, and Ireland all had lower unemployment rates than the United States. But what set the United States apart was its low average duration of unemployment. Compared with their counterparts in other countries, when a person becomes unemployed in the United States, he or she usually finds new employment relatively quickly. In 2001, for example, only 0.3 percent of the U.S. labor force was unemployed for more than one year. By contrast, in Japan, 1.3 percent of the labor force was unemployed for more than one year, and in Germany, some 4 percent of the labor force was unemployed for more than one year. 2001 was not an unusual year—in most years the duration of unemployment in the United States is among the shortest of any country. This short average duration of unemployment in the United States is in part a consequence of the high mobility of the American labor force.

People who are willing to move to where the jobs are have less fear of unemployment. Being a nation of immigrants, perhaps it is not surprising that Americans move within the United States to a much greater extent than do people in other developed countries. Many of us remember the exodus from the so-called “rust belt” to the “sun belt” states in the 1970s, and then to Silicon Valley and other centers of the computer industry in the 1980s and 1990s. This kind of mobility is much less prevalent in other countries. Whereas about 3 percent of Americans move out of state in a typical year, less than half that number of Britons, Germans, and Italians make a comparable move. Canadians fall somewhere between the Europeans and Americans in terms of geographic mobility.

Researchers have found that labor is much more sensitive to regional differences in wage and unemployment rates in the United States than in other countries. When better opportunities arise elsewhere, Americans are unusually quick to pick up and move to take advantage of those opportunities. This mobility helps ensure that resources flow to where they can be employed most productively. These flows also help even out differences in wage and unemployment rates between states. In other countries, differences in wage and unemployment rates tend to persist across regions far longer than in the United States.

**WHY IS THE U.S. LABOR FORCE MORE MOBILE?**

What accounts for the relatively short average duration of unemployment in the United States? Economists don’t agree on all of the reasons why spells of unemployment differ in length between countries, but among the patterns detected are the following:

- **First**, unemployment rates tend to be higher, and the duration of unemployment spells longer, in countries that offer generous unemployment benefits that are allowed to run on indefinitely, combined with little or no pressure on the unemployed to obtain work.
- **Second**, unemployment rates also tend to be higher in countries that have more unionized labor forces, with little coordination between either unions or employers in wage bargaining. Unionization need not inherently restrict mobility, but in practice it often does.
- **Third**, unemployment rates tend to be higher in countries with high tax rates impinging on labor, or with a combination of high payroll taxes and high minimum wage rates for young people.
- **Fourth**, unemployment rates are higher where educational standards at the bottom end of the labor market are poor.

Let me illustrate how labor market policies can affect unemployment rates by describing the case of the Netherlands, where policy changes...
appear to have markedly reduced the average unemployment rate. Beginning in 1986, the Netherlands instituted reforms that shortened the length of time that a person could collect unemployment benefits from 30 months to 6 months, as well as reduced benefit levels. Later reforms increased the length of time that a person had to be employed before becoming eligible to receive unemployment benefits, and made it more difficult for an unemployed person to turn down job offers and continue to collect benefits. Before these reforms were put into place, the Netherlands consistently had one of the highest unemployment rates among developed countries. But since the reforms were instituted, the Netherlands has had one of the lowest unemployment rates among developed countries. During 2002, for example, the unemployment rate in the Netherlands averaged 2.7 percent—the lowest among all developed countries.

This evidence suggests that government policies toward labor markets can be an important determinant of labor mobility and, consequently, the average unemployment rate and duration of unemployment spells. Most of us would agree that government should provide a safety net for people who become unemployed. However, we must keep in mind that the level and structure of benefits can affect the incentive for the unemployed to seek out new jobs, while high minimum wage rates and high tax rates can reduce the demand for labor.

Another aspect of labor mobility concerns the extent to which people move across regions in response to employment opportunities. What factors influence the geographic mobility of labor? Surely a part of the explanation is cultural. I mentioned that the United States is a nation of immigrants and, as such, Americans have always been accustomed to moving in search of new opportunities. In many other countries, people traditionally live close to where they grow up and the idea of moving a significant distance away from home is foreign to them.

Economic factors also may play a role in geographic mobility. For example, although home ownership is more widespread in the United States than in many other countries, the U.S. market for long-term mortgages is relatively efficient and the transactions costs associated with real estate transactions are relatively low. Hence, Americans tend not to be tied down by the ownership of their homes.

Housing markets are not as deep in many other countries. Further, the prevalence of rent controls, publicly allocated rental housing, and other factors inhibit mobility, even for people who rent.

**SO WHAT?**

Why all the concern about labor mobility? The reason is simple: The high mobility of the American labor force has been a key determinant of our nation’s economic success. This mobility implies that when new opportunities are created that boost labor productivity in existing industries, or lead to the birth of entirely new industries, people can and do move freely to supply the labor necessary to build those industries. For example, in the early part of the 20th century, we saw a mass exodus of people from farms to cities, both because mechanization reduced the demand for labor on the farm and because a slew of technological advances greatly increased labor productivity in American manufacturing and created hundreds of thousands of new, high-wage jobs. The flow of labor from low- to high-productivity uses spurred economic growth and increased our nation’s living standard.

In the United States, we have few impediments to the flow of labor and other resources from low- to high-productivity endeavors. The costs of hiring, and also of firing, labor are relatively low. Some countries have imposed rigid policies to discourage firms from laying off employees. These efforts to enhance job security have, however, often served to diminish employment security by discouraging the hiring of workers in the first place. As a consequence of such impediments, as well as the relative immobility of labor in many countries, many people
who desire work are unable to find it. It makes no sense to artificially limit opportunities to find productive employment any more than it does to devote scarce resources to the production of goods and services that no longer are in demand, or that can be had less expensively from other sources.

The limits imposed by certain labor market policies are often entirely unintentional. I recall my travels around the Eighth Federal Reserve District in the late 1990s, when the labor market was so strong. One employer after another described how difficult it was to find workers and how firms were dealing with the labor shortage. Companies took chances on hiring workers they would not even have looked at a few years before. These were workers who had been on welfare, or recent immigrants with little command of English. A given employer might find that only half, or fewer, of the new hires would work out, but the investment was worth the effort. Would firms have taken these chances if the law required elaborate procedures for firing workers and payment of expensive severance benefits? The answer is obvious. Many of the marginal workers of a few years ago are employed today, and are not marginal any more.

A DYNAMIC ECONOMY

A successful, high-growth economy must be a dynamic economy. By that I mean that through the interplay of market forces, resources are moved efficiently to their most productive uses. When new technologies or other forces create profitable opportunities, the market system will allocate productive resources to exploit those opportunities. A highly mobile labor force gives a country a competitive edge in exploiting new technologies and other market opportunities.

U.S. history is replete with examples of “creative destruction”—a term coined by the economist Joseph Schumpeter to describe the process by which new industries displace existing industries and how this phenomenon is fundamental to economic growth. Schumpeter explained that technological advances and other forces can both increase the productivity of resources in existing industries as well as lead to the creation of entirely new industries. In doing so, there are inevitably winners and losers, but generally the winners exceed the losers and, in the aggregate, economic activity expands and living standards rise.

Consider the development of the electric motor. Technological advances in the second half of the 19th century made the application of electric power feasible in many industries. Entirely new industries devoted to the generation and distribution of electric power, and to the building of electric motors and machines, were born. At the same time, the application of electric power boosted labor productivity in countless existing occupations, from auto manufacturing to office work. There were some losers, of course, including those who built steam engines or gas lamps. But the jobs created by the advances far outnumbered those destroyed. And even many of the losers found the costs temporary, as they were able to find new employment in growing industries after a spell of unemployment.

Move forward to the last decades of the 20th century. This time the microprocessor was the hot new technology. It led to the creation of the desktop computer and associated software. Thousands of jobs were created by firms, such as Microsoft, Apple, and Dell Computer, that did not even exist in 1970. At the same time, the application of the new technology in established industries greatly enhanced productivity and led to rising wages and increased demand for labor. Some firms and jobs did not survive the computer revolution. But many of those who lost jobs in old industries were quickly re-employed, thanks to the creation of new jobs in both new and existing industries. On balance, the technological progress boosted economic growth, increased employment, and raised our standard of living.

I am a champion of free markets, but that does not mean that I see no role for government in the labor market. Government can and should provide a safety net for those affected by the winds of change. Government plays an indispensable role in helping educate our workforce. I also strongly support policies that foster an economic
environment that encourages invention and the application of new technologies.

The United States also enjoys high rates of new business creation, which complement beautifully the flexible labor market. The nation has long had a climate that is favorable to starting a business, to trying out new technologies, and to creation of jobs in new industries. At the same time, we allow firms, both new ones and old ones, to fail. Although we are distressed when we learn of failures and their associated job losses, we are heartened by the creation of jobs in new or expanding industries. Creative destruction, the process described by Schumpeter, is the engine of economic growth and rising living standards. Labor mobility ensures an efficient and rapid reallocation of resources so that the pain of creative destruction is minimized while the opportunities it creates bring about a rising standard of living.

Although job creation in the current economic recovery has been nil, I am optimistic about the prospects for future growth of the U.S. economy. The institutions and practices in the U.S. labor market have not been weakened by the recession of 2001 and the slow recovery. All the fundamentals that drove economic growth in the past are in place today. In time, these fundamentals will overwhelm the present uncertainties that are holding the economy back. Growth is in this economy’s bones and will not be denied.