Economic growth can only occur in two ways—either we work harder or we find better ways of producing the goods and services that satisfy our desires. Of course it’s working smarter, rather than harder, that is the preferred route to prosperity. How will this come about? Well, we need to continually challenge our methods of production. Sometimes, we find gains in our productivity: We add to our capital—both human and physical—and we innovate with new technology. Today we often hear the concept referred to as “business process re-engineering,” but the idea of working smarter is at least as old as the invention of the wheel. Economists also remind us—although it’s sometimes difficult for us to fully appreciate—that another method of improving our standard of living involves expanding trade relationships.

While the national economy is shaking off the recession, I still hear business people in this region complain that the deterioration of our industrial economy will continue long after the national economy has recovered. People here worry because we still think of ourselves as an industrial region, even though the vast majority of us are now employed in nonmanufacturing industries. Like the nation, our region has seen the role of manufacturing change over time.

Since the mid-1970s, even though Ohio’s manufacturing production has continued to grow, manufacturing’s contribution to the state’s output has declined from about 35 percent to 20 percent, and the number of people employed in manufacturing has fallen from around 25 percent to just under 16 percent of total employment.

Indeed, our economy has been changing for decades. And this change has been stressful to many. But although change creates stress, it also presents opportunities. And that brings me to the first point I’d like to make about the nature of economic change: Rising productivity and expanded trade relationships are the only paths to a higher standard of living, despite the challenges we may face during the transition.

What do I mean by higher living standards? I mean that we have more of the things we value—food, clothing, shelter, medical care, education, and so on—in exchange for the time we spend working. I know that some days, it seems as if our incomes don’t stretch enough to cover all of the things we think we need, but the reality is that today’s typical U.S. household has more purchasing power than ever before. If you don’t believe me, think about the one-time luxuries that many people now regard as essentials: the latest entertainment devices, cable service, home computers, two or more cars, multiple cell phones. You get the idea.
It is why most of us no longer sew our own clothes or grow our own food or produce any number of goods and services that we now trade for in the marketplace. The same process is at work not only between individuals, but also between nations. International trade is nothing more than having a larger market available to the ultimate benefit of all trading partners.

So, on the road to a better standard of living, people, businesses, and regions have to navigate change. Productivity and trade drive change in every sector of the economy, in expansions and in recessions. These driving forces affect industries and regions unevenly, and how regions and industries evolve depends heavily on how they respond. If the response is to throw up trade barriers, for example, then that is a big step backward. Policies designed to shelter industries from the effects of competition and innovation may seem appealing in the short run, but they ultimately prevent living standards from advancing.

### Economic Growth and Shifts in Resources

Clearly, like the generations before us, we must prepare for a future that looks different from our past.

This brings me to my second point about economic change: Technological advances require us to rethink our approach to work and careers. This is happening already. No longer do workers count on the security of a lifetime job, as our parents did. Today, most of us have several jobs in our careers. In succeeding years, not only will workers change jobs, but many will change occupations. And some will be employed in occupations that don’t even exist today. We will need to constantly reinvent ourselves by developing new skills, adapting to new technologies, and being flexible about how and where we work.

The U.S. labor market is incredibly dynamic. For example, in a typical calendar quarter during the expansion of the 1990s, about 25 percent of business establishments reduced their workforce. That resulted in job losses that amounted to an incredible 8 percent of total employment. This might seem staggering until I tell you that job gains from business establishments expanding and opening businesses exceeded those losses.

The result? Over a ten-year period, we accumulated an additional 24 million jobs. More recently, during the recession, we saw the reverse of this pattern.

Whether we are in a period of expansion or recession, the number of jobs being created and lost at any given time is substantial: about 15 percent of total employment. And this process—this churning—increases our standard of living over time, as people continue to look for their best opportunities, and firms seek to augment and improve their workforces.

Over time, small net labor force adjustments can really add up to shifts in the nature of our economy. For example, in 1960, about 4 percent of the labor force was employed in services. Today, these industries employ more than 15 percent of a much larger workforce.

The view that we are becoming a low-skilled, low-paid workforce with few opportunities for advancement is simply not true. The fact is that wages in the manufacturing and service sectors, on average, are about the same. Indeed, the industries that are experiencing the strongest job growth in the service sector are industries that pay substantially above the average. For instance, workers in health care, financial services, and information technology all enjoy average earnings that exceed the average manufacturing wage. It is curious that the service economy is often described as little more than taking in each other’s laundry. But people in professional and technical service jobs earn an average of nearly $23 an hour. That’s pretty pricey laundry. And yet, we retain a strong emotional attachment to the industrial economy, which many believe to be the source of all our national wealth.

This faulty perception closely parallels our attachment to farming in the first half of the twentieth century. Perhaps we have forgotten that a hundred years ago, many people presumed that all wealth—all real wealth—came from the ground.

Manufacturers, according to the proponents of agriculture, were merely the fabricators of wealth, not its creators.

Without farming, mining, and forestry, so it was thought, there would be nothing to manufacture; if we let these precious industries wane, economic prosperity would wane with them. Consider that in the 1930s, about 26 percent of the workers in this country worked on a farm; today, it’s less than 2 percent.

So, why aren’t we hungry? Because every working farmer is producing more—about 10 times more.

Today, we are hearing a story like the one told at the end of the nineteenth century. But now, instead of farming, mining, and forestry, we are told that manufacturing is the origin of wealth because it is in manufacturing that all “real” things are created.

### Economic Change and Opportunity

Although the changes being driven by trade and technology have strongly affected manufacturing, I regard these as forces that are reshaping manufacturing, not destroying it.

The recent focus of attention has been China, but our manufacturers have weathered other shifts in our trade position. Think back to the anxieties that accompanied an expansion in our trade relationships with Germany, Japan, or Mexico.

In each case, what we produced changed somewhat, but the total amount of goods manufactured in the U.S. actually rose. What we typically stand to lose through trade is not our economic future, but our economic past.

Which brings me to my final point. I believe that we can and will adapt and emerge stronger, but doing so will require enlightened thinking.

For many years, states and regions have been actively promoting economic growth through a variety of strategies, some of which are designed to attract specific companies to specific locations. It is easy to think that by enticing a company to move here, we have created new wealth. This line of thinking is misguided. In most cases, we have simply moved a business from one place to another without creating any new wealth for our nation. While some government efforts may have a positive impact, economic growth ultimately stems from technological innovations and trade.

If everyone knew how to create new companies and jobs, and how to revitalize economically depressed communi-
ties, we wouldn’t spend so much time discussing it—we would just do it. But successful economic planning is complex and problematic. It is extremely difficult to predict what the new jobs and growth industries will be, not to mention when and where they will appear. The history of innovation contains many examples of inventions that were initially ignored. These same inventions were successfully applied in unforeseen ways by new companies, in places far from the research laboratory.

So there are no easy solutions to the challenges that confront our region, but we can take action. Everyone who has a vested interest in the region’s growth—business and civic leaders, universities, financial institutions—we all have a role to play.

There is also a role for government, of course. Governments at all levels can provide the physical and human services that markets, left to themselves, will undersupply. At a time when public resources seem inadequate to meet the many demands placed on them, it becomes all the more imperative for governments to operate efficiently and to ensure that their funds are being directed toward those activities that yield the greatest return over time.

In an economy that must rely increasingly on brain power, investments that enhance our greatest asset—our people—merit our full attention.

The Federal Reserve Bank of Minneapolis recently completed a study suggesting that investments in early childhood education exceed the returns generally found in more traditional economic development programs (see http://www.minneapolisfed.org/research/studies/earlychild/earlychild.pdf). In the Federal Reserve System, we can produce studies like this one and share our findings with public policymakers, who can use the input to make better-informed decisions.

At the Federal Reserve Bank of Cleveland, we hope to contribute to our region by encouraging more research on a variety of topics, including the role of education in promoting innovation and change. We will be hosting a research conference on this topic next year.

We are also engaging university faculty and others throughout the region in a dialogue on economic development, and we are forging partnerships with them. You will be hearing more from us about these initiatives in the months and years ahead.

Growth, by its very nature, requires change—and change, as they say, is hard. But we cannot look backward.

What we can do is draw strength from our experience. That experience includes a heritage of risk-taking and successful innovation. Akron, Ohio, is home to Inventure Place, the National Inventors Hall of Fame. The building is a monument to creative people who have been directly or indirectly responsible for a tremendous amount of economic growth, and it is located in Akron in recognition of the many contributions our region has made. Let’s build on that foundation.

I’ll end with a metaphor. Think of the steady, upward march of our economic prosperity as climbing a ladder, where each rung is a different stage of our economic development. Until we are willing to release our grasp on the rung we’re holding and reach for the next rung, we cannot hope to reach greater heights.

We must have confidence in ourselves, an appreciation of our strengths, and a willingness to embrace our future.
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