## **FOREWORD**

## Cathy E. Minehan

Education is an issue that touches everyone, personally, professionally, and as citizens of our respective nations and the world. The Federal Reserve Bank of Boston has had a long involvement with education reform in Massachusetts and in Boston specifically. We do this out of a sense of community involvement, but also out of a real desire to improve the pool from which we draw a major share of our workforce. As we consider the challenges facing our country and the world, education, more so than almost anything else, is at once both at the heart of every problem and a part of every solution.

In this regard, the topic for the 47th Boston Fed conference could not have been more pressing. For some time now, we have oriented the topics for these conferences around issues central to economic growth. In recent years, we have focused on technological change, on demographic trends, on managing economic crises, and on promoting increased domestic savings. But as vital as all of these areas are, education is their equal in addressing some of the key questions of our time.

Among the topics most central to ongoing discussions at the Federal Open Market Committee are the appropriate and realistic goals for economic growth. In the late 1990s, a consensus emerged that the potential growth rate of GDP had increased, likely as a result of an increased rate of structural productivity growth. Now, with our nation coming out of a recession, there are debates about whether future productivity trends will be as strong as those during the information technology boom, or more moderate, reminiscent of what we saw in the eighties and early nineties.

The educational mix of the population is a key piece of the growthtrend puzzle. The better educated workers are, the more productive they are, and the more likely they are to provide an impetus to technological change. The more closely the mix of workforce skills matches the demands of the twenty-first century economy, the fewer the bottlenecks we will experience in pursuing our national objective of robust and sustainable growth. In terms of skill attainment, I would argue that education affects not just the quality of the workforce, but also the way in which that workforce implements new technology. Though it is difficult to prove, I believe that the interaction between capital deepening and a skilled workforce has resulted in process reengineering that has been at the heart of the jump in productivity in the United States economy in recent years. Whether productivity continues to surge, with all that this can mean for rising standards of living, depends on continued success in improving workforce skills and quality.

The Federal Reserve also has an interest in promoting education as a complement to our pursuit of sound monetary policy. We believe that a widely educated populace improves the stability of the economy. When many consumers are unable to make good use of information, or when some groups are poorly equipped to make long-range decisions concerning their financial security, free markets do not function up to their potential, and the risk of economic crises becomes greater.

We, in Boston, along with our colleague Reserve Banks, actively advance financial literacy and economic education through a number of public and community programs. One of our newest initiatives involves designing neighborhood workshops covering a range of financial literacy issues such as budgeting, homeownership, basic savings, and access to credit. To ensure the effectiveness of these programs, we need to be aware of the diverse and changing math, reasoning, language, and technological skills of the population. Only by recognizing these educational parameters can we make the appropriate choices for topics and teaching methods.

The Bank has also been active for many years in the Boston Private Industry Council, working to improve both the employment prospects of the graduates of our local schools and our own workforce. One of our recent initiatives, "Classroom at the Workplace," offers high school students an opportunity to improve their literacy and math skills as part of their summer jobs. These summer employees attend daily 90-minute classes designed by teachers from the Boston public schools that take place on our site. Begun as a small effort by our Bank, Verizon, and Gillette three summers ago, this program now involves 20 employers and 300 students from Boston public schools. These numbers mean that we stand a good chance of helping about a third of the Boston seniors who have not yet passed the high-stakes test that is a state graduation requirement in 2003.

Many of the decisions that we, as individuals, make about education seem very localized, not just the personal decisions we make about schooling for our families, but also the stances we take as voters and public citizens. For those of us living in Massachusetts, these decisions include whether we support or reject tax-limitation measures that affect school funding, and whether we choose to support or reject standardized testing as a high school graduation requirement. Across the United States, state by state, similar deliberations are taking place that alter public education. But these decisions are also being replicated throughout the world in developed and developing countries alike.

Recently, James Wolfensohn of the World Bank spoke of a new initiative to implement reforms in education (and two other key areas aimed at jump-starting development) in 15 or 20 developing countries. His concise assessment of the related challenges—time and scale—struck me as at the heart of all of the efforts we need to be making locally in education reform. No matter where you are in the world, education is a vital component of development, and one that defies easy solutions as we seek to leverage its contributions to economic growth.

Thus, I believe it is a hopeful sign that the current wave of worldwide education reforms involves rigorous economic analysis to an unprecedented extent. It goes without saying that this is a welcome development to an institution such as the Federal Reserve that relies on and values economic research. But it also follows the tradition of microeconomists making noteworthy contributions to public policy in a variety of important sectors of the economy. Four decades ago, Kenneth Arrow, economist and, ultimately, Nobel laureate, published an analysis of healthcare markets in the American Economic Review. At the time, it was radical to view healthcare as operating within standard models of economic behavior and pathbreaking to analyze how imperfect consumer information affected healthcare delivery. Today, Arrow's insights remain at the core of how policymakers view healthcare, just as Ronald Coase's scholarship guides environmental and natural resource policies, and as Alfred Kahn's initiatives have transformed transportation markets. Will the application of economic modeling provide us with insights that are useful in creating better education systems—systems that meet the challenges of time and scale? I believe that the answer is yes, and that this conference, bringing together so many different backgrounds and fields of expertise, helps provide some new insights.

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