Addressing the Challenge of Growing Earnings Inequality

by Cathy E. Minehan with Robert K. Triest*

Over the past several years, the United States has enjoyed the most favorable macroeconomic conditions in more than three decades—to some, the definition of "as good as it gets." Unemployment has been low, growth has been above expectations of what the U.S. economy could sustain over such a long period, and inflation has declined to a very low rate of growth. But one feature of today's economy stands in marked contrast with the earlier years. In the 1960s, the incomes of all those involved in the economy were much more narrowly spread than is the case today. Whether one examines the wages and salaries of workers or the total incomes of families and households, income inequality, that is, the difference in income between those at the upper and lower ends of the income distribution, has increased markedly. To some, perhaps, the definition of an economic problem.

Federal Reserve policies, like those of all central banks, aim to achieve price stability and a sound and stable banking and financial system. Neither monetary policy, nor policies and practices to maintain a stable financial system, can directly address income inequality—nor should they. Rather, the larger goal underlying these policies is to create an environment that is supportive of long-term economic growth and the improvement of living standards. Arguably, that environment exists at present; but it has not yet allowed all those in our society to benefit at the same rate. This unequal sharing of the fruits of growth should be a concern for all those involved in macroeconomic policy setting and for the private sector as well.

Unequal incomes are not intrinsically bad. They are, in many senses, the ultimate reflection of a competitive economy, with its emphasis on market-based wages. Income inequality is a problem, however, when significant numbers of people lose their ability to compete for the jobs that can improve the quality of their lives. Over time, increased inequality can signal that some members of society are participating less fully in the economy than was true in the past. They may not have the opportunity to develop the skills needed for success in today's labor market. More effectively integrating such people into the economy, in ways that are consistent with increased productivity, may well enhance the economy's potential to grow, creating benefits for everyone.

Economic growth is facilitated by a well-functioning government, a stable political and economic environment, and sound economic policies. These factors depend on a degree of social cohesion and political consensus that could be threatened by marked increases in inequality. It is in the interest of us all to search for economically efficient means of reducing or, at a minimum, stabilizing the growth in inequality. This essay explores the causes of income inequality and reflects on one Boston-based version of a program broadly aimed at addressing those causes.

The Growth of Economic Inequality

The basic facts regarding the growth of inequality are striking. As Figure 1 shows (page 6), the incomes of families throughout the income distribution increased rapidly during the 1960s. But in the subsequent decades, the incomes of families at the bottom of the distribution stagnated (after adjusting for inflation), while those at the top continued to grow. Underlying this pattern are certain demographic

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shifts. The growth of families headed by single mothers, who tend to have low incomes, has contributed to the stagnation of family income at the bottom of the distribution. And an increase in the incomes of wives with high-earning husbands has pushed up family income at the top of the distribution. However, probably the most important contributor to the widening spread between those at the top and bottom of the income distribution has been a marked increase in inequality of workers' earnings. This increase in earnings inequality, in turn, reflects factors that are more economic than demographic.

Earnings Inequality and the Increasing Return on Education

One important factor in increasing income inequality relates to the growing market value of higher levels of education. This has widened the earnings gap between workers with varying levels of education, as reflected in Figure 2 (page 7), and reflects changes in both supply and demand. After adjusting for inflation, the average annual earnings of men who have not gone to college have fallen substantially over the past twenty years, while the average annual earnings of men with a four-year degree or better have increased.

For women, trends in average earnings have been greatly affected by an increase in their hours of work, as well as by their educational attainment. Thus, women with high school or less education have seen little earnings growth over the past twenty years, but no actual earnings decline. Women with a college degree or better, however, have enjoyed a substantial increase in real annual average earnings.

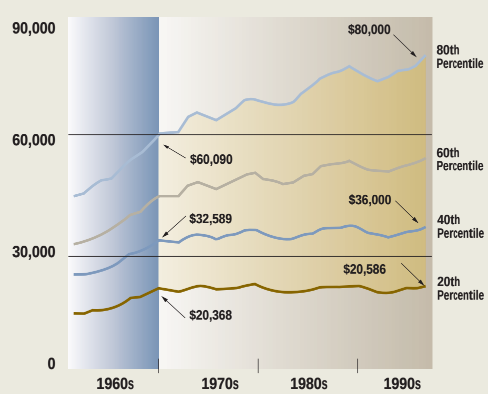
For both genders, then, the earnings premium associated with college education increases substantially. During the same period, college attendance rates increased and older workers were replaced by younger individuals with higher degrees of educational attainment. Thus, the economic return to education increased at the same time that the relative supply of educated workers increased, indicating a shift in labor demand toward more educated workers.

Various studies of earnings inequality have also shown that the return to labor market experience has increased over time. But a substantial part of the increase in the inequality of earnings cannot be fully explained by educational attainment, years of work experience, or other readily quantifiable determinants of earnings. One possible explanation is a general increase in the return to skill, along a host of difficult-to-measure dimensions. Some workers with similar backgrounds are simply better than others; they may work more effectively with colleagues, they may be more persuasive sales people, or they may exercise more dynamic leadership. Such differences are real, but they are very difficult to characterize in a way that allows their impact on compensation to be calculated.

Greater instability of earnings may also have contributed to the increase in inequality that is not explained by education or experience. In other words, if incomes have become more volatile — up one year and down the next — looking at earnings in a single year may exaggerate the degree of inequality over a longer time frame. The earnings and incomes of individuals and families fluctuate

Growth in Inequality
For all U.S. families, income growth was healthy during the 1960s. After that, income growth came to a halt for the bottom two fifths, while strong growth has continued for those at the top.

Income Limits for Each Fifth of All U.S. Families
1997 Dollars



Source: U.S. Bureau of the Census

Figure 1

Figure 2

Economic Return to Education Has Increased...

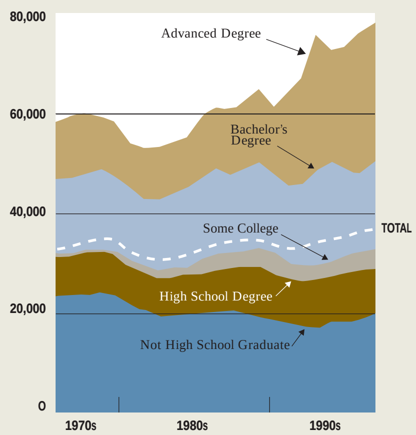
Men

In the past 20 years, earnings of males not attending college have declined, while earnings of males with college degrees have climbed. The growth has been especially pronounced for holders of advanced degrees.

Women

Working more hours has helped women avoid the same earnings declines as men. Women not attending college have seen modest growth in their earnings, while earnings growth has been substantial for women holding college degrees.

Mean Annual Earnings of
Male Workers 18 and Over
1997 Dollars



Mean Annual Earnings of
Female Workers 18 and Over
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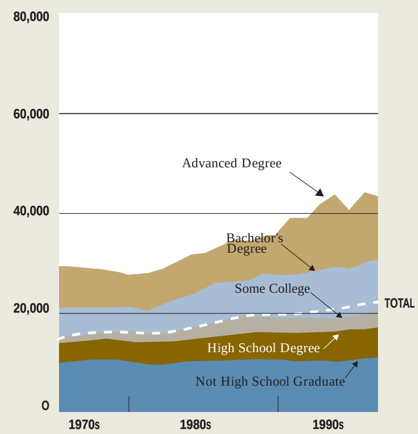
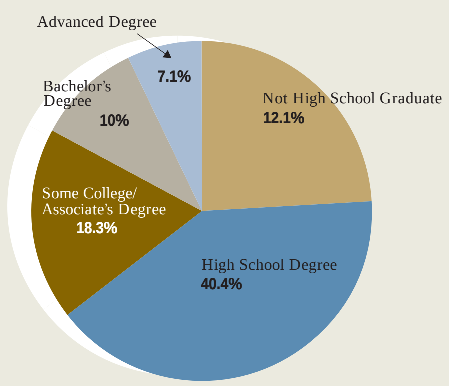


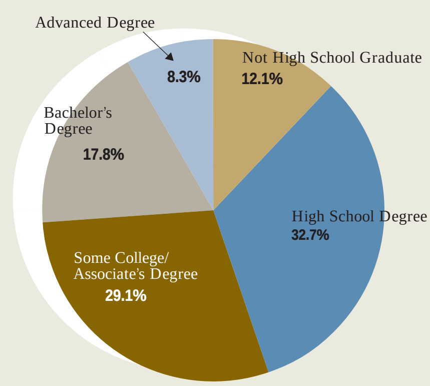
...Even Though the Relative Supply of College-Educated Workers Has Increased

Distribution of Workers by Degree Level

1977



1997



Source: U.S. Bureau of the Census

over time for a variety of reasons. Individuals and families may be near the bottom of the income distribution because of a temporary spell of unemployment or a short-run reduction in work hours while in graduate school or caring for a young child. And some individuals may have low earnings simply because they are young and new to the labor market. Over time, their earnings increase as their skills improve and they find jobs to which they are well matched. If measured income inequality simply reflected people's earnings at a point in time and, in fact, workers could move across the income distribution with ease, income inequality would not be such an issue. Indeed, the existence of high wages might provide incentives to workers to be even more mobile.

Unfortunately, available data suggest that the degree of mobility across income groups is not sufficient to greatly ease concerns about inequality. One recent study by Peter Gottschalk found that 42 percent of the workers in the bottom quintile of the earnings distribution in 1974 were in the bottom quintile 17 years later, while 23 percent had moved up only into the next quintile. Thus, workers over time were unable to substantially close the initial gaps in income, and many of those who started at the bottom stayed there.

Causes—And Possible Solutions

While the facts regarding the increase in inequality are not disputed, there is not the same degree of consensus on why such things as education, and returns to skill more generally, have been driving incomes to become more unequal in recent years. And there is more controversy about how to combat the increase. Still, it is generally agreed that growing inequality is a serious problem and that innovative policies are needed to address it.

What Has Caused the Increase in Earnings Inequality?

Most research shows that contributors to the increase in earnings inequality include technological change, increased globalization of the economy, and institutional factors, as reflected, in part, in Figure 3.

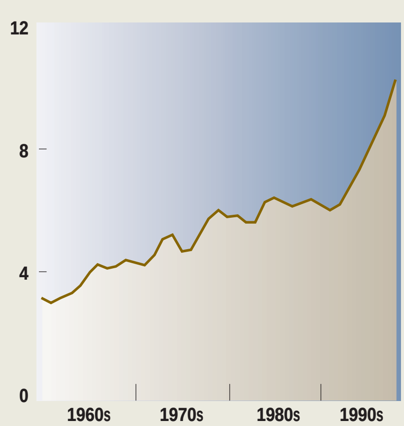
Figure 3

Increased Technological Complexity & Globalization Have Contributed to the Growth in Income Inequality.

Technology

More technologically complex equipment requires more highly educated workers and makes them more productive. Their earnings reflect the greater value of their output. Since the mid 1970s, business spending on new equipment has grown rapidly as a share of gross domestic product.

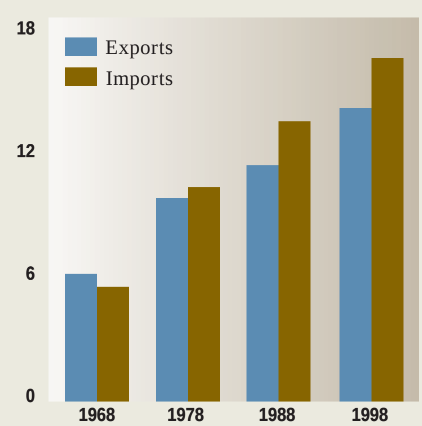
Producers' Durable Equipment
(1992 Chained Dollars) as Percent of Real GDP



Globalization

Since 1968, U.S. exports have more than doubled as a percent of gross domestic product, while U.S. imports have tripled. The U.S. increasingly looks abroad to lower-wage countries for imports involving labor-intensive, low-skill production, while U.S. exports increasingly reflect the highly skilled, more highly paid work that is remaining in the U.S.

Export and Import of Goods, Services and Income, as Percent of Nominal GDP



Researchers differ, however, in the relative importance they attach to these causes. Technological change is thought by many to have been very important. Advances in computers and related technologies, it is argued, have increased the demand for highly educated workers and have decreased the demand for the relatively unskilled. Basic economic theory suggests that this shift in the composition of labor demand would increase the wages of highly educated workers relative to those with lesser degrees of education. Changes in the way firms are organized and managed, such as increased emphasis on pay for performance, may also have increased the premium attached to knowledge-based skills.

Increased globalization works in a similar way. Labor-intensive fabrication and assembly operations are often performed more cheaply in low-wage countries than in the United States, while management, engineering, and design functions are less easily moved offshore. So increased globalization also tends to shift labor demand in the United States toward more highly educated workers.

Institutional factors, such as the drive to "flatten" corporate organizations, the decline in the number of workers in labor unions, and the fall in the real value of the minimum wage, may also have contributed to increased income inequality. In particular, as technological change and globalization alter the nature of jobs in the United States, fewer jobs are created in manufacturing industries that are typically unionized. As a result, the share of the private sector work force employed in unionized jobs has decreased steadily over the past twenty years, with all that implies about the pervasiveness of the typically higher wages and benefits enjoyed by union workers. In addition, while increases in the nominal minimum wage have been enacted over the past 20 years, on an inflation-adjusted basis it remains well below its 1979 level. While clearly this is a political issue of no small magnitude, the decline in the real value of minimum-wage jobs reflects the reduced demand for such jobs in an increasingly technically and globally driven economy.

Undoing the Cause Is Not the Solution

Although we would like to have a fuller understanding of the determinants of the increase in earnings inequality, this knowledge would not necessarily change what we view as the best policy responses. Quite simply, undoing the causes of the increase in inequality is not the best solution to the problem. In some cases, such as technological change, it is not possible to reverse the technological progress that has led to the increase in the wage premium attached to educational attainment. And even if the clock could be magically turned back, this would not be desirable. Technological progress is a key factor in productivity improvements and economic growth. Similarly, great benefits for everyone are derived from international trade, and even if increased globalization has contributed to earnings inequality, it does not follow that steps should be taken to restrict trade.

Tight labor markets can be especially beneficial to disadvantaged workers, as employers who face a growing number of job vacancies turn to applicants that they might otherwise not have considered. Indeed, during this long expansion that began in 1991, unemployment rates for disadvantaged minority groups, such as African-American and Hispanic teenagers, have dropped well below the lowest levels of the last expansion, and real median family income has begun to rise in the last several years, albeit slowly. Similarly, the average real hourly wage of workers at the bottom of the wage distribution has been increasing recently. Because of this, it is sometimes suggested that the Federal Reserve System should lean toward allowing labor markets to remain tight, even when doing so runs the risk of igniting price inflation.

Let us be clear on this point: Such a policy would be counterproductive. There is no long-term trade-off between unemployment and inflation. If we "buy" a tight labor market today at the risk of an acceleration of inflation, eventually economic slowing will be necessary to stem that acceleration and restore price stability. Those at the bottom of the income distribution are better off with more stable labor markets, rather than suffering through boom and bust cycles, and better off with low inflation as well. Stable markets and prices provide the environment most conducive to the economic growth and sound investment that ensure job creation.

We have been very fortunate lately in enjoying a combination of low inflation and unemployment, along with rapid growth of productivity and economic output and a slowing of the growth in income inequality, but history teaches us that such good times will not last forever. Despite our best efforts to avoid them, business cycles are likely a fact of life, and a downturn will occur at some point. To ensure hard-won ground is not lost, public policies and private sector practices must focus on creating a work force that can more broadly meet the demands of the changing, competitive U.S. economy. One way to do this is to increase levels of education and skill.

The Importance of Education and Skill Development

Both the public and the private sectors stand to gain when more people are working and when more jobs are filled by better-qualified candidates. On the public side, policies aimed at income support for low-income families increasingly have moved in the direction of providing incentives for increased work effort, by limiting the duration of welfare benefits and by reducing the tax burden on the working poor. This shift in policy has at its core a belief that both individuals and society more generally will be better off in many ways, not just monetarily, if workers are successful in the workplace. To make this possible, those at risk of falling into the very low-wage sectors of the market, or of not working at all, must be prepared to compete for the jobs offered at higher wages. One place to start is with high school students.

It is clear that private sector demand for highly educated workers has increased relative to the demand for less-educated workers, resulting in the increase in the earnings premium associated with college education. Thus, promoting greater educational attainment and skills development by youths who are at risk of dropping out of high school, or of not continuing on to post-secondary education, would directly

School-To-Career student
on the job at the New England Medical Center.

help those youths affected by the recent public policy changes. It would also help to meet the needs of the private sector by increasing the relative supply of better-educated workers. Educational attainment should be interpreted broadly in this context. Years of schooling and degree attainment are not all that matter; the quality of schooling and the relevance of the skills developed to today's (and tomorrow's) economy matter as well.

Much emphasis has recently been placed on educational reform, and this is surely important. Public policies are needed to ensure that schools are supplied with the resources to equip their students with the skills required to succeed both in higher education and in the workplace. Experimentation with new teaching methods, curricula, and methods of school management and organization, as well as standardized testing to better understand what does and does not work, seem useful. In particular, the recently introduced MCAS tests in Massachusetts will likely be helpful as more experience is gained with their use. But changing funding and educational techniques, and imposing new standards, will not cure the problem. Students, particularly those in high school, must see the value of education and skill building as well.

To many students, the link between academic achievement, educational attainment, and economic success later in life is clear. Such students have a strong motivation to work hard in high school and go on to higher education. However, this is less likely to be the case for students in low-income urban districts. Fewer of their peers go on to college, and fewer of their neighbors work in education-intensive, knowledge-based jobs than is true of students in higher-income areas. And businesses which locate in their neighborhoods may not place the same premium on educated employees that exists in the broader economy. For students in low-income areas, programs that make the link between academic skills and economic rewards more salient can be an effective means of motivating improved academic performance and educational attainment. Moreover, such programs can be important ways in which businesses develop the skilled employees they need, particularly in times of economic growth and competitive challenge. Such a program exists in Boston, and while it may not provide all the answers to educational reform—or reducing income inequality more generally—it sets a promising direction.

The Role for Private Sector Partnerships

In Boston, the link between good high schools and an employable work force has long been recognized. Starting in 1982 with the signing of the first Boston Compact, the joint roles of the public schools, the private sector, and local colleges and universities in creating that work force were acknowledged. Essentially the Compact states that if the Boston public schools graduate better students—students who come to school more often, drop out less, and get better grades—then local industry will hire those students and local colleges and universities will offer them higher education. It is important to appreciate that the goals of the Compact are not simply a function of corporate altruism. They reflect the needs of Boston businesses to have a more qualified pool of available local workers. Thus, involvement in the Compact has been driven in large part by business economics, and the achievement of Compact goals is, in many senses, a "win-win" situation. Boston public school students get a better education and Boston industry gets better workers.

The Compact has been re-signed two times since 1982, and is scheduled for revisiting in 1999. It has many goals, but one that has proven particularly effective is its commitment to a concept known as School-to-Career. This program was the model for, and was initially funded by, the federal government's school-to-work legislation signed in 1994. Now, however, it is funded by the state of Massachusetts and the Boston Public School System. Under the direction of the local Private Industry Council (PIC) and the school system, this program helps students link schoolwork with career success.

The PIC's program offers high school students paid internships in particular business areas—medical technology or financial services, for example—and requires that the high school curriculum be redesigned to take advantage of these real world learning experiences. Students learn the relevance of biology or geometry in a much more hands-on way when they see what they have learned in the classroom in action in the workplace. The interdisciplinary knowledge required for success at the workplace encourages teachers to work in teams that focus on career needs. Many Boston high schools are now creating smaller learning communities oriented around particular businesses and calling them career pathways. This more focused environment has the natural outcome of increasing attention to the individual student. In addition, PIC employees provide a connection between employer and student, increasing adult attention to the student even further. Teachers become aware of workplace needs, often through summer programs and on-site visits, and they are encouraged to adjust curricula to the standards of employers.

The School-to-Career program is labor intensive and expensive. Boston alone spends over $2 million per year for staff to recruit businesses and place students. But the results are impressive. A case in point is the experience of over 50 School-to-Career students who have held internships at the New England Medical Center in recent years. Largely minority, inner-city students of Boston public high schools, all of these program participants have gone on to college or university training, compared with fewer than 60 percent of their high school peers. And many of them continue to work at New England Medical Center, reflecting again the win-win aspects of this program. School-to-Career students, as measured by data from the Boston public school system, are also absent less frequently and get better grades. As a result of the program, they see the connection between education and work and come to the realization that higher skills equate with better jobs and higher income.

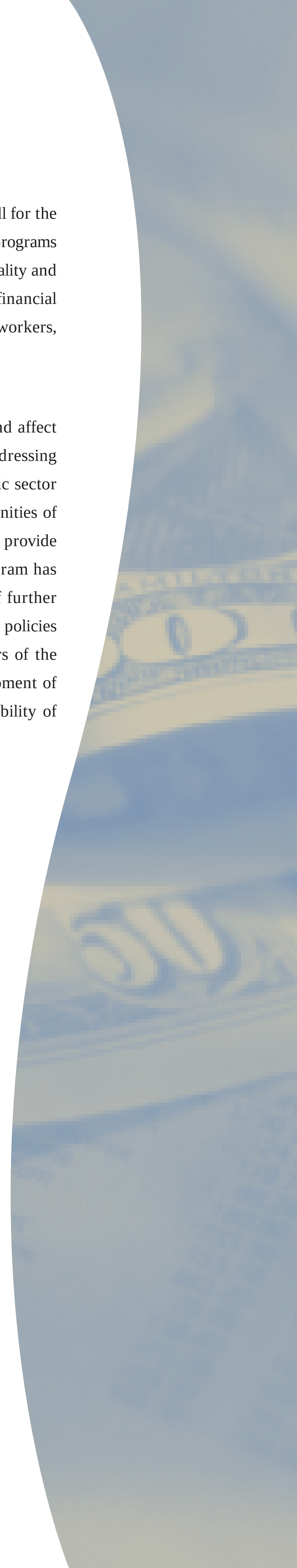
Some have argued that School-to-Career programs run the risk of "dumbing-down" the high school experience with a focus on technical education rather than the liberal arts. This view simply does not square with the experience in Boston. By lending relevance to students' educational experiences, and responding to the needs of many to have a hands-on educational experience as well as a strictly academic one, School-to-Career programs stimulate intellectual development and seem to increase the likelihood that students will continue their schooling. The thinking, writing, and analytical skills developed in a liberal arts curriculum are enhanced, not lessened, by application in the world of work.

By promoting the skills development and earnings potential of young people at risk of falling into a pattern of low-wage jobs, School-to-Career programs help to reduce future earnings inequality. They are also an important tool for generating economic growth and development. There is concern both in New England and in other areas of the country that prospects for future growth could be reduced by a shortage of skilled workers. It is important to realize that the shortage is more than just a phenomenon related to the current strong state of the economy. Demographics suggest the work force will be growing relatively slowly in the future. Thus, it is particularly important that the new entrants into the work force be equipped with the flexible skills needed to fill the technically complex and information-intensive jobs being generated by technological innovation.

Programs like Boston School-to-Career, even on a vastly increased scale, are not a cure-all for the problem of earnings inequality. But one must realize that no simple solution exists. Expansion of programs like School-to-Career is one reasonable step that can be taken to reduce future earnings inequality and increase the supply of skilled workers. In combination with other policies, such as increased financial aid for college students from low-income families or enhanced training opportunities for older workers, for example, School-to-Career can have a substantial impact.

Concluding Thoughts

Growing income inequality could undermine the quality of life in the United States and affect the pace of economic growth. While specific monetary policy action is not a tool suited to addressing this problem, other policies and practices can help. These ideally will involve a mix of public sector and private sector efforts, both to enhance the earnings potential and labor market opportunities of those who are at risk of falling into (or staying in) the bottom of the earnings distribution and to provide a better pool of labor for local businesses. Boston's involvement in its School-to-Career program has been convincing as to the promise of this approach, but other strategies are also worthy of further study and consideration. We hope that this essay will help to spark more debate about what policies and programs should be implemented or expanded. It is especially important that members of the business community join this debate and increase their efforts to enhance the skills development of young workers. Our prospects for future economic growth depend critically on the availability of skilled workers.



Articles used for this essay that you may want to read:

Journal of Economic Perspectives symposium on wage inequality, volume 11, number 2, Spring 1997:

Peter Gottschalk, "Inequality, Income Growth, and Mobility: The Basic Facts," pp. 21-40.

George E. Johnson, "Changes in Earnings Inequality: The Role of Demand Shifts," pp. 41-54.

Robert H. Topel, "Factor Proportions and Relative Wages: The Supply-Side Determinants of Wage Inequality," pp. 55-74.

Nicole M. Fortin and Thomas Lemieux, "Institutional Changes and Rising Wage Inequality: Is There a Linkage?" pp. 75-96.

Special Issue on Spatial and Labor Market Contributions to Earnings Inequality, Federal Reserve Bank of Boston, New England Economic Review, May/June 1996.

Stuart E. Wiener and Stephen A. Motto, "Income Inequality: A Summary of the Bank's 1998 Symposium," Federal Reserve Bank of Kansas City, Economic Review, Fourth Quarter 1998, pp. 5-12.