
Income Inequality: A Summary of The Bank's 1998 Symposium

By Stuart E. Weiner and Stephen A. Monto

Income inequality has become an increasingly important public policy issue in industrialized countries in recent years. Although macroeconomic conditions have been favorable in many of these countries, the distribution of income within and across countries has remained uneven. In fact, in several countries, income inequality has risen. As a result, policymakers have become concerned that large segments of the population are not reaping the benefits of economic growth.

To gain a better understanding of these issues, the Federal Reserve Bank of Kansas City sponsored a symposium titled "Income Inequality: Issues and Policy Options" held at Jackson Hole, Wyoming, August 27-29, 1998. The symposium brought together a distinguished group of public officials, academics, and private-sector representatives. The discussion was far-ranging and insightful. As moderator Alice Rivlin noted toward the end of the conference, while there was a divergence of opinion in several areas, there was a consensus that "poverty, deprivation, and lack of opportunity are things that ought to be of great concern to us."

Stuart E. Weiner is a vice president and economist at the Federal Reserve Bank of Kansas City. Stephen A. Monto is an assistant economist at the bank. This article can be accessed on the bank's Website at www.kc.frb.org.

This article summarizes the papers and commentary presented at the symposium. The first section reviews the changes in income inequality patterns over the past two decades. The second explores the reasons for these changes. Monetary policy links and the economic impact of distributional change are taken up in the following two sections. The final section considers policy options and summarizes the remarks of an overview panel.

Recent Trends

Alan Greenspan opened the conference by observing that distributional issues have received increased attention in recent years as several countries have experienced a widening in earnings and income inequality. While there is general agreement that technological change has been a key contributing factor—high-skilled workers as a group have prospered relative to the less-skilled—other factors may also be at work. These include evolving organizational structures and the growth in world trade. Greenspan noted that, in trying to assess the distribution of overall economic well being, trends in consumption and wealth are relevant in addition to trends in income and earnings. A central bank's goal regarding distributional issues, Greenspan asserted, is to pursue a disciplined stable-price policy that "will offer the best underpinnings for

identifying opportunities to channel growing knowledge, innovation, and capital investment into the creation of wealth that, in turn, will lift living standards as broadly as possible.”

Tony Atkinson, in his paper, detailed recent income distribution trends in industrialized countries. The United States, the United Kingdom, and some other OECD countries have experienced rising income dispersion since the 1970s. The rise has been particularly marked in the UK, where the Gini coefficient, a summary measure of income differences, has increased by nearly a half. The increase in the United States has been about 10 percent. Poverty rates, defined as the proportion of households with income levels below half the national average, have also increased in some OECD countries, including the United States and the UK. Atkinson stressed, however, that there has been considerable diversity of experience across countries and, in his view, it is misleading to talk of a general trend toward increased income inequality.

Atkinson also drew attention to the various components underlying the distribution of disposable household income. Individual labor earnings is a key component, but also important are income from capital, private and public transfers, taxation, and household composition. In the UK, for example, it appears that the redistributive effect of cash transfers and taxation lessened in the late 1980s, contributing to the widening of income dispersion. Macroeconomic fluctuations can also have an impact, but the links between macro variables and the distribution of income are complex and require further study.

Lawrence Katz, in commenting on Atkinson’s paper, agreed that national experience has varied widely with respect to income distribution trends. But, on the whole, he felt that there had been a noticeable increase in income inequality. For example, according to data based on the Luxembourg Income Study, 10 out of 13 OECD countries have experienced some increase in

family income inequality since 1979. Indeed, for most of these countries, these increases represent a break from a pattern of sustained reductions in inequality over most of the twentieth century. Katz also made the point that, when one expands the measure of economic well-being to consider both the distributions of income and of employment opportunities, a common pattern of rising “economic inequity” becomes apparent for most industrialized countries. France and Italy, for example—countries with little or no increase in income inequality—have seen sharp increases in unemployment since the 1970s.

Although Katz agreed that the evolution of a country’s income distribution can reflect a number of different components, he argued that changes in earnings inequality are especially important. He has found in recent research, for example, that 75 percent of the widening income differential between the top and bottom quintiles of married couple families in the United States can be explained by widening wage differentials. Thus, understanding the determinants of changes in income inequality requires understanding the determinants of changes in earnings inequality. In the United States, the following changes in the wage structure have been observed: (1) from the 1970s to the mid-1990s, wage dispersion increased dramatically for both men and women; (2) wage differentials by education and occupation increased; (3) wage dispersion expanded within demographic and skill groups; and (4) increased cross-sectional earnings inequality has not been offset by increased earnings mobility. Katz noted other OECD countries have also seen important changes in wage structure.

Katz concluded his remarks by underscoring Atkinson’s point that the links between macroeconomic variables and the distribution of income are complex. Strong macroeconomic performance will improve prospects for the disadvantaged. But studies suggest that structural changes in the labor market have played an important role in the rising inequality in the

United States. Thus, “tight labor markets need to be complemented with greater access to education for the disadvantaged, work-force preparation strategies that better enable those without college degrees and from poor backgrounds to take advantage of emerging opportunities, and with policies to supplement the earnings and possibly subsidize the employment of the less-skilled.”

Ignazio Visco, in his comments on the Atkinson paper, concurred with Katz that, while trends in income dispersion have been uneven, the majority of OECD countries did experience an increase in income inequality over the one to two decades leading up to the mid-1990s. A recent study by the OECD indicates that a widening in earnings dispersion was principally responsible and that changes in taxes and transfers served as a partially offsetting force in most of these countries. Visco, like Katz, stressed that employment rates vary widely across OECD countries, and when one calculates earnings dispersion across the entire working-age population, including those who are unemployed, Gini coefficients in low-inequality/high-unemployment nations like the Netherlands rise markedly.

Visco also highlighted the importance of household formation changes and mobility patterns in assessing income distribution movements. Regarding household formation, he noted that there has been an increase in the share of two-earner households, which has led to a widening in the family income gap between two-adult and one-adult households. Regarding mobility patterns, he noted that earnings and income mobility appear to have remained relatively constant in the few countries where data are available, suggesting that, where cross-sectional income and earnings distributions have increased, the distribution of lifetime incomes has also increased.

Causes

Dennis Snower, in his paper, explored the causes of rising earnings inequality in industrial-

ized countries. He reviewed the conventional analysis and offered an alternative explanation stressing organizational change.

The conventional analysis begins with the observation that, over the past two decades, the earnings of skilled individuals have risen relative to the earnings of unskilled individuals despite the fact that the supply of skilled labor has risen relative to the supply of unskilled labor. The inference is that the demand for skilled labor has increased faster than its supply. Three possible sources commonly suggested for such a relative demand shift are globalization, deindustrialization, and skill-biased technological change. This model has come to be generally accepted because it is capable of explaining a number of stylized facts, for example, in the United States, the enhanced premium paid to workers with more education and more experience and the widening wage gap between nonproduction and production workers.

Snower argued, however, that the conventional analysis is not entirely satisfactory. He considered first the globalization and deindustrialization variant, with specific reference to the United States. Since the 1960s, the United States has become increasingly integrated into the world economy. With its relatively large supply of skilled labor, the United States has had an increased incentive to produce goods and services that make intensive use of skilled labor and to import goods and services that are intensive in unskilled labor. The effect, according to the conventional analysis, has been a decline in the relative demand for unskilled workers in the United States. Deindustrialization—the decline of low-wage manufacturing industries and the rise of high-wage service industries—has had a similar impact. One problem with these arguments, Snower asserted, is that empirical studies have found that such compositional effects are too weak to account for the observed changes in earnings inequality. A second, more fundamental, problem is analytical contradictions. For

example, counter to the predictions of the hypothesis, the demand for skilled relative to unskilled labor appears to have risen in virtually all countries, not just in those with abundant skilled labor.

The technological-change variant of the conventional analysis is more popular, but it too has problems. Technological advances of the last 20 years, it is argued, have largely been skill-biased; that is, they have increased the productivity of skilled, rather than unskilled, workers. Indeed, in many cases, unskilled workers have been displaced: the use of computers to automate repetitive clerical tasks and the use of robotics on the assembly line are two examples. As a result, the wages of skilled workers have risen relative to the wages of unskilled workers. Snower noted that there is evidence supporting this technological change hypothesis but there is also evidence at odds with it. For example, the hypothesis cannot explain the widening of income dispersion *within* education, experience, and occupational groups; nor can it explain why some OECD countries have experienced a marked increase in income inequality and others have not. As with the globalization and deindustrialization hypotheses, something appears to be missing.

The answer, Snower suggested, is organizational change. Sweeping changes in the organization of production, of product design, of marketing, and of authority within firms—changes made possible through advances in computer and telecommunication technologies—are transforming postindustrial society. Workers who exhibit versatility across tasks, communicate effectively in a team, and show initiative and responsibility are thriving in this new work environment. The earnings of such workers are rising accordingly. In Snower's view, many of the empirical puzzles, for example, the increase in within-group inequality, can be explained by this "Organizational Revolution." It, rather than globalization, deindustrialization, and technological change, is the driving force behind increasing income inequality.

Robert Lawrence, in discussing the Snower paper, agreed that globalization and deindustrialization have played only a small role in widening income dispersion and that organizational change has been a particularly important factor. Unlike Snower, however, Lawrence saw organizational change as a type of technological change, where technology is defined as the methods by which inputs are combined to achieve output. Hence, in Lawrence's view, Snower "has actually fleshed out the technology hypothesis rather than challenged it."

Lawrence went on to ask an intriguing question. If the organizational revolution, or technological change more broadly, is indeed the primary source of the large changes in the wage structure, why has it also not led to more rapid productivity growth? One possible answer is that it is enhancing productivity but in ways that are difficult to measure. For example, products may be becoming more differentiated and customized, leading to a better match with consumers. The resulting increase in consumer welfare would not be picked up in the productivity data. Alternatively, it is possible that the organizational revolution and technological change are not enhancing productivity. For example, new types of advertising aimed at increasing firms' market shares might in the end be offsetting, resulting in higher wages for advertising executives but no increase in overall social welfare.

Kevin Murphy, in his comments on the Snower paper, concurred with Lawrence that organizational change can be thought of as a type of technological change. Indeed, in Murphy's view, taking the same set of individuals and reorganizing them in a way that produces more output is, from a theoretical standpoint, "technical change in its purest form." But Murphy also stressed that the types of organizational change identified by Snower have important analytical implications. For example, it becomes very difficult to measure shifts in product demand when products are increasingly being differentiated

along specialization, timeliness, and customization lines. Similarly, it becomes very difficult to measure shifts in labor demand when labor is increasingly being differentiated by task—coordination, synthesis, and analysis—instead of by occupation.

In other comments, Murphy noted that the rising wage inequality in the United States is a pervasive phenomenon, running throughout income and educational groups. The one area where wage gaps have narrowed, between men and women, reflects, in Murphy's view, not organizational factors but female supply factors such as increased labor force attachment and changing occupational mix. Murphy also was hopeful that the rising return to education reflected in the widening wage dispersion would give individuals an incentive to augment their human capital.

Monetary policy

Christina and David Romer, in their paper, examined the relationship between monetary policy and income inequality. They began by reviewing the channels through which monetary policy may affect the distribution of income in the short run. According to standard analysis, expansionary monetary policy leads to higher output and lower unemployment over short time horizons. The authors suggested that if income inequality and poverty are sensitive to these variables, monetary policy could be viewed as a means to help the poor.

Consistent with earlier authors who have investigated the short-run behavior of poverty in the United States, Romer and Romer found that the poverty rate (defined as the percentage of the population living in households below the poverty level) indeed falls as the unemployment rate falls. But they could not confirm the common finding that income inequality (measured by the Gini coefficient) responds to cyclical movements in the unemployment rate. Additionally, they found some evidence that an unexpected

increase in inflation leads to less inequality but found no evidence that it leads to less poverty.

Romer and Romer next examined the ability of monetary policy to help the poor in the long run. Their multicountry analysis revealed important negative relationships between the real income of the poor (measured as the average income of the poorest quintile in each country) and both average inflation rates and output variability. The Romers also found some evidence that increased inflation and output variability lead to greater inequality, although the results were less robust.

While cautioning against drawing strong inferences from imperfect statistical tests, Romer and Romer believed two conclusions were warranted. First, the standard emphasis on the short-run impact of monetary policy on poverty is misguided, since the impact is temporary. That is, although expansionary policy induces a decline in the poverty rate, the decline is eventually reversed when the unemployment rate returns to its original level. Second, monetary policy that aims to restrain inflation and minimize output fluctuations is likely to be associated with improved conditions for the poor over time. The link between monetary policy and the well being of the poor may not be causal. But, they strongly suspected that “the typical package of reforms that brings about low inflation and macroeconomic stability will also generate improved conditions for the poor.”

Alan Blinder, in commenting on the Romer and Romer paper, generally agreed that too much emphasis is placed on the cyclical finding that expansions help the poor. In particular, he largely concurred that declines in the unemployment rate induced by expansionary policy are temporary, as the natural rate hypothesis predicts. Yet, he was hesitant to conclude that business cycles have no impact on poverty, a position he felt the Romers came close to advocating. The impact of monetary policy on employment, and presumably on poverty, lasts for several years,

and he noted “that has always seemed to me a long enough period to matter.” Moreover, a prolonged tight labor market, through a positive hysteresis effect, may allow some marginal workers to permanently lift their incomes above the poverty level.

Blinder also generally agreed that, in the long run, low inflation would be expected to benefit the poor, but he argued that the statistical evidence was not compelling. For example, in the Romers’ study, the relationship between lower inflation and higher incomes of the poor seems to hold for OECD countries but not for other countries. Thus, Blinder concluded, a monetary policy that emphasizes short-run stabilization can likely do the most for the poor.

Consequences

Jason Furman and Joseph Stiglitz, in their paper, examined the economic consequences of income inequality. They first reviewed theories and evidence on the long-run relationship between inequality and growth. Traditionally, economists have focused on how growth might affect inequality—according to the so-called Kuznets hypothesis, inequality rises during the initial stages of economic development, but then falls. Recent empirical research, however, tends to reject the Kuznets hypothesis. Economists have also focused on how inequality might affect growth, identifying four possible channels: saving rate differentials, agency costs, fiscal policy, and political instability. But generalizations have been difficult to make. Furman’s and Stiglitz’s overall assessment of recent research results was that “inequality is neither necessary for growth nor is it an inevitable consequence of growth.”

Furman and Stiglitz then examined the relationship between income inequality and the long-run unemployment rate. They argued that the experience in the United States is consistent with the hypothesis that inequality and unemployment move together. To support their hypothesis, they

sketched two models, an efficiency wage model and a search model, that imply that an increase in income inequality leads to an increase in equilibrium unemployment.

Furman and Stiglitz also discussed the short-run relationship between inequality and unemployment. They noted that cyclical increases in unemployment lead to higher inequality since some individuals experience significant reductions in income while others are largely unaffected. They also asserted that high levels of inequality lead to high levels of unemployment. Thus, in their view, there is a vicious cycle between inequality and unemployment. In addition, it is possible that, as inequality increases, unemployment becomes more persistent because individuals become demoralized, stigmatized, and less effective job searchers.

Furman and Stiglitz drew several broad conclusions from their analysis. Because low-income individuals bear a disproportionate share of the burden of cyclical fluctuations, both theory and policy must be sensitive to the fact that there are social trade-offs in macroeconomic management. Moreover, lower levels of inequality may enhance economic growth and reduce economic instability. Thus, the potential benefits of reducing inequality merit active government policies. These policies may include macroeconomic measures that reduce unemployment as well as redistributive measures that support education for disadvantaged groups.

Horst Siebert, in commenting on the Furman and Stiglitz paper, asserted that rising income inequality is largely a phenomenon confined to the Anglo-Saxon countries. Taking a longer view than earlier authors, he cited World Bank data showing that, over the last four decades, Gini coefficients have changed little in most large, industrialized countries. Moreover, Siebert stressed that income inequality in a given year is only a snapshot that cannot capture vertical mobility over time. For example, OECD data

indicate that slightly more than half of employees in the United States and the United Kingdom move up one or two quintiles within a five-year period.

Siebert agreed with Furman and Stiglitz that unemployed, low-skilled, low-income people face a higher risk of becoming marginalized. However, he found the policy orientation advocated by Furman and Stiglitz to be misguided. Social welfare programs, he argued, can lead to higher unemployment and reduced efficiency because of adverse incentives and financing requirements. Siebert cautioned U.S. policymakers against adopting the equity policies of continental Europe.

Policy options and overview

Assar Lindbeck, in his paper, examined policy options for reducing income inequality, analyzing their potential impact on economic efficiency. He extensively surveyed both policies affecting factor incomes and policies designed to disconnect factor incomes from disposable incomes. Throughout, Lindbeck emphasized the importance of choosing measures carefully since policies vary in their effectiveness and often have unintended consequences.

Lindbeck observed that policies can sometimes be combined to exploit the strengths and mitigate the weaknesses of individual programs. For example, governments might augment minimum wage programs with reductions in payroll taxes, the goal being to increase incomes without discouraging employment. Lindbeck noted that some European countries have in fact pursued such a combined policy, and he suggested that it is a reasonable approach in the short run.

In the long run, Lindbeck felt that educational and vocational training programs for low-productivity workers should be an important part of the policy mix. A clear advantage of education and training programs over other measures is

that they lead both to greater income equality (through higher wages for low-income persons) and greater economic efficiency (through higher worker productivity). A drawback of education and vocational training programs, however, is their beneficial effects take a considerable time to appear. Lindbeck favored vocational programs run by the private sector rather than by the public sector. Private sector programs, in his view, are more cost-effective because they provide a better matching of skill development to demand and give trainees greater access to modern equipment and experienced instructors.

While noting the positive potential of redistributive policies, Lindbeck cautioned against implementing far-reaching programs. He warned that governments and analysts must always be mindful of the potential disincentive effects of welfare-state programs on individual behavior. In addition, institutional differences suggest that certain policies may be more effective in some countries than in others. For example, poverty in Europe is closely connected to persistent long-term unemployment, while in the United States it is more tied to the low earnings of low-productivity workers. Lindbeck stressed that officials must be sensitive to these factors and package policies accordingly.

Laura D'Andrea Tyson, in discussing the Lindbeck paper, agreed with the majority of his points. She noted the difficulty officials face in gauging how individuals will respond to changes in income distribution policy. There remains considerable disagreement among economists, for example, on how sensitive personal incentives to save and work are to tax and subsidy policy. In addition, personal attitudes toward the value of work may not change for as long as a decade after new programs have been implemented. As a result, the cumulative impact of policy changes may be larger than originally estimated.

Tyson also discussed the special challenges of addressing income inequality in the United

States. Recent studies have shown that, at every level of education, single parents earn less than half of what families headed by two persons earn. Increases in the Earned Income Tax Credit and higher minimum wages have helped lift some single mothers working full time above the poverty level, but training programs have been much less successful. In Tyson's view, the well being of all low-income persons is most likely to be increased by improving the quality of their primary education and their access to college education.

Martin Feldstein, serving on the overview panel that closed the conference, asserted that rising income inequality in the United States and elsewhere was not a problem in need of remedy. Citing the Pareto principle, he argued that if the material well being of some individuals increases with no decrease in the material well-being of others, society is better off even if measured inequality has risen. In Feldstein's view, high-income individuals have experienced relatively larger gains in income than low-income individuals in recent years because of increases in productivity, entrepreneurial successes, longer work weeks, and a lower cost of capital. The fact that income dispersion has correspondingly increased is unimportant.

Feldstein did stress, however, that poverty—the low income levels of those in the bottom decile or quintile of the income distribution—*was* a problem. Although measurement issues make it difficult to accurately track poverty trends, it is clear that poverty is a serious concern in the

United States and other countries. The sources of poverty—long-term nonemployment, lack of earning ability, and misguided individual choice—should be addressed with such policies as better on-the-job training and a more competitive educational system. Monetary policy, Feldstein asserted, cannot solve the problems of poverty.

Mervyn King, in his comments from the overview panel, took a less sanguine view of inequality than Feldstein. As labor demand has shifted away from the unskilled and disadvantaged toward the skilled and socially adaptable, inequality has risen with little change in mobility across income groups. Such a rise in inequality, King asserted, can have implications for the overall economy, for example, in designing an appropriate tax system. Changes in income inequality can also have implications for monetary policy. Structural changes in labor markets—for example, minimum wage laws—can alter not just the distribution of income but also the inflation flashpoint stemming from tight labor markets.

King concurred with earlier speakers that the proper role of monetary policy is to provide a stable macroeconomic environment. Central banks should not be asked to participate directly in formulating income distribution policies. Under-scoring a point made by moderator George Shultz earlier in the conference, King emphasized that central banks should be viewed as “limited purpose” organizations with a goal of pursuing price stability.